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(54) Title: METHODS OF DIAGNOSIS OF CANCER COMPOSITIONS AND METHODS OF SCREENING FOR MODULATORS OF CANCER

(57) Abstract: Described herein are genes whose expression are up-regulated or down-regulated in specific cancers. Related methods and compositions that can be used for diagnosis and treatment of those cancers are disclosed. Also described herein are methods that can be used to identify modulators of selected cancers.



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## METHODS OF DIAGNOSIS OF CANCER, COMPOSITIONS AND METHODS OF SCREENING FOR MODULATORS OF CANCER

### 5 CROSS-REFERENCES TO RELATED APPLICATIONS

This application claims priority to USSN 60/323,469, filed September 17, 2001; USSN 60/355,145, filed February 8, 2002; USSN 60/369,899, filed April 4, 2002; USSN 60/323,887, filed September 20, 2001; USSN 60/355,257, filed February 8, 2002; USSN 60/325,114, filed September 25, 2001; USSN 60/340,944, filed October 29, 2001; USSN 60/350,666, filed  
10 November 13, 2001; and USSN 60/372,246, filed April 12, 2002; each of which is incorporated herein by reference for all purposes.

### FIELD OF THE INVENTION

The invention relates to the identification of nucleic acid and protein expression profiles and nucleic acids, products, and antibodies thereto that are involved in cancer; and to the use of  
15 such expression profiles and compositions in the diagnosis, prognosis, and therapy of cancer. The invention further relates to methods for identifying and using agents and/or targets that modulate cancer.

### BACKGROUND OF THE INVENTION

Cancer is a major cause of morbidity in the United States. For example, in 1996, the  
20 American Cancer Society estimated that 1,359,150 people were diagnosed with a malignant neoplasm and 554,740 died from one of these diseases. Cancer is responsible for 23.9 percent of all American deaths and is exceeded only by heart disease as a cause of mortality (33 percent). Unfortunately, cancer mortality is increasing and sometime early in this century, cancer is expected to become the leading cause of mortality in the United States as it already is  
25 in Japan.

Cancers share the characteristic of disordered control over normal cell division, growth, and differentiation. Their initial clinical manifestations are extremely heterogeneous, with over 70 types of cancer arising in virtually every organ and tissue of the body. Moreover, some of those similarly classified cancer types may represent multiple different molecular diseases.  
30 Unfortunately, some cancers may be virtually asymptomatic until late in the disease course, when treatment is more difficult, and prognosis grim.



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Treatment for cancer typically includes surgery, chemotherapy, and/or radiation therapy. Although nearly 50 percent of cancer patients can be effectively treated using these methods, the current therapies all induce serious side effects which diminish quality of life. The identification of novel therapeutic targets and diagnostic markers will be important for  
5 improving the diagnosis and treatment of cancer patients.

Recent advances in molecular medicine have increased the interest in tumor-specific antigens that could serve as targets for various immunotherapeutic or small molecule strategies. Antigens suitable for immunotherapeutic strategies should be highly expressed in cancer tissues, preferably accessible from the vasculature and at the cell surface, and ideally not expressed in  
10 normal adult tissues. Expression in tissues that are dispensable for life, however, may be tolerated, e.g., reproductive organs. Examples of antigens that are currently available for the detection and treatment of certain cancers include Her2/neu and the B-cell antigen CD20. Humanized monoclonal antibodies directed to Her2/neu (Herceptin®/trastuzumab) are currently in use for the treatment of metastatic breast cancer. See Ross and Fletcher (1998) Stem Cells  
15 16:413-428. Similarly, anti-CD20 monoclonal antibodies (Rituxin®/rituximab) are used to effectively treat non-Hodgkin's lymphoma. See Maloney, et al. (1997) Blood 90:2188-2195; Leget and Czuczman (1998) Curr. Opin. Oncol. 10:548-551.

The elucidation of a role for novel proteins and compounds in disease states for identification of therapeutic targets and diagnostic markers is valuable for improving the current  
20 treatment of cancer patients. Accordingly, provided herein are molecular targets for therapeutic intervention in various defined cancers. Additionally, provided herein are methods that can be used in diagnosis and prognosis of cancer. Further provided are methods that can be used to screen candidate bioactive agents for the ability to modulate cancer.

#### SUMMARY OF THE INVENTION

25 The present invention provides methods for determining the presence or absence of a pathological cell in a patient, the method comprising detecting a nucleic acid comprising a sequence at least 80% identical to a sequence as described in Tables 2A-68 in a biological sample from the patient, thereby determining the presence or absence of the pathological cell. In certain embodiments of the method, the pathology is described in Table 1, including a  
30 cancer; the biological sample comprises isolated nucleic acids; the nucleic acids are mRNA; the biological sample is tissue from an organ which is affected by the pathology of Table 1, including a cancer; a further step is used of amplifying nucleic acids before the step of detecting

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the nucleic acid; the detecting is of a protein encoded by the nucleic acid; the nucleic acid comprises a sequence as described in Tables 2A-68; the detecting step is carried out by using a labeled nucleic acid probe, utilizing a biochip comprising a sequence at least 80% identical to a sequence as described in Tables 2A-68, or detecting a polypeptide encoded by the nucleic acid;  
5 or the patient is undergoing a therapeutic regimen to treat the pathology of Table 1, or is suspected of having the pathology or cancer.

Compositions are also provided, e.g., an isolated nucleic acid molecule comprising a sequence as described in Tables 2A-68, including, e.g., those which are labeled; an expression vector comprising such nucleic acid; a host cell comprising such expression vector; an isolated  
10 polypeptide which is encoded by such a nucleic acid molecule comprising a sequence as described in Tables 2A-68; or an antibody that specifically binds the polypeptide. In particular embodiments, the antibody is: conjugated to an effector component, is conjugated to a detectable label (including, e.g., a fluorescent label, a radioisotope, or a cytotoxic chemical), an antibody fragment, or is a humanized antibody.

15 Additional methods are provided, including methods for specifically targeting a compound to a pathological cell in a patient, the method comprising administering to the patient an antibody, as described, thereby providing the targeting. Others include, e.g., methods for determining the presence or absence of a pathological cell in a patient, the methods comprising contacting a biological sample with an antibody, as described. In more particular methods, the  
20 antibody is: conjugated to an effector component, or to a fluorescent label; or the biological sample is a blood, serum, urine, or stool sample.

Further methods include those for identifying a compound that modulates a pathology-associated polypeptide, the method comprising steps of: contacting the compound with a pathology-associated polypeptide, the polypeptide encoded by a polynucleotide that selectively  
25 hybridizes to a sequence at least 80% identical to a sequence as described in Tables 2A-68; and determining the functional effect of the compound upon the polypeptide. Another drug screening assay method comprises steps of: administering a test compound to a mammal having a pathology of Table 1 or a cell isolated therefrom; and comparing the level of gene expression of a polynucleotide that selectively hybridizes to a sequence at least 80% identical to a sequence  
30 as described in Tables 2A-68 in a treated cell or mammal with the level of gene expression of the polynucleotide in a control cell or mammal, wherein a test compound that modulates the level of expression of the polynucleotide is a candidate for the treatment of the pathology.

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## DETAILED DESCRIPTION OF THE INVENTION

In accordance with the objects outlined above, the present invention provides novel methods for diagnosis and prognosis evaluation for various disorders, e.g., angiogenesis, fibrosis, and various defined forms of cancer, including metastatic cancer, as well as methods for screening for compositions which modulate such conditions. Also provided are methods for treating such disorders or cancers. See, e.g., American Society of Clinical Oncology (ed. 2001) ASCO Curriculum: Symptom Management Kendall/Hunt, ISBN: 0787277851; Bonadonna, et al. (2001) Textbook of Breast Cancer (2d ed.) Dunitz Martin, ISBN: 1853178241; Devita and Hellman (eds. 2001) Cancer Principles and Practice of Oncology (2 vols.), Lippincott Williams, ISBN: 0781723876; Howell, et al. (2001) Breast Cancer Isis Medical Media, ISBN: 1901865584; Kaye and Laws (2001) Brain Tumours: An Encyclopedic Approach (2d ed.) Churchill Livingstone, ISBN: 0443064261; Mihm, et al. (2001) The Melanocytic Proliferation: A Comprehensive Textbook of Pigmented Lesions Wiley-Liss, ISBN: 0471252719; Montgomery and Aaron (2001) Clinical Pathology of Soft-Tissue Tumors Marcel Dekker, ISBN: 0824702905; Petrovich, et al. (eds. 2001) Combined Modality of Central Nervous System Tumors (Medical Radiology) Springer Verlag, ISBN: 3540660534; Rosen (2001) Rosen's Breast Pathology Lippincott Williams and Wilkins, ISBN: 0781723795; Shah, et al. (2001) Oral Cancer Isis Medical Media, ISBN: 189906687X; Weiss and Goldblum (2001) Enzinger and Weiss's Soft Tissue Tumors (4th ed.) Mosby, ISBN: 0323012000; Abeloff, et al. (eds. 2000) Clinical Oncology (2d ed.) Churchill Livingstone, ISBN: 044307545X; American Society of Clinical Oncology (ed. 2000) Cancer Genetics and Cancer Predisposition Testing Kendall/Hunt, ISBN: 0787276154; Fletcher (2000) Diagnostic Histopathology of Tumors (2 vols. 2d ed.) Churchill Livingstone, ISBN: 0443079927; Vogelzang (ed. 2000) Comprehensive Textbook of Genitourinary Oncology (2d ed.) Lippincott Williams and Wilkins, ISBN: 0683306456; Holland, et al. (eds. 2000) Holland-Frei Cancer Medicine (Book with CD-ROM 5th ed.) Decker, ISBN: 1550091131; Turrisi, et al. (2000) Lung Cancer Isis Medical Media, ISBN: 1901865428; Bartolozzi and Lencioni (eds. 1999) Liver Malignancies: Diagnostic and Interventional Radiology (Medical Radiology) Springer Verlag, ISBN: 3540647562; Gasparini (ed. 1999) Prognostic Variables in Node-Negative and Node-Positive Breast Cancer Kluwer, ISBN: 0792384474; Hansen (ed. 1999) The LASLC Textbook of Lung Cancer: International Association for the Study of Lung Cancer Dunitz Martin, ISBN: 1853177083; Raghavan, et al. (eds. 1999) Textbook of Uncommon Cancer (2nd ed.) Wiley, ISBN: 0471929212; Thawley, et

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- al. (eds. 1999) Comprehensive Management of Head and Neck Tumors (2 vols.) Saunders, ISBN: 0721655823; Whittaker and Holmes (eds. 1999) Leukemia and Related Disorders (3d ed.) Blackwell Science, ISBN: 0865426074; Aapro (ed. 1998) OncoMedia: Medical Oncology (CD-ROM) Elsevier Science, ISBN: 0080427480; Abeloff (1998) Clinical Oncology (Library Version 2 CD-ROM Individual Version 2.0 Windows and Macintosh) Harcourt Brace, ISBN: 0443075557; Benson (ed. 1998) Gastrointestinal Oncology (Cancer Treatment and Research, CTAR 98) Kluwer, ISBN: 0792382056; Brambilla and Brambilla (eds. 1998) Lung Tumors: Fundamental Biology and Clinical Management (Vol 124) Marcel Dekker, ISBN: 0824701607; Canellos, et al. (eds. 1998) The Lymphomas Saunders, ISBN: 0721650309; Greenspan and Remagen (1998) Differential Diagnosis of Tumors and Tumor-Like Lesions of Bones and Joints Lippincott Williams and Wilkins Publishers, ISBN: 0397517106; Hiddemann (ed. 1998) Acute Leukemias VII: Experimental Approaches and Novel Therapies (Haematologie Und Bluttransfusion, Vol 39), Springer Verlag, ISBN: 3540635041; Husband and Reznik (1998) Imaging in Oncology (2 vols.) Mosby, ISBN: 1899066489; Leibel and Phillips (eds. 1998) Textbook of Radiation Oncology Saunders, ISBN: 0721653367; Maloney and Miller (eds. 1998) Cutaneous Oncology: Pathophysiology, Diagnosis, and Management Blackwell Science, ISBN: 0865425175; Mittal, et al. (eds. 1998) Advances in Radiation Therapy Kluwe, ISBN: 0792399811; Oldham (ed. 1998) Principles of Cancer Biotherapy (3d ed.) Kluwer, ISBN: 0792335074; Ozols (ed. 1998) Gynecologic Oncology Kluwer, ISBN: 0792380703; Parkin, et al. (eds. 1998) Cancer Incidence in Five Continents (Iarc Scientific Publications, No 143) Oxford University Press, ISBN: 9283221435; Perez and Brady (eds. 1998) Principles and Practice of Radiation Oncology Lippincott Williams and Wilkins, ISBN: 0397584164; Black, et al. (eds. 1997) Cancer of the Nervous System Blackwell Science, ISBN: 0865423849; Bonadonna, et al. (1997) Textbook of Breast Cancer: A Clinical Guide to Therapy Blackwell Science, ISBN: 1853173487; Pollock (ed. 1997) Surgical Oncology Kluwer, ISBN: 0792399005; Sheaves, et al. (eds. 1997) Clinical Endocrine Oncology Blackwell Science, ISBN: 086542862X; Vahrson (1997) Radiation Oncology of Gynecological Cancers Springer Verlag, ISBN: 0387567682; Walterhouse and Cohn (eds. 1997) Diagnostic and Therapeutic Advances in Pediatric Oncology Kluwer, ISBN: 0792399781; Aisner (ed. 1996) Comprehensive Textbook of Thoracic Oncology Lippincott, Williams and Wilkins, ISBN: 0683000624; Bertino, et al. (eds. 1996) Encyclopedia of Cancer (3 vols.) Academic, ISBN: 012093230X; Cavalli, et al. (1996) Textbook of Medical Oncology Dunitz Martin, ISBN: 1853172901;

Peckham, et al. (eds. 1995) Oxford Textbook of Oncology (2-Vols.) Oxford University Press, ISBN: 0192616854; and Freireich and Kantarjian (eds. 1996) Molecular Genetics and Therapy of Leukemia (Cancer Treatment and Research, V. 84) Kluwer, ISBN: 0792339126.

In particular, identification of markers selectively expressed on defined cancers allows  
5 for use of that expression in diagnostic, prognostic, or therapeutic methods. As such, the invention defines various compositions, e.g., nucleic acids, polypeptides, antibodies, and small molecule agonists/antagonists, which will be useful to selectively identify those markers. For example, therapeutic methods may take the form of protein therapeutics which use the marker expression for selective localization or modulation of function (for those markers which have a  
10 causative disease effect), for vaccines, identification of binding partners, or antagonism, e.g., using antisense or RNAi. The markers may be useful for molecular characterization of subsets of the diseases, e.g., as provided in Table 1, which subsets may actually require very different treatments. Moreover, the markers may also be important in related diseases to the specific disorders and cancers, e.g., which affect similar tissues in non-malignant diseases, or have  
15 similar mechanisms of induction/maintenance. Metastatic processes or characteristics may also be targeted. Diagnostic and prognostic uses are made available, e.g., to subset related but distinct diseases, or to determine treatment strategy. The detection methods may be based upon nucleic acid, e.g., PCR or hybridization techniques, or protein, e.g., ELISA, imaging, IHC, etc. The diagnosis may be qualitative or quantitative, and may detect increases or decreases in  
20 expression levels.

Tables 2B-66C provide unigene cluster identification numbers for the nucleotide sequence of genes that exhibit increased or decreased expression in cancer samples, particularly sequences involved in angiogenesis, prostate cancer (including androgen independent and taxol resistant prostate cancer), breast cancer, colorectal cancer, cervical cancer, bladder cancer, lung  
25 cancer, ovarian cancer, uterine cancer, glioblastoma, Ewing sarcoma, and lung fibrosis. Tables 2A-67 also provide an exemplar accession number that provides a nucleotide sequence that is part of the unigene cluster.

#### Definitions

The term "cancer protein" or "cancer polynucleotide" or "cancer-associated transcript"  
30 refers to nucleic acid and polypeptide polymorphic variants, alleles, mutants, and interspecies homologues that: (1) have a nucleotide sequence that has greater than about 60% nucleotide sequence identity, 65%, 70%, 75%, 80%, 85%, 90%, preferably about 92%, 94%, 96%, 97%,

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98%, or 99% or greater nucleotide sequence identity, preferably over a region of over a region of at least about 25, 50, 100, 200, 500, 1000, or more nucleotides, to a nucleotide sequence of or associated with a gene of Tables 1-68; (2) bind to antibodies, e.g., polyclonal antibodies, raised against an immunogen comprising an amino acid sequence encoded by a nucleotide sequence of or associated with a gene of Tables 1-68, and conservatively modified variants thereof; (3) specifically hybridize under stringent hybridization conditions to a nucleic acid sequence, or the complement thereof of Tables 1-68 and conservatively modified variants thereof; or (4) have an amino acid sequence that has greater than about 60% amino acid sequence identity, 65%, 70%, 75%, 80%, 85%, preferably 90%, 91%, 93%, 95%, 97%, 98%, or 99% or greater amino  
5 sequence identity, preferably over a region of over a region of at least about 25, 50, 100, 200, 500, 1000, or more amino acids, to an amino acid sequence encoded by a nucleotide sequence of or associated with a gene of Tables 1-68. A polynucleotide or polypeptide sequence is typically from a mammal including, but not limited to, primate, e.g., human; rodent, e.g., rat, mouse, hamster; cow, pig, horse, sheep, or other mammal. A "cancer polypeptide" and a  
10 "cancer polynucleotide," include both naturally occurring or recombinant forms.  
15

A "full length" cancer protein or nucleic acid refers to a cancer polypeptide or polynucleotide sequence, or a variant thereof, that contains elements normally contained in one or more naturally occurring, wild type cancer polynucleotide or polypeptide sequences. The "full length" may be prior to, or after, various stages of post-translational processing or splicing,  
20 including alternative splicing.

"Biological sample" as used herein is a sample of biological tissue or fluid that contains nucleic acids or polypeptides, e.g., of a cancer protein, polynucleotide, or transcript. Such samples include, but are not limited to, tissue isolated from primates, e.g., humans, or rodents, e.g., mice, and rats. Biological samples may also include sections of tissues such as biopsy and  
25 autopsy samples, frozen sections taken for histologic purposes, archival samples, blood, plasma, serum, sputum, stool, tears, mucus, hair, skin, etc. Biological samples also include explants and primary and/or transformed cell cultures derived from patient tissues. A biological sample is typically obtained from a eukaryotic organism, most preferably a mammal such as a primate e.g., chimpanzee or human; cow; dog; cat; a rodent, e.g., guinea pig, rat, mouse; rabbit; or a  
30 bird; reptile; or fish. Livestock and domestic animals are of interest.

"Providing a biological sample" means to obtain a biological sample for use in methods described in this invention. Most often, this will be done by removing a sample of cells from an

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animal, but can also be accomplished by using previously isolated cells (e.g., isolated by another person, at another time, and/or for another purpose), or by performing the methods of the invention in vivo. Archival tissues or materials, having treatment or outcome history, will be particularly useful.

5           The terms "identical" or percent "identity," in the context of two or more nucleic acids or polypeptide sequences, refer to two or more sequences or subsequences that are the same or have a specified percentage of amino acid residues or nucleotides that are the same (e.g., about 70% identity, preferably 75%, 80%, 85%, 90%, 91%, 93%, 95%, 97%, 98%, 99%, or higher identity over a specified region, when compared and aligned for maximum correspondence over  
10 a comparison window or designated region) as measured using, e.g., a BLAST or BLAST 2.0 sequence comparison algorithms with default parameters described below, or by manual alignment and visual inspection (see, e.g., NCBI web site <http://www.ncbi.nlm.nih.gov/BLAST/> or the like). Such sequences are then said to be "substantially identical." This definition also refers to, or may be applied to, the complement of a test sequence. The definition also includes  
15 sequences that have deletions and/or insertions, substitutions, and naturally occurring, e.g., polymorphic or allelic variants, and man-made variants. As described below, the preferred algorithms can account for gaps and the like. Preferably, identity exists over a region that is at least about 25 amino acids or nucleotides in length, or more preferably over a region that is 50-  
20 100 amino acids or nucleotides in length.

20           For sequence comparison, typically one sequence acts as a reference sequence, to which test sequences are compared. When using a sequence comparison algorithm, test and reference sequences are entered into a computer, subsequence coordinates are designated, if necessary, and sequence algorithm program parameters are designated. Preferably, default program parameters can be used, or alternative parameters can be designated. The sequence comparison  
25 algorithm then calculates the percent sequence identities for the test sequences relative to the reference sequence, based on the program parameters.

          A "comparison window", as used herein, includes reference to a segment of contiguous positions selected from the group consisting typically of from 20 to 600, usually about 50 to about 200, more usually about 100 to about 150, in which a sequence may be compared to a  
30 reference sequence of the same number of contiguous positions after the two sequences are optimally aligned. Methods of alignment of sequences for comparison are well-known. Optimal alignment of sequences for comparison can be conducted, e.g., by the local homology

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algorithm of Smith and Waterman (1981) Adv. Appl. Math. 2:482-489, by the homology alignment algorithm of Needleman and Wunsch (1970) J. Mol. Biol. 48:443-453, by the search for similarity method of Pearson and Lipman (1988) Proc. Nat'l. Acad. Sci. USA 85:2444-2448, by computerized implementations of these algorithms (GAP, BESTFIT, FASTA, and TFASTA  
5 in the Wisconsin Genetics Software Package, Genetics Computer Group, 575 Science Dr., Madison, WI), or by manual alignment and visual inspection (see, e.g., Ausubel, et al. (eds. 1995 and supplements) Current Protocols in Molecular Biology Wiley).

Preferred examples of algorithms that are suitable for determining percent sequence identity and sequence similarity include the BLAST and BLAST 2.0 algorithms, which are  
10 described in Altschul, et al. (1977) Nuc. Acids Res. 25:3389-3402 and Altschul, et al. (1990) J. Mol. Biol. 215:403-410. BLAST and BLAST 2.0 are used, with the parameters described herein, to determine percent sequence identity for the nucleic acids and proteins of the invention. Software for performing BLAST analyses is publicly available through the National Center for Biotechnology Information (<http://www.ncbi.nlm.nih.gov/>). This algorithm involves  
15 first identifying high scoring sequence pairs (HSPs) by identifying short words of length W in the query sequence, which either match or satisfy some positive-valued threshold score T when aligned with a word of the same length in a database sequence. T is referred to as the neighborhood word score threshold (Altschul, et al., supra). These initial neighborhood word hits act as seeds for initiating searches to find longer HSPs containing them. The word hits are  
20 extended in both directions along each sequence for as far as the cumulative alignment score can be increased. Cumulative scores are calculated using, e.g., for nucleotide sequences, the parameters M (reward score for a pair of matching residues; always > 0) and N (penalty score for mismatching residues; always < 0). For amino acid sequences, a scoring matrix is used to calculate the cumulative score. Extension of the word hits in each direction are halted when: the  
25 cumulative alignment score falls off by the quantity X from its maximum achieved value; the cumulative score goes to zero or below, due to the accumulation of one or more negative-scoring residue alignments; or the end of either sequence is reached. The BLAST algorithm parameters W, T, and X determine the sensitivity and speed of the alignment. The BLASTN program (for nucleotide sequences) uses as defaults a wordlength (W) of 11, an expectation (E) of 10, M=5, N=-4 and a comparison of both strands. For amino acid sequences, the BLASTP  
30 program uses as defaults a wordlength of 3, and expectation (E) of 10, and the BLOSUM62



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scoring matrix (see Henikoff and Henikoff (1992) Proc. Natl. Acad. Sci. USA 89:10915-919) alignments (B) of 50, expectation (E) of 10, M=-4, N=-4, and a comparison of both strands.

The BLAST algorithm also performs a statistical analysis of the similarity between two sequences. See, e.g., Karlin and Altschul (1993) Proc. Nat'l. Acad. Sci. USA 90:5873-5787.

5 One measure of similarity provided by the BLAST algorithm is the smallest sum probability (P(N)), which provides an indication of the probability by which a match between two nucleotide or amino acid sequences would occur by chance. For example, a nucleic acid is considered similar to a reference sequence if the smallest sum probability in a comparison of the test nucleic acid to the reference nucleic acid is less than about 0.2, more preferably less than  
10 about 0.01, and most preferably less than about 0.001. Log values may be negative large numbers, e.g., 5, 10, 20, 30, 40, 40, 70, 90, 110, 150, 170, etc.

An indication that two nucleic acid sequences are substantially identical is that the polypeptide encoded by the first nucleic acid is immunologically cross reactive with the antibodies raised against the polypeptide encoded by the second nucleic acid. Thus, a  
15 polypeptide is typically substantially identical to a second polypeptide, e.g., where the two peptides differ only by conservative substitutions. Another indication that two nucleic acid sequences are substantially identical is that the two molecules or their complements hybridize to each other under stringent conditions. Yet another indication that two nucleic acid sequences are substantially identical is that the same primers can be used to amplify the sequences.

20 A "host cell" is a naturally occurring cell or a transformed cell that contains an expression vector and supports the replication or expression of the expression vector. Host cells may be cultured cells, explants, cells in vivo, and the like. Host cells may be prokaryotic cells such as E. coli, or eukaryotic cells such as yeast, insect, amphibian, or mammalian cells such as CHO, HeLa, and the like (see, e.g., the American Type Culture Collection catalog or web site,  
25 www.atcc.org).

The terms "isolated," "purified," or "biologically pure" refer to material that is substantially or essentially free from components that normally accompany it as found in its native state. Purity and homogeneity are typically determined using analytical chemistry techniques such as polyacrylamide gel electrophoresis or high performance liquid  
30 chromatography. A protein or nucleic acid that is the predominant species present in a preparation is substantially purified. In particular, an isolated nucleic acid is separated from some open reading frames that naturally flank the gene and encode proteins other than protein

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encoded by the gene. The term "purified" in some embodiments denotes that a nucleic acid or protein gives rise to essentially one band in an electrophoretic gel. Preferably, it means that the nucleic acid or protein is at least about 85% pure, more preferably at least 95% pure, and most preferably at least 99% pure. "Purify" or "purification" in other embodiments means removing  
5 at least one contaminant or component from the composition to be purified. In this sense, purification does not require that the purified compound be homogeneous, e.g., 100% pure.

The terms "polypeptide," "peptide," and "protein" are used interchangeably herein to refer to a polymer of amino acid residues. The terms apply to amino acid polymers in which one or more amino acid residue is an artificial chemical mimetic of a corresponding naturally  
10 occurring amino acid, as well as to naturally occurring amino acid polymers, those containing modified residues, and non-naturally occurring amino acid polymers.

The term "amino acid" refers to naturally occurring and synthetic amino acids, as well as amino acid analogs and amino acid mimetics that function similarly to the naturally occurring amino acids. Naturally occurring amino acids are those encoded by the genetic code, as well as  
15 those amino acids that are later modified, e.g., hydroxyproline,  $\gamma$ -carboxyglutamate, and O-phosphoserine. Amino acid analogs refers to compounds that have the same basic chemical structure as a naturally occurring amino acid, e.g., an  $\alpha$  carbon that is bound to a hydrogen, a carboxyl group, an amino group, and an R group, e.g., homoserine, norleucine, methionine sulfoxide, methionine methyl sulfonium. Such analogs may have modified R groups (e.g.,  
20 norleucine) or modified peptide backbones, but retain some basic chemical structure as a naturally occurring amino acid. Amino acid mimetic refers to a chemical compound that has a structure that is different from the general chemical structure of an amino acid, but that functions similarly to another amino acid.

Amino acids may be referred to herein by either their commonly known three letter  
25 symbols or by the one-letter symbols recommended by the IUPAC-IUB Biochemical Nomenclature Commission. Nucleotides, likewise, may be referred to by their commonly accepted single-letter codes.

"Conservatively modified variant" applies to both amino acid and nucleic acid sequences. With respect to particular nucleic acid sequences, conservatively modified variants  
30 refers to those nucleic acids which encode identical or essentially identical amino acid sequences, or where the nucleic acid does not encode an amino acid sequence, to essentially identical or associated, e.g., naturally contiguous, sequences. Because of the degeneracy of the

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genetic code, a large number of functionally identical nucleic acids encode most proteins. For instance, the codons GCA, GCC, GCG, and GCU each encode the amino acid alanine. Thus, at each position where an alanine is specified by a codon, the codon can be altered to another of the corresponding codons described without altering the encoded polypeptide. Such nucleic acid variations are "silent variations," which are one species of conservatively modified variations. Every nucleic acid sequence herein which encodes a polypeptide also describes silent variations of the nucleic acid. In certain contexts each codon in a nucleic acid (except AUG, which is ordinarily the only codon for methionine, and TGG, which is ordinarily the only codon for tryptophan) can be modified to yield a functionally similar molecule. Accordingly, a silent variation of a nucleic acid which encodes a polypeptide is implicit in a described sequence with respect to the expression product, but not necessarily with respect to actual probe sequences.

As to amino acid sequences, one of skill will recognize that individual substitutions, deletions, or additions to a nucleic acid, peptide, polypeptide, or protein sequence which alters, adds, or deletes a single amino acid or a small percentage of amino acids in the encoded sequence is a "conservatively modified variant" where the alteration results in the substitution of an amino acid with a chemically similar amino acid. Conservative substitution tables providing functionally similar amino acids are well known. Such conservatively modified variants are in addition to and do not exclude polymorphic variants, interspecies homologs, and alleles of the invention. Typically conservative substitutions include for one another: 1) Alanine (A), Glycine (G); 2) Aspartic acid (D), Glutamic acid (E); 3) Asparagine (N), Glutamine (Q); 4) Arginine (R), Lysine (K); 5) Isoleucine (I), Leucine (L), Methionine (M), Valine (V); 6) Phenylalanine (F), Tyrosine (Y), Tryptophan (W); 7) Serine (S), Threonine (T); and 8) Cysteine (C), Methionine (M) (see, e.g., Creighton (1984) Proteins: Structure and Molecular Properties Freeman).

Macromolecular structures such as polypeptide structures can be described in terms of various levels of organization. For a general discussion of this organization, see, e.g., Alberts, et al. (eds. 2001) Molecular Biology of the Cell (4th ed.) Garland; and Cantor and Schimmel (1980) Biophysical Chemistry Part I: The Conformation of Biological Macromolecules Freeman. "Primary structure" refers to the amino acid sequence of a particular peptide. "Secondary structure" refers to locally ordered, three dimensional structures within a polypeptide. These structures are commonly known as domains. Domains are portions of a

polypeptide that often form a compact unit of the polypeptide and are typically 25 to approximately 500 amino acids long. Typical domains are made up of sections of lesser organization such as stretches of  $\beta$ -sheet and  $\alpha$ -helices. "Tertiary structure" refers to the complete three dimensional structure of a polypeptide monomer. "Quaternary structure" refers to the three dimensional structure formed, usually by the noncovalent association of independent tertiary units. Anisotropic terms are also known as energy terms.

"Nucleic acid" or "oligonucleotide" or "polynucleotide" or grammatical equivalents used herein means at least two nucleotides covalently linked together. Oligonucleotides are typically from about 5, 6, 7, 8, 9, 10, 12, 15, 25, 30, 40, 50, or more nucleotides in length, up to about 100 nucleotides in length. Nucleic acids and polynucleotides are a polymers of any length, including longer lengths, e.g., 200, 300, 500, 1000, 2000, 3000, 5000, 7000, 10,000, etc. A nucleic acid of the present invention will generally contain phosphodiester bonds, although in some cases, nucleic acid analogs are included that may have at least one different linkage, e.g., phosphoramidate, phosphorothioate, phosphorodithioate, or O-methylphosphoramidite linkages (see Eckstein (1992) Oligonucleotides and Analogues: A Practical Approach Oxford Univ. Press); and peptide nucleic acid backbones and linkages. Other analog nucleic acids include those with positive backbones; non-ionic backbones, and non-ribose backbones, including those described in U.S. Patent Nos. 5,235,033 and 5,034,506, and Chapters 6 and 7 of Sanghvi and Cook (eds. 1994) Carbohydrate Modifications in Antisense Research ACS Symposium Series 580. Nucleic acids containing one or more carbocyclic sugars are also included within one definition of nucleic acids. Modifications of the ribose-phosphate backbone may be done for a variety of reasons, e.g., to increase the stability and half-life of such molecules in physiological environments or as probes on a biochip. Mixtures of naturally occurring nucleic acids and analogs can be made; alternatively, mixtures of different nucleic acid analogs, and mixtures of naturally occurring nucleic acids and analogs may be made.

A variety of references disclose such nucleic acid analogs, including, e.g., phosphoramidate (Beaucage, et al. (1993) Tetrahedron 49:1925-1963 and references therein; Letsinger (1970) J. Org. Chem. 35:3800-3803; Sprinzl, et al. (1977) Eur. J. Biochem. 81:579-589; Letsinger, et al. (1986) Nucl. Acids Res. 14:3487-499; Sawai, et al. (1984) Chem. Lett. 805; Letsinger, et al. (1988) J. Am. Chem. Soc. 110:4470-4471; and Pauwels, et al. (1986) Chemica Scripta 26:141-149), phosphorothioate (Mag, et al. (1991) Nucleic Acids Res. 19:1437-441; and U.S. Patent No. 5,644,048), phosphorodithioate (Brill, et al. (1989) J. Am.

- Chem. Soc. 111:2321-2322), O-methylphosphoramidite linkages (see Eckstein (1992) Oligonucleotides and Analogues: A Practical Approach, Oxford Univ. Press), and peptide nucleic acid backbones and linkages (see Egholm (1992) J. Am. Chem. Soc. 114:1895-1897; Meier, et al. (1992) Chem. Int. Ed. Engl. 31:1008-1010; Nielsen (1993) Nature 365:566-568; Carlsson, et al. (1996) Nature 380:207, all of which are incorporated by reference). Other analog nucleic acids include those with positive backbones (Denpcy, et al. (1995) Proc. Natl. Acad. Sci. USA 92:6097-101; non-ionic backbones (U.S. Patent Nos. 5,386,023, 5,637,684, 5,602,240, 5,216,141, and 4,469,863; Kiedrowski, et al. (1991) Angew. Chem. Intl. Ed. English 30:423-426; Letsinger, et al. (1988) J. Am. Chem. Soc. 110:4470-4471; Letsinger, et al. (1994) Nucleoside and Nucleotide 13:1597-xxx; Chapters 2 and 3 in Sanghvi and Cook (eds. 1994) Carbohydrate Modifications in Antisense Research ACS Symposium Series 580; Mesmaeker, et al. (1994) Bioorganic and Medicinal Chem. Lett. 4:395-398; Jeffs, et al. (1994) J. Biomolecular NMR 34:17; Horn, et al. (1996) Tetrahedron Lett. 37:743-xxx) and non-ribose backbones, including those described in U.S. Patent Nos. 5,235,033 and 5,034,506, and Chapters 6 and 7 in Sanghvi and Cook (eds. 1994) Carbohydrate Modifications in Antisense Research ACS Symposium Series 580. Nucleic acids containing one or more carbocyclic sugars are also included within one definition of nucleic acids (see Jenkins, et al. (1995) Chem. Soc. Rev. pp 169-176). Several nucleic acid analogs are described in Rawls (page 35, June 2, 1997) C&E News.
- Particularly preferred are peptide nucleic acids (PNA) which includes peptide nucleic acid analogs. These backbones are substantially non-ionic under neutral conditions, in contrast to the highly charged phosphodiester backbone of naturally occurring nucleic acids. This results in at least two advantages. The PNA backbone exhibits improved hybridization kinetics. PNAs have larger changes in the melting temperature ( $T_m$ ) for mismatched versus perfectly matched basepairs. DNA and RNA typically exhibit a 2-4° C drop in  $T_m$  for an internal mismatch. With the non-ionic PNA backbone, the drop is closer to 7-9° C. Similarly, due to their non-ionic nature, hybridization of the bases attached to these backbones is relatively insensitive to salt concentration. In addition, PNAs are not degraded by cellular enzymes, and thus can be more stable.
- The nucleic acids may be single stranded or double stranded, as specified, or contain portions of both double stranded or single stranded sequence. The depiction of a single strand also defines the sequence of the complementary strand; thus the sequences described herein also

provide the complement of the sequence. The nucleic acid may be DNA, both genomic and cDNA, RNA, or a hybrid, where the nucleic acid may contain combinations of deoxyribo- and ribo-nucleotides, and combinations of bases, including uracil, adenine, thymine, cytosine, guanine, inosine, xanthine hypoxanthine, isocytosine, isoguanine, etc. "Transcript" typically refers to a naturally occurring RNA, e.g., a pre-mRNA, hnRNA, or mRNA. As used herein, the term "nucleoside" includes nucleotides and nucleoside and nucleotide analogs, and modified nucleosides such as amino modified nucleosides. In addition, "nucleoside" includes non-naturally occurring analog structures. Thus, e.g., the individual units of a peptide nucleic acid, each containing a base, are referred to herein as a nucleoside.

10 A "label" or a "detectable moiety" is a composition detectable by spectroscopic, photochemical, biochemical, immunochemical, physiological, chemical, or other physical means. In general, labels fall into three classes: a) isotopic labels, which may be radioactive or heavy isotopes; b) immune labels, which may be antibodies, antigens, or epitope tags; and c) colored or fluorescent dyes. The labels may be incorporated into the cancer nucleic acids, proteins, and antibodies. For example, the label should be capable of producing, either directly or indirectly, a detectable signal. The detectable moiety may be a radioisotope, such as  $^3\text{H}$ ,  $^{14}\text{C}$ ,  $^{32}\text{P}$ ,  $^{35}\text{S}$ , or  $^{125}\text{I}$ , electron-dense reagents, a fluorescent or chemiluminescent compound, such as fluorescein isothiocyanate, rhodamine, or luciferin, or an enzyme (e.g., as commonly used in an ELISA), biotin, digoxigenin, or haptens and proteins or other entities which can be made detectable such as alkaline phosphatase, beta-galactosidase, or horseradish peroxidase. Methods are known for conjugating the antibody to the label. See, e.g., Hunter, et al. (1962) Nature 144:945; David, et al. (1974) Biochemistry 13:1014-1021; Pain, et al. (1981) J. Immunol. Meth. 40:219-230; and Nygren (1982) J. Histochem. and Cytochem. 30:407-412.

25 An "effector" or "effector moiety" or "effector component" is a molecule that is bound (or linked, or conjugated), either covalently, through a linker or a chemical bond, or noncovalently, through ionic, van der Waals, electrostatic, or hydrogen bonds, to an antibody. The "effector" can be a variety of molecules including, e.g., detection moieties including radioactive compounds, fluorescent compounds, enzymes or substrates, tags such as epitope tags, toxins; activatable moieties, chemotherapeutic agents; lipases; antibiotics; or radioisotopes, e.g., emitting "hard" beta, radiation.

A "labeled nucleic acid probe or oligonucleotide" is one that is bound, e.g., covalently, through a linker or a chemical bond, or noncovalently, through ionic, van der Waals,

electrostatic, or hydrogen bonds to a label such that the presence of the probe may be detected by detecting the presence of the label bound to the probe. Alternatively, methods using high affinity interactions may achieve the same results where one of a pair of binding partners binds to the other, e.g., biotin, streptavidin.

5           As used herein a "nucleic acid probe or oligonucleotide" is a nucleic acid capable of binding to a target nucleic acid of complementary sequence through one or more types of chemical bonds, usually through complementary base pairing, e.g., through hydrogen bond formation. As used herein, a probe may include natural (e.g., A, G, C, or T) or modified bases (7-deazaguanosine, inosine, etc.). In addition, the bases in a probe may be joined by a linkage  
10 other than a phosphodiester bond, preferably one that does not functionally interfere with hybridization. Thus, e.g., probes may be peptide nucleic acids in which the constituent bases are joined by peptide bonds rather than phosphodiester linkages. Probes may bind target sequences lacking complete complementarity with the probe sequence depending upon the stringency of the hybridization conditions. The probes are preferably directly labeled, e.g., with  
15 isotopes, chromophores, lumiphores, chromogens, or indirectly labeled, e.g., with biotin to which a streptavidin complex may later bind. By assaying for the presence or absence of the probe, one can detect the presence or absence of the select sequence or subsequence. Diagnosis or prognosis may be based at the genomic level, or at the level of RNA or protein expression.

          The term "recombinant" when used with reference, e.g., to a cell, or nucleic acid,  
20 protein, or vector, indicates that the cell, nucleic acid, protein, or vector, has been modified by the introduction of a heterologous nucleic acid or protein or the alteration of a native nucleic acid or protein, or that the cell is derived from a cell so modified. Thus, e.g., recombinant cells express genes that are not found within the native (non-recombinant) form of the cell or express native genes that are otherwise abnormally expressed, under expressed, or not expressed at all.  
25 By the term "recombinant nucleic acid" herein is meant nucleic acid, originally formed in vitro, in general, by the manipulation of nucleic acid, e.g., using polymerases and endonucleases, in a form not normally found in nature. In this manner, operably linkage of different sequences is achieved. Thus an isolated nucleic acid, in a linear form, or an expression vector formed in vitro by ligating DNA molecules that are not normally joined, are both considered recombinant  
30 for the purposes of this invention. It is understood that once a recombinant nucleic acid is made and reintroduced into a host cell or organism, it will replicate non-recombinantly, e.g., using the in vivo cellular machinery of the host cell rather than in vitro manipulations; however, such

nucleic acids, once produced recombinantly, although subsequently replicated non-recombinantly, are still considered recombinant for the purposes of the invention.

Similarly, a "recombinant protein" is a protein made using recombinant techniques, e.g., through the expression of a recombinant nucleic acid as depicted above. A recombinant protein is distinguished from naturally occurring protein by at least one or more characteristics. The protein may be isolated or purified away from some or most of the proteins and compounds with which it is normally associated in its wild type host, and thus may be substantially pure. An isolated protein is unaccompanied by at least some of the material with which it is normally associated in its natural state, preferably constituting at least about 0.5%, more preferably at least about 5% by weight of the total protein in a given sample. A substantially pure protein comprises at least about 75% by weight of the total protein, with at least about 80% being preferred, and at least about 90% being particularly preferred. The definition includes the production of a skin cancer protein from one organism in a different organism or host cell. Alternatively, the protein may be made at a significantly higher concentration than is normally seen, through the use of an inducible promoter or high expression promoter, such that the protein is made at increased concentration levels. Alternatively, the protein may be in a form not normally found in nature, as in the addition of an epitope tag or amino acid substitutions, insertions and deletions, as discussed below.

The term "heterologous" when used with reference to portions of a nucleic acid indicates that the nucleic acid comprises two or more subsequences that are not normally found in the same relationship to each other in nature. For instance, the nucleic acid is typically recombinantly produced, having two or more sequences, e.g., from unrelated genes arranged to make a new functional nucleic acid, e.g., a promoter from one source and a coding region from another source. Similarly, a heterologous protein will often refer to two or more subsequences that are not found in the same relationship to each other in nature (e.g., a fusion protein).

A "promoter" is typically an array of nucleic acid control sequences that direct transcription of a nucleic acid. As used herein, a promoter includes necessary nucleic acid sequences near the start site of transcription, such as, in the case of a polymerase II type promoter, a TATA element. A promoter also optionally includes distal enhancer or repressor elements, which can be located as much as several thousand base pairs from the start site of transcription. A "constitutive" promoter is a promoter that is active under most environmental and developmental conditions. An "inducible" promoter is a promoter that is active under



environmental or developmental regulation. The term "operably linked" refers to a functional linkage between a nucleic acid expression control sequence (such as a promoter, or array of transcription factor binding sites) and a second nucleic acid sequence, e.g., wherein the expression control sequence directs transcription of the nucleic acid corresponding to the second  
5 sequence.

An "expression vector" is a nucleic acid construct, generated recombinantly or synthetically, with a series of specified nucleic acid elements that permit transcription of a particular nucleic acid in a host cell. The expression vector can be part of a plasmid, virus, or nucleic acid fragment. Typically, the expression vector includes a nucleic acid to be transcribed  
10 in operable linkage to a promoter.

The phrase "selectively (or specifically) hybridizes to" refers to the binding, duplexing, or hybridizing of a molecule selectively to a particular nucleotide sequence under stringent hybridization conditions when that sequence is present in a complex mixture (e.g., total cellular or library DNA or RNA).

15 The phrase "stringent hybridization conditions" refers to conditions under which a probe will hybridize to its target subsequence, typically in a complex mixture of nucleic acids, but to no other sequences. Stringent conditions are sequence-dependent and will be different in different circumstances. Longer sequences hybridize specifically at higher temperatures. An extensive guide to the hybridization of nucleic acids is found in "Overview of principles of  
20 hybridization and the strategy of nucleic acid assays" in Tijssen (1993) Hybridization with Nucleic Probes (Laboratory Techniques in Biochemistry and Molecular Biology) (vol. 24) Elsevier. Generally, stringent conditions are selected to be about 5-10° C lower than the thermal melting point ( $T_m$ ) for the specific sequence at a defined ionic strength pH. The  $T_m$  is the temperature (under defined ionic strength, pH, and nucleic concentration) at which 50% of  
25 the probes complementary to the target hybridize to the target sequence at equilibrium (as the target sequences are present in excess, at  $T_m$ , 50% of the probes are occupied at equilibrium). Stringent conditions will be those in which the salt concentration is less than about 1.0 M sodium ion, typically about 0.01-1.0 M sodium ion concentration (or other salts) at pH 7.0 to 8.3 and the temperature is at least about 30° C for short probes (e.g., about 10-50 nucleotides)  
30 and at least about 60° C for long probes (e.g., greater than about 50 nucleotides). Stringent conditions may also be achieved with the addition of destabilizing agents such as formamide. For selective or specific hybridization, a positive signal is typically at least two times

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background, preferably 10 times background hybridization. Exemplary stringent hybridization conditions can be as following: 50% formamide, 5x SSC, and 1% SDS, incubating at 42° C, or, 5x SSC, 1% SDS, incubating at 65° C, with wash in 0.2x SSC, and 0.1% SDS at 65° C. For PCR, a temperature of about 36° C is typical for low stringency amplification, although  
5 annealing temperatures may vary between about 32°-48° C depending on primer length. For high stringency PCR amplification, a temperature of about 62° C is typical, although high stringency annealing temperatures can range from about 50-65° C, depending on the primer length and specificity. Typical cycle conditions for both high and low stringency amplifications include a denaturation phase of 90-95° C for 30-120 sec, an annealing phase lasting 30-120 sec,  
10 and an extension phase of about 72° C for 1-2 min. Protocols and guidelines for low and high stringency amplification reactions are provided, e.g., in Innis, et al. (1990) PCR Protocols: A Guide to Methods and Applications, Academic Press, NY.

Nucleic acids that do not hybridize to each other under stringent conditions are still substantially identical if the polypeptides which they encode are substantially identical. This  
15 occurs, e.g., when a copy of a nucleic acid is created using the maximum codon degeneracy permitted by the genetic code. In such cases, the nucleic acids typically hybridize under moderately stringent hybridization conditions. Exemplary "moderately stringent hybridization conditions" include a hybridization in a buffer of 40% formamide, 1 M NaCl, 1% SDS at 37° C, and a wash in 1X SSC at 45° C. A positive hybridization is typically at least twice background.  
20 Alternative hybridization and wash conditions can be utilized to provide conditions of similar stringency. Additional guidelines for determining hybridization parameters are provided in numerous references, e.g., Ausubel, et al. (eds. 1991 and supplements) Current Protocols in Molecular Biology Wiley.

The phrase "functional effects" in the context of assays for testing compounds that  
25 modulate activity of a cancer protein includes the determination of a parameter that is indirectly or directly under the influence of the cancer protein or nucleic acid, e.g., a physiological, functional, physical, or chemical effect, such as the ability to decrease cancer. It includes ligand binding activity; cell viability; cell growth on soft agar; anchorage dependence; contact inhibition and density limitation of growth; cellular proliferation; cellular transformation;  
30 growth factor or serum dependence; tumor specific marker levels; invasiveness into Matrigel; tumor growth and metastasis in vivo; mRNA and protein expression in cells undergoing

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metastasis; and other characteristics of cancer cells. "Functional effects" include in vitro, in vivo, and ex vivo activities.

By "determining the functional effect" is meant assaying for a compound that increases or decreases a parameter that is indirectly or directly under the influence of a cancer protein sequence, e.g., physiological, functional, enzymatic, physical, or chemical effects. Such functional effects can be measured, e.g., changes in spectroscopic characteristics (e.g., fluorescence, absorbance, refractive index), hydrodynamic (e.g., shape), chromatographic, or solubility properties for the protein, measuring inducible markers or transcriptional activation of the cancer protein, measuring binding activity or binding assays, e.g., binding to antibodies or other ligands, and measuring growth, cellular proliferation, cell viability, cellular transformation, growth factor or serum dependence, tumor specific marker levels, invasiveness into Matrigel, tumor growth and metastasis in vivo, mRNA and protein expression, and other characteristics of cancer cells. The functional effects can be evaluated by many means, e.g., microscopy for quantitative or qualitative measures of alterations in morphological features, measurement of changes in RNA or protein levels for cancer-associated sequences, measurement of RNA stability, identification of downstream or reporter gene expression (CAT, luciferase,  $\beta$ -gal, GFP, and the like), e.g., via chemiluminescence, fluorescence, colorimetric reactions, antibody binding, inducible markers, and ligand binding assays.

"Inhibitors", "activators," and "modulators" of cancer polynucleotide and polypeptide sequences are used to refer to activating, inhibitory, or modulating molecules or compounds identified using in vitro and in vivo assays of cancer polynucleotide and polypeptide sequences. Inhibitors are compounds that, e.g., bind to, partially or totally block activity, decrease, prevent, delay activation, inactivate, desensitize, or down regulate the activity or expression of cancer proteins, e.g., antagonists. Antisense or inhibitory nucleic acids may seem to inhibit expression and subsequent function of the protein. "Activators" are compounds that increase, open, activate, facilitate, enhance activation, sensitize, agonize, or up regulate cancer protein activity. Inhibitors, activators, or modulators also include genetically modified versions of cancer proteins, e.g., versions with altered activity, as well as naturally occurring and synthetic ligands, antagonists, agonists, antibodies, small chemical molecules, and the like. Such assays for inhibitors and activators include, e.g., expressing the cancer protein in vitro, in cells, or cell membranes, applying putative modulator compounds, and then determining the functional effects on activity, as described above. Activators and inhibitors of cancer can also be identified

by incubating cancer cells with the test compound and determining increases or decreases in the expression of 1 or more cancer proteins, e.g., 1, 2, 3, 4, 5, 10, 15, 20, 25, 30, 40, 50, or more cancer proteins, such as cancer proteins encoded by the sequences set out in Tables 1-68.

Samples or assays comprising cancer proteins that are treated with a potential activator, inhibitor, or modulator are compared to control samples without the inhibitor, activator, or modulator to examine the extent of inhibition. Control samples (untreated with inhibitors) are assigned a relative protein activity value of 100%. Inhibition of a polypeptide is achieved when the activity value relative to the control is about 80%, preferably 50%, more preferably 25-0%. Activation of a cancer polypeptide is achieved when the activity value relative to the control (untreated with activators) is 110%, more preferably 150%, more preferably 200-500% (e.g., two to five fold higher relative to the control), more preferably 1000-3000% higher.

The phrase "changes in cell growth" refers to any change in cell growth and proliferation characteristics in vitro or in vivo, such as cell viability, formation of foci, anchorage independence, semi-solid or soft agar growth, changes in contact inhibition and density limitation of growth, loss of growth factor or serum requirements, changes in cell morphology, gaining or losing immortalization, gaining or losing tumor specific markers, ability to form or suppress tumors when injected into suitable animal hosts, and/or immortalization of the cell. See, e.g., pp. 231-241 in Freshney (1994) Culture of Animal Cells a Manual of Basic Technique (2d ed.) Wiley-Liss.

"Tumor cell" refers to precancerous, cancerous, and normal cells in a tumor.

"Cancer cells," "transformed" cells or "transformation" in tissue culture, refers to spontaneous or induced phenotypic changes that do not necessarily involve the uptake of new genetic material. Although transformation can arise from infection with a transforming virus and incorporation of new genomic DNA, or uptake of exogenous DNA, it can also arise spontaneously or following exposure to a carcinogen, thereby mutating an endogenous gene. Transformation is associated with phenotypic changes, such as immortalization of cells, aberrant growth control, nonmorphological changes, and/or malignancy. See, Freshney (2000) Culture of Animal Cells: A Manual of Basic Technique (4th ed.) Wiley-Liss.

"Antibody" refers to a polypeptide comprising a framework region from an immunoglobulin gene or fragments thereof that specifically binds and recognizes an antigen. The recognized immunoglobulin genes include the kappa, lambda, alpha, gamma, delta, epsilon, and mu constant region genes, as well as the myriad immunoglobulin variable region genes.

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Light chains are classified as either kappa or lambda. Heavy chains are classified as gamma, mu, alpha, delta, or epsilon, which in turn define the immunoglobulin classes, IgG, IgM, IgA, IgD, and IgE, respectively. Typically, the antigen-binding region of an antibody or its functional equivalent will be most critical in specificity and affinity of binding. See Paul (ed. 5 1999) Fundamental Immunology (4th ed.) Raven.

An exemplary immunoglobulin (antibody) structural unit comprises a tetramer. Each tetramer is composed of two identical pairs of polypeptide chains, each pair having one "light" (about 25 kD) and one "heavy" chain (about 50-70 kD). The N-terminus of each chain defines a variable region of about 100 to 110 or more amino acids primarily responsible for antigen 10 recognition. The terms variable light chain ( $V_L$ ) and variable heavy chain ( $V_H$ ) refer to these light and heavy chains respectively.

Antibodies exist, e.g., as intact immunoglobulins or as a number of well-characterized fragments produced by digestion with various peptidases. Thus, e.g., pepsin digests an antibody below the disulfide linkages in the hinge region to produce  $F(ab)'_2$ , a dimer of Fab which itself 15 is a light chain joined to  $V_H$ - $C_H1$  by a disulfide bond. The  $F(ab)'_2$  may be reduced under mild conditions to break the disulfide linkage in the hinge region, thereby converting the  $F(ab)'_2$  dimer into an Fab' monomer. The Fab' monomer is essentially Fab with part of the hinge region (see Paul (ed. 1999) Fundamental Immunology (4th ed.) Raven. While various antibody fragments are defined in terms of the digestion of an intact antibody, one of skill will appreciate 20 that such fragments may be synthesized de novo either chemically or by using recombinant DNA methodology. Thus, the term antibody, as used herein, also includes antibody fragments either produced by the modification of whole antibodies, or those synthesized de novo using recombinant DNA methodologies (e.g., single chain Fv) or those identified using phage display libraries (see, e.g., McCafferty, et al. (1990) Nature 348:552-554).

25 For preparation of antibodies, e.g., recombinant, monoclonal, or polyclonal antibodies, many techniques known. See, e.g., Kohler and Milstein (1975) Nature 256:495-497; Kozbor, et al. (1983) Immunology Today 4:72; Cole, et al. (1985) pp. 77-96 in Reisfeld and Sell (1985) Monoclonal Antibodies and Cancer Therapy Liss; Coligan (1991) Current Protocols in Immunology Lippincott; Harlow and Lane (1988) Antibodies: A Laboratory Manual CSH 30 Press; and Goding (1986) Monoclonal Antibodies: Principles and Practice (2d ed.) Academic Press. Techniques for the production of single chain antibodies (U.S. Patent 4,946,778) can be adapted to produce antibodies to polypeptides of this invention. Also, transgenic mice, or other

organisms such as other mammals, may be used to express humanized antibodies.

Alternatively, phage display technology can be used to identify antibodies and heteromeric Fab fragments that specifically bind to selected antigens. See, e.g., McCafferty, et al. (1990) Nature 348:552-554; Marks, et al. (1992) Biotechnology 10:779-783.

- 5           A "chimeric antibody" is an antibody molecule in which (a) the constant region, or a portion thereof, is altered, replaced, or exchanged so that the antigen binding site (variable region) is linked to a constant region of a different or altered class, effector function, and/or species, or an entirely different molecule which confers new properties to the chimeric antibody, e.g., an enzyme, toxin, hormone, growth factor, drug, etc.; or (b) the variable region, or a
- 10          portion thereof, is altered, replaced, or exchanged with a variable region having a different or altered antigen specificity.

#### Identification of cancer-associated sequences

- In one aspect, the expression levels of genes are determined in different patient samples for which diagnosis information is desired, to provide expression profiles. An expression
- 15          profile of a particular sample is essentially a "fingerprint" of the state of the sample; while two states may have any particular gene similarly expressed, the evaluation of a number of genes simultaneously allows the generation of a gene expression profile that is characteristic of the state of the cell. That is, normal tissue may be distinguished from cancerous or metastatic cancerous tissue, or cancer tissue or metastatic cancerous tissue can be compared with tissue
- 20          from surviving cancer patients. By comparing expression profiles of tissue in known different cancer states, information regarding which genes are important (including both up-and down-regulation of genes) in each of these states is obtained. Molecular profiling may distinguish subtypes of a currently collective disease designation, e.g., different forms of a cancer.

- The identification of sequences that are differentially expressed in cancer versus non-
- 25          cancer tissue allows the use of this information in a number of ways. For example, a particular treatment regime may be evaluated: does a chemotherapeutic drug act to down-regulate cancer, and thus tumor growth or recurrence, in a particular patient. Alternatively, a treatment step may induce other markers which may be used as targets to destroy tumor cells. Similarly, diagnosis and treatment outcomes may be done or confirmed by comparing patient samples with the
- 30          known expression profiles. Malignant disease may be compared to non-malignant conditions. Metastatic tissue can also be analyzed to determine the stage of cancer in the tissue, or origin of primary tumor, e.g., metastasis from a remote primary site. Furthermore, these gene expression

profiles (or individual genes) allow screening of drug candidates with an eye to mimicking or altering a particular expression profile; e.g., screening can be done for drugs that suppress the cancer expression profile. This may be done by making biochips comprising sets of the important cancer genes, which can then be used in these screens. These methods can also be  
5 done on the protein basis; that is, protein expression levels of the cancer proteins can be evaluated for diagnostic purposes or to screen candidate agents. In addition, the cancer nucleic acid sequences can be administered for gene therapy purposes, including the administration of antisense nucleic acids, or the cancer proteins (including antibodies and other modulators thereof) administered as therapeutic drugs.

10 Thus the present invention provides nucleic acid and protein sequences that are differentially expressed in cancer relative to normal tissues and/or non-malignant disease, or in different types of related diseases, herein termed "cancer sequences." As outlined below, cancer sequences include those that are up-regulated (e.g., expressed at a higher level) in cancer, as well as those that are down-regulated (e.g., expressed at a lower level). In a preferred  
15 embodiment, the cancer sequences are from humans; however, cancer sequences from other organisms may be useful in animal models of disease and drug evaluation; thus, other cancer sequences are provided, from vertebrates, including mammals, including rodents (rats, mice, hamsters, guinea pigs, etc.), primates, farm animals (including sheep, goats, pigs, cows, horses, etc.) and pets (e.g., dogs, cats, etc.). Cancer sequences from other organisms may be obtained  
20 using the techniques outlined below.

Cancer sequences can include both nucleic acid and amino acid sequences. In a preferred embodiment, the skin cancer sequences are recombinant nucleic acids. These nucleic acid sequences are useful in a variety of applications, including diagnostic applications, which will detect naturally occurring nucleic acids, as well as screening applications; e.g., biochips  
25 comprising nucleic acid probes or PCR microtiter plates with selected probes to the cancer sequences.

A cancer sequence can be initially identified by substantial nucleic acid and/or amino acid sequence homology to the cancer sequences outlined herein. Such homology can be based upon the overall nucleic acid or amino acid sequence, and is generally determined as outlined  
30 below, e.g., using homology programs or hybridization conditions.

For identifying cancer-associated sequences, the cancer screen typically includes comparing genes identified in different tissues, e.g., normal and cancerous tissues, cancer and

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non-malignant conditions, non-malignant conditions and normal tissues, or tumor tissue samples from patients who have metastatic disease vs. non metastatic tissue. Other suitable tissue comparisons include comparing cancer samples with metastatic cancer samples from other cancers, such as lung, stomach, gastrointestinal cancers, etc. Samples of different stages of cancer, e.g., survivor tissue, drug resistant states, and tissue undergoing metastasis, are applied to biochips comprising nucleic acid probes. The samples are first microdissected, if applicable, and treated for preparation of mRNA. Suitable biochips are commercially available, e.g., from Affymetrix, Santa Clara, CA. Gene expression profiles as described herein are generated and the data analyzed.

10 In one embodiment, the genes showing changes in expression as between normal and disease states are compared to genes expressed in other normal tissues, including, and not limited to lung, heart, brain, liver, stomach, kidney, muscle, colon, small intestine, large intestine, spleen, bone, and/or placenta. In a preferred embodiment, those genes identified during the cancer screen that are expressed in a significant amount in other tissues (e.g.,

15 essential organs) are removed from the profile, although in some embodiments, this is not necessary (e.g., where organs may be dispensable, e.g., female or male specific). That is, when screening for drugs, it is usually preferable that the target expression be disease specific, to minimize possible side effects on other organs were there expression.

In a preferred embodiment, cancer sequences are those that are up-regulated in cancer; that is, the expression of these genes is higher in the cancer tissue as compared to non-cancer or non-malignant tissue. "Up-regulation" as used herein often means at least about a two-fold change, preferably at least about a three fold change, with at least about five-fold or higher being preferred. Another embodiment is directed to sequences up-regulated in non-malignant conditions relative to normal. Uniformity among relevant samples is also preferred.

25 Unigene cluster identification numbers and accession numbers herein are for the GenBank sequence database and the sequences of the accession numbers are hereby expressly incorporated by reference. GenBank is available, see, e.g., Benson, et al. (1998) Nuc. Acids Res. 26:1-7; and <http://www.ncbi.nlm.nih.gov/>. Sequences are also available in other databases, e.g., European Molecular Biology Laboratory (EMBL) and DNA Database of Japan (DDBJ).

30 In some situations, the sequences may be derived from assembly of available sequences or be predicted from genomic DNA using exon prediction algorithms, such as FGENESH. See



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Salamov and Solovyev (2000) Genome Res. 10:516-522. In other situations, sequences have been derived from cloning and sequencing of isolated nucleic acids.

In another preferred embodiment, cancer sequences are those that are down-regulated in the cancer; that is, the expression of these genes is lower in cancer tissue as compared to non-cancerous tissue. "Down-regulation" as used herein often means at least about a two-fold change, preferably at least about a three fold change, with at least about five-fold or higher being preferred.

#### Informatics

The ability to identify genes that are over or under expressed in cancer can additionally provide high-resolution, high-sensitivity datasets which can be used in the areas of diagnostics, therapeutics, drug development, pharmacogenetics, protein structure, biosensor development, and other related areas. For example, the expression profiles can be used in diagnostic or prognostic evaluation of patients with cancer or related diseases. See Tables 1 and 3. Or as another example, subcellular toxicological information can be generated to better direct drug structure and activity correlation (see Anderson (June 11-12, 1998) Pharmaceutical Proteomics: Targets, Mechanism, and Function, paper presented at the IBC Proteomics conference, Coronado, CA). Subcellular toxicological information can also be utilized in a biological sensor device to predict the likely toxicological effect of chemical exposures and likely tolerable exposure thresholds (see U.S. Patent No. 5,811,231). Similar advantages accrue from datasets relevant to other biomolecules and bioactive agents (e.g., nucleic acids, saccharides, lipids, drugs, and the like).

Thus, in another embodiment, the present invention provides a database that includes at least one set of assay data. The data contained in the database is acquired, e.g., using array analysis either singly or in a library format. The database can be in a form in which data can be maintained and transmitted, but is preferably an electronic database. The electronic database of the invention can be maintained on any electronic device allowing for the storage of and access to the database, such as a personal computer, but is preferably distributed on a wide area network, such as the World Wide Web.

The focus of the present section on databases that include peptide sequence data is for clarity of illustration only. Similar databases can be assembled for assay data acquired using an assay of the invention.

The compositions and methods for identifying and/or quantitating the relative and/or absolute abundance of a variety of molecular and macromolecular species from a biological sample representing cancer, e.g., the identification of cancer-associated sequences described herein, provide an abundance of information which can be correlated with pathological  
5 conditions, predisposition to disease, drug testing, therapeutic monitoring, gene-disease causal linkages, identification of correlates of immunity and physiological status, among others. Although the data generated from the assays of the invention is suited for manual review and analysis, in a preferred embodiment, data processing using high-speed computers is utilized.

An array of methods for indexing and retrieving biomolecular information is available.  
10 For example, U.S. Patents 6,023,659 and 5,966,712 disclose a relational database system for storing biomolecular sequence information in a manner that allows sequences to be catalogued and searched according to one or more protein function hierarchies. U.S. Patent 5,953,727 discloses a relational database having sequence records containing information in a format that allows a collection of partial-length DNA sequences to be catalogued and searched according to  
15 association with one or more sequencing projects for obtaining full-length sequences from the collection of partial length sequences. U.S. Patent 5,706,498 discloses a gene database retrieval system for making a retrieval of a gene sequence similar to a sequence data item in a gene database based on the degree of similarity between a key sequence and a target sequence. U.S. Patent 5,538,897 discloses a method using mass spectroscopy fragmentation patterns of  
20 peptides to identify amino acid sequences in computer databases by comparison of predicted mass spectra with experimentally-derived mass spectra using a closeness-of-fit measure. U.S. Patent 5,926,818 discloses a multi-dimensional database comprising a functionality for multi-dimensional data analysis described as on-line analytical processing (OLAP), which entails the consolidation of projected and actual data according to more than one consolidation path or  
25 dimension. U.S. Patent 5,295,261 reports a hybrid database structure in which the fields of each database record are divided into two classes, navigational and informational data, with navigational fields stored in a hierarchical topological map which can be viewed as a tree structure or as the merger of two or more such tree structures. See also Baxevanis, et al. (2001) Bioinformatics: A Practical Guide to the Analysis of Genes and Proteins Wiley; Mount (2001)  
30 Bioinformatics: Sequence and Genome Analysis CSH Press, NY; Durbin, et al. (eds. 1999) Biological Sequence Analysis: Probabilistic Models of Proteins and Nucleic Acids Cambridge University Press; Baxevanis and Ouellette (eds. 1998) Bioinformatics: A Practical Guide to the

Analysis of Genes and Proteins (2d. ed.) Wiley-Liss; Rashidi and Buehler (1999)

Bioinformatics: Basic Applications in Biological Science and Medicine CRC Press; Setubal, et

al. (eds. 1997) Introduction to Computational Molecular Biology Brooks/Cole; Misener and

Krawetz (eds. 2000) Bioinformatics: Methods and Protocols Humana Press; Higgins and Taylor

5 (eds. 2000) Bioinformatics: Sequence, Structure, and Databanks: A Practical Approach Oxford

University Press; Brown (2001) Bioinformatics: A Biologist's Guide to Biocomputing and the

Internet Eaton Pub.; Han and Kamber (2000) Data Mining: Concepts and Techniques

Kaufmann Pub.; and Waterman (1995) Introduction to Computational Biology: Maps,

Sequences, and Genomes Chap and Hall.

10           The present invention provides a computer database comprising a computer and  
software for storing in computer-retrievable form assay data records cross-tabulated, e.g., with  
data specifying the source of the target-containing sample from which each sequence specificity  
record was obtained.

          In an exemplary embodiment, at least one of the sources of target-containing sample is  
15 from a control tissue sample known to be free of pathological disorders. In a variation, at least  
one of the sources is a known pathological tissue specimen, e.g., a neoplastic lesion or another  
tissue specimen to be analyzed for cancer. In another variation, the assay records cross-tabulate  
one or more of the following parameters for each target species in a sample: (1) a unique  
identification code, which can include, e.g., a target molecular structure and/or characteristic  
20 separation coordinate (e.g., electrophoretic coordinates); (2) sample source; and (3) absolute  
and/or relative quantity of the target species present in the sample.

          The invention also provides for the storage and retrieval of a collection of target data in  
a computer data storage apparatus, which can include magnetic disks, optical disks, magneto-  
optical disks, DRAM, SRAM, SGRAM, SDRAM, RDRAM, DDR RAM, magnetic bubble  
25 memory devices, and other data storage devices, including CPU registers and on-CPU data  
storage arrays. Typically, the target data records are stored as a bit pattern in an array of  
magnetic domains on a magnetizable medium or as an array of charge states or transistor gate  
states, such as an array of cells in a DRAM device (e.g., each cell comprised of a transistor and  
a charge storage area, which may be on the transistor). In one embodiment, the invention  
30 provides such storage devices, and computer systems built therewith, comprising a bit pattern  
encoding a protein expression fingerprint record comprising unique identifiers for at least 10  
target data records cross-tabulated with target source.

When the target is a peptide or nucleic acid, the invention preferably provides a method for identifying related peptide or nucleic acid sequences, comprising performing a computerized comparison between a peptide or nucleic acid sequence assay record stored in or retrieved from a computer storage device or database and at least one other sequence. The comparison can  
5 include a sequence analysis or comparison algorithm or computer program embodiment thereof (e.g., FASTA, TFASTA, GAP, BESTFIT) and/or the comparison may be of the relative amount of a peptide or nucleic acid sequence in a pool of sequences determined from a polypeptide or nucleic acid sample of a specimen.

The invention also preferably provides a magnetic disk, such as an IBM-compatible  
10 (DOS, Windows, Windows95/98/2000, Windows NT, OS/2) or other format (e.g., Linux, SunOS, Solaris, AIX, SCO Unix, VMS, MV, Macintosh, etc.) floppy diskette or hard (fixed, Winchester) disk drive, comprising a bit pattern encoding data from an assay of the invention in a file format suitable for retrieval and processing in a computerized sequence analysis, comparison, or relative quantitation method.

The invention also provides a network, comprising a plurality of computing devices  
15 linked via a data link, such as an Ethernet cable (coax or 10BaseT), telephone line, ISDN line, wireless network, optical fiber, or other suitable signal transmission medium, whereby at least one network device (e.g., computer, disk array, etc.) comprises a pattern of magnetic domains (e.g., magnetic disk) and/or charge domains (e.g., an array of DRAM cells) composing a bit  
20 pattern encoding data acquired from an assay of the invention.

The invention also provides a method for transmitting assay data that includes generating an electronic signal on an electronic communications device, such as a modem, ISDN terminal adapter, DSL, cable modem, ATM switch, or the like, wherein the signal includes (in native or encrypted format) a bit pattern encoding data from an assay or a database  
25 comprising a plurality of assay results obtained by the method of the invention.

In a preferred embodiment, the invention provides a computer system for comparing a query target to a database containing an array of data structures, such as an assay result obtained by the method of the invention, and ranking database targets based on the degree of identity and gap weight to the target data. A central processor is preferably initialized to load and execute  
30 the computer program for alignment and/or comparison of the assay results. Data for a query target is entered into the central processor via an I/O device. Execution of the computer

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program results in the central processor retrieving the assay data from the data file, which comprises a binary description of an assay result.

The target data or record and the computer program can be transferred to secondary memory, which is typically random access memory (e.g., DRAM, SRAM, SGRAM, or SDRAM). Targets are ranked according to the degree of correspondence between a selected assay characteristic (e.g., binding to a selected affinity moiety) and the same characteristic of the query target and results are output via an I/O device. For example, a central processor can be a conventional computer (e.g., Intel Pentium, PowerPC, Alpha, PA-8000, SPARC, MIPS 4400, MIPS 10000, VAX, etc.); a program can be a commercial or public domain molecular biology software package (e.g., UWGCG Sequence Analysis Software, Darwin); a data file can be an optical or magnetic disk, a data server, a memory device (e.g., DRAM, SRAM, SGRAM, SDRAM, EPROM, bubble memory, flash memory, etc.); an I/O device can be a terminal comprising a video display and a keyboard, a modem, an ISDN terminal adapter, an Ethernet port, a punched card reader, a magnetic strip reader, or other suitable I/O device.

The invention also preferably provides the use of a computer system, such as that described above, which comprises: (1) a computer; (2) a stored bit pattern encoding a collection of peptide sequence specificity records obtained by the methods of the invention, which may be stored in the computer; (3) a comparison target, such as a query target; and (4) a program for alignment and comparison, typically with rank-ordering of comparison results on the basis of computed similarity values. See, e.g., Ewens and Grant (2001) Statistical Methods in Bioinformatics: An Introduction Springer-Verlag. Mathematical approaches can also be used to conclude whether similarities or differences in the gene expression exhibited by different samples are significant. See, e.g., Golub, et al. (1999) Science 286:531-537; Duda, et al. (2001) Pattern Classification Wiley; and Hastie, et al. (2001) The Elements of Statistical Learning: Data Mining, Inference, and Prediction Springer-Verlag. One approach to determine whether a sample is more similar to or has maximum similarity with a given condition between the sample and one or more pools representing different conditions for comparison; the pool with the smallest vector angle is then chosen as the most similar to the biological sample among the pools compared.

Characteristics of cancer-associated proteins

Cancer proteins of the present invention may be classified as secreted proteins, transmembrane proteins, or intracellular proteins. In one embodiment, the cancer protein is an

intracellular protein. Intracellular proteins may be found in the cytoplasm and/or in the nucleus. Intracellular proteins are involved in all aspects of cellular function and replication (including, e.g., signaling pathways); aberrant expression of such proteins often results in unregulated or dysregulated cellular processes (see, e.g., Alberts, et al. (eds. 1994) Molecular Biology of the  
5 Cell (3d ed.) Garland). For example, many intracellular proteins have enzymatic activity such as protein kinase activity, protein phosphatase activity, protease activity, nucleotide cyclase activity, polymerase activity, and the like. Intracellular proteins also serve as docking proteins that are involved in organizing complexes of proteins, or targeting proteins to various subcellular localizations, and are involved in maintaining the structural integrity of organelles.

10 An increasingly appreciated concept in characterizing proteins is the presence in the proteins of one or more structural motifs for which defined functions have been attributed. In addition to the highly conserved sequences found in the enzymatic domain of proteins, highly conserved sequences have been identified in proteins that are involved in protein-protein interaction. For example, Src-homology-2 (SH2) domains bind tyrosine-phosphorylated targets  
15 in a sequence dependent manner. PTB domains, which are distinct from SH2 domains, also bind tyrosine phosphorylated targets. SH3 domains bind to proline-rich targets. In addition, PH domains, tetratricopeptide repeats and WD domains to name only a few, have been shown to mediate protein-protein interactions. Some of these may also be involved in binding to phospholipids or other second messengers. These motifs can be identified on the basis of amino  
20 acid sequence; thus, an analysis of the sequence of proteins may provide insight into both the enzymatic potential of the molecule and/or molecules with which the protein may associate. One useful database is Pfam (protein families), which is a large collection of multiple sequence alignments and hidden Markov models covering many common protein domains. Versions are available via the internet from Washington University in St. Louis, the Sanger Center in  
25 England, and the Karolinska Institute in Sweden. See, e.g., Bateman, et al. (2000) Nuc. Acids Res. 28:263-266; Sonnhammer, et al. (1997) Proteins 28:405-420 ; Bateman, et al. (1999) Nuc. Acids Res. 27:260-262; and Sonnhammer, et al. (1998) Nuc. Acids Res. 26:320-322.

In another embodiment, the cancer sequences are transmembrane proteins. Transmembrane proteins are molecules that span a phospholipid bilayer of a cell. They may  
30 have an intracellular domain, an extracellular domain, or both. The intracellular domains of such proteins may have a number of functions including those already described for intracellular proteins. For example, the intracellular domain may have enzymatic activity

and/or may serve as a binding site for additional proteins. Frequently the intracellular domain of transmembrane proteins serves both roles. For example certain receptor tyrosine kinases have both protein kinase activity and SH2 domains. In addition, autophosphorylation of tyrosines on the receptor molecule itself, creates binding sites for additional SH2 domain  
5 containing proteins.

Transmembrane proteins may contain from one to many transmembrane domains. For example, receptor tyrosine kinases, certain cytokine receptors, receptor guanylyl cyclases and receptor serine/threonine protein kinases contain a single transmembrane domain. However, various other proteins including channels and adenylyl cyclases contain numerous  
10 transmembrane domains. Many important cell surface receptors such as G protein coupled receptors (GPCRs) are classified as "seven transmembrane domain" proteins, as they contain 7 membrane spanning regions. Characteristics of transmembrane domains include approximately 17 consecutive hydrophobic amino acids that may be followed by charged amino acids. Therefore, upon analysis of the amino acid sequence of a particular protein, the localization and  
15 number of transmembrane domains within the protein may be predicted (see, e.g., PSORT web site <http://psort.nibb.ac.jp/>). Important transmembrane protein receptors include, but are not limited to the insulin receptor, insulin-like growth factor receptor, human growth hormone receptor, glucose transporters, transferrin receptor, epidermal growth factor receptor, low density lipoprotein receptor, epidermal growth factor receptor, leptin receptor, and interleukin  
20 receptors, e.g., IL-1 receptor, IL-2 receptor, etc.

The extracellular domains of transmembrane proteins are diverse; however, conserved motifs are found repeatedly among various extracellular domains. Conserved structure and/or functions have been ascribed to different extracellular motifs. Many extracellular domains are involved in binding to other molecules. In one aspect, extracellular domains are found on  
25 receptors. Factors that bind the receptor domain include circulating ligands, which may be peptides, proteins, or small molecules such as adenosine and the like. For example, growth factors such as EGF, FGF, and PDGF are circulating growth factors that bind to their cognate receptors to initiate a variety of cellular responses. Other factors include cytokines, mitogenic factors, neurotrophic factors, and the like. Extracellular domains also bind to cell-associated  
30 molecules. In this respect, they may mediate cell-cell interactions. Cell-associated ligands can be tethered to the cell, e.g., via a glycosylphosphatidylinositol (GPI) anchor, or may themselves

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be transmembrane proteins. Extracellular domains may also associate with the extracellular matrix and contribute to the maintenance of the cell structure.

Cancer proteins that are transmembrane are particularly preferred in the present invention as they are readily accessible targets for immunotherapeutics, as are described herein.

- 5 In addition, as outlined below, transmembrane proteins can be also useful in imaging modalities. Antibodies may be used to label such readily accessible proteins in situ. Alternatively, antibodies can also label intracellular proteins, in which case samples are typically permeablized to provide access to intracellular proteins. In addition, some membrane proteins can be processed to release a soluble protein, or to expose a residual fragment.
- 10 Released soluble proteins may be useful diagnostic markers, processed residual protein fragments may be useful lung markers of disease.

- It will also be appreciated that a transmembrane protein can be made soluble by removing transmembrane sequences, e.g., through recombinant methods. Furthermore, transmembrane proteins that have been made soluble can be made to be secreted through
- 15 recombinant means by adding an appropriate signal sequence.

- In another embodiment, the cancer proteins are secreted proteins; the secretion of which can be either constitutive or regulated. These proteins may have a signal peptide or signal sequence that targets the molecule to the secretory pathway. Secreted proteins are involved in numerous physiological events; e.g., if circulating, they often serve to transmit signals to
- 20 various other cell types. The secreted protein may function in an autocrine manner (acting on the cell that secreted the factor), a paracrine manner (acting on cells in close proximity to the cell that secreted the factor), an endocrine manner (acting on cells at a distance, e.g, secretion into the blood stream), or exocrine (secretion, e.g., through a duct or to adjacent epithelial surface as sweat glands, sebaceous glands, pancreatic ducts, lacrimal glands, mammary glands, wax producing glands of the ear, etc.). Thus secreted molecules often find use in modulating or
- 25 altering numerous aspects of physiology. Cancer proteins that are secreted proteins are particularly preferred in the present invention as they serve as good targets for diagnostic markers, e.g., for blood, plasma, serum, or stool tests. Those which are enzymes may be antibody or small molecule targets. Others may be useful as vaccine targets, e.g., via CTL
- 30 mechanisms.



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### Use of cancer nucleic acids

As described above, cancer sequence is initially identified by substantial nucleic acid and/or amino acid sequence homology or linkage to the cancer sequences outlined herein. Such homology can be based upon the overall nucleic acid or amino acid sequence, and is generally  
5 determined as outlined below, using either homology programs or hybridization conditions. Typically, linked sequences on a mRNA are found on the same molecule.

As detailed elsewhere, percent identity can be determined using an algorithm such as BLAST. A preferred method utilizes the BLASTN module of WU-BLAST-2 set to the default parameters, with overlap span and overlap fraction set to 1 and 0.125, respectively. Alignment  
10 may include the introduction of gaps in the sequences to be aligned. In addition, for sequences which contain either more or fewer nucleotides than those of the nucleic acids described, the percentage of homology may be determined based on the number of homologous nucleosides in relation to the total number of nucleosides. Thus, e.g., homology of sequences shorter than those of the sequences identified will be determined using the number of nucleosides in the  
15 shorter sequence.

In one embodiment, the nucleic acid homology is determined through hybridization studies. Thus, e.g., nucleic acids which hybridize under high stringency to a described nucleic acid, or its complement, or is also found on naturally occurring mRNAs is considered a cancer  
20 sequence. In another embodiment, less stringent hybridization conditions are used; e.g., moderate or low stringency conditions may be used; see Ausubel, supra, and Tijssen, supra.

The cancer nucleic acid sequences of the invention, e.g., the sequences in Tables 1-68, can be fragments of larger genes, e.g., they are nucleic acid segments. "Genes" in this context includes coding regions, non-coding regions, and mixtures of coding and non-coding regions. Accordingly, using the sequences provided herein, extended sequences, in either direction, of  
25 the cancer genes can be obtained, using techniques well known for cloning either longer sequences or the full length sequences; see Ausubel, et al., supra. Much can be done by informatics and many sequences can be clustered to include multiple sequences corresponding to a single gene, e.g., systems such as UniGene (see, <http://www.ncbi.nlm.nih.gov/UniGene/>).

Once a cancer nucleic acid is identified, it can be cloned and, if necessary, its constituent  
30 parts recombined to form the entire cancer nucleic acid coding regions or the entire mRNA sequence. Once isolated from its natural source, e.g., contained within a plasmid or other vector or excised therefrom as a linear nucleic acid segment, the recombinant cancer nucleic acid can

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be further used as a probe to identify and isolate other cancer nucleic acids, e.g., extended coding regions. It can also be used as a "precursor" nucleic acid to make modified or variant cancer nucleic acids and proteins.

The cancer nucleic acids of the present invention are used in several ways. In one embodiment, nucleic acid probes to the cancer nucleic acids are made and attached to biochips to be used in screening and diagnostic methods, as outlined below, or for administration, e.g., for gene therapy, vaccine, RNAi, and/or antisense applications. Alternatively, cancer nucleic acids that include coding regions of cancer proteins can be put into expression vectors for the expression of cancer proteins, again for screening purposes or for administration to a patient.

10 In a preferred embodiment, nucleic acid probes to cancer nucleic acids (both the nucleic acid sequences outlined in the figures and/or the complements thereof) are made. The nucleic acid probes attached to the biochip are designed to be substantially complementary to the cancer nucleic acids, e.g., the target sequence (either the target sequence of the sample or to other probe sequences, e.g., in sandwich assays), such that hybridization of the target sequence and  
15 the probes of the present invention occurs. As outlined below, this complementarity need not be perfect; there may be any number of base pair mismatches which will interfere with hybridization between the target sequence and the single stranded nucleic acids of the present invention. However, if the number of mutations is so great that no hybridization can occur under even the least stringent of hybridization conditions, the sequence is not a complementary  
20 target sequence. Thus, by "substantially complementary" herein is meant that the probes are sufficiently complementary to the target sequences to hybridize under normal reaction conditions, particularly high stringency conditions, as outlined herein.

A nucleic acid probe is generally single stranded but can be partially single and partially double stranded. The strandedness of the probe is dictated by the structure, composition, and  
25 properties of the target sequence. In general, the nucleic acid probes range from about 8-100 bases long, with from about 10-80 bases being preferred, and from about 30-50 bases being particularly preferred. That is, generally whole genes are not used. In some embodiments, much longer nucleic acids can be used, up to hundreds of bases.

In a preferred embodiment, more than one probe per sequence is used, with either  
30 overlapping probes or probes to different sections of the target being used. That is, two, three, four or more probes, with three being preferred, are used to build in a redundancy for a

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particular target. The probes can be overlapping (e.g., have some sequence in common), or separate. In some cases, PCR primers may be used to amplify signal for higher sensitivity.

Nucleic acids can be attached or immobilized to a solid support in a wide variety of ways. By "immobilized" and grammatical equivalents herein is meant the association or  
5 binding between the nucleic acid probe and the solid support is sufficient to be stable under the conditions of binding, washing, analysis, and removal as outlined. The binding can typically be covalent or non-covalent. By "non-covalent binding" and grammatical equivalents herein is meant one or more of electrostatic, hydrophilic, and hydrophobic interactions. Included in non-covalent binding is the covalent attachment of a molecule, e.g., streptavidin to the support and  
10 the non-covalent binding of the biotinylated probe to the streptavidin. By "covalent binding" and grammatical equivalents herein is meant that the two moieties, the solid support and the probe, are attached by at least one bond, including sigma bonds, pi bonds, and coordination bonds. Covalent bonds can be formed directly between the probe and the solid support or can be formed by a cross linker or by inclusion of a specific reactive group on either the solid  
15 support or the probe or both molecules. Immobilization may also involve a combination of covalent and non-covalent interactions.

In general, the probes are attached to the biochip in a wide variety of ways. As described herein, the nucleic acids can either be synthesized first, with subsequent attachment to the biochip, or can be directly synthesized on the biochip.

20 The biochip comprises a suitable solid substrate. By "substrate" or "solid support" or other grammatical equivalents herein is meant a material that can be modified for the attachment or association of the nucleic acid probes and is amenable to at least one detection method. Often, the substrate may contain discrete individual sites appropriate for individual partitioning and identification. The number of possible substrates is very large, and include, but  
25 are not limited to, glass and modified or functionalized glass, plastics (including acrylics, polystyrene and copolymers of styrene and other materials, polypropylene, polyethylene, polybutylene, polyurethanes, Teflon, etc.), polysaccharides, nylon or nitrocellulose, resins, silica or silica-based materials including silicon and modified silicon, carbon, metals, inorganic glasses, plastics, etc. In general, the substrates allow optical detection and do not appreciably  
30 fluoresce. See WO 0055627.

Generally the substrate is planar, although other configurations of substrates may be used as well. For example, the probes may be placed on the inside surface of a tube for flow-

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through sample analysis to minimize sample volume. Similarly, the substrate may be flexible, such as a flexible foam, including closed cell foams made of particular plastics.

In a preferred embodiment, the surface of the biochip and the probe may be derivatized with chemical functional groups for subsequent attachment of the two. Thus, e.g., the biochip is derivatized with a chemical functional group including, but not limited to, amino groups, carboxy groups, oxo groups, and thiol groups, with amino groups being particularly preferred. Using these functional groups, the probes can be attached using functional groups on the probes. For example, nucleic acids containing amino groups can be attached to surfaces comprising amino groups, e.g., using linkers; e.g., homo-or hetero-bifunctional linkers as are well known (see 1994 Pierce Chemical Company catalog, technical section on cross-linkers, pages 155-200). In addition, in some cases, additional linkers, such as alkyl groups (including substituted and heteroalkyl groups) may be used.

In this embodiment, oligonucleotides are synthesized, and then attached to the surface of the solid support. Either the 5' or 3' terminus may be attached to the solid support, or attachment may be via linkage to an internal nucleoside. In another embodiment, the immobilization to the solid support may be very strong, yet non-covalent. For example, biotinylated oligonucleotides can be made, which bind to surfaces covalently coated with streptavidin, resulting in attachment.

Alternatively, the oligonucleotides may be synthesized on the surface. For example, photoactivation techniques utilizing photopolymerization compounds and techniques are used. In a preferred embodiment, the nucleic acids can be synthesized in situ, using known photolithographic techniques, such as those described in WO 95/25116; WO 95/35505; U.S. Patent Nos. 5,700,637 and 5,445,934; and references cited within, all of which are expressly incorporated by reference; these methods of attachment form the basis of the Affymetrix GeneChip™ technology.

Often, amplification-based assays are performed to measure the expression level of cancer-associated sequences. These assays are typically performed in conjunction with reverse transcription. In such assays, a cancer-associated nucleic acid sequence acts as a template in an amplification reaction (e.g., Polymerase Chain Reaction, or PCR). In a quantitative amplification, the amount of amplification product will be proportional to the amount of template in the original sample. Comparison to appropriate controls provides a measure of the amount of cancer-associated RNA. Methods of quantitative amplification are well known.

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Detailed protocols for quantitative PCR are provided, e.g., in Innis, et al. (1990) PCR Protocols, A Guide to Methods and Applications Academic Press.

In some embodiments, a TaqMan based assay is used to measure expression. TaqMan based assays use a fluorogenic oligonucleotide probe that contains a 5' fluorescent dye and a 3' quenching agent. The probe hybridizes to a PCR product, but cannot itself be extended due to a blocking agent at the 3' end. When the PCR product is amplified in subsequent cycles, the 5' nuclease activity of the polymerase, e.g., AmpliTaq, results in the cleavage of the TaqMan probe. This cleavage separates the 5' fluorescent dye and the 3' quenching agent, thereby resulting in an increase in fluorescence as a function of amplification (see, e.g., literature provided by Perkin-Elmer, e.g., www2.perkin-elmer.com).

Other suitable amplification methods include, but are not limited to, ligase chain reaction (LCR) (see Wu and Wallace (1989) Genomics 4:560-569, Landegren, et al. (1988) Science 241:1077-1080, and Barringer, et al. (1990) Gene 89:117-122), transcription amplification (Kwoh, et al. (1989) Proc. Natl. Acad. Sci. USA 86:1173-1177), self-sustained sequence replication (Guatelli, et al. (1990) Proc. Nat. Acad. Sci. USA 87:1874-1878), dot PCR, linker adapter PCR, etc.

#### Expression of cancer proteins from nucleic acids

In a preferred embodiment, cancer nucleic acids, e.g., encoding cancer proteins, are used to make a variety of expression vectors to express cancer proteins which can then be used in screening assays, as described below. Expression vectors and recombinant DNA technology are well known (see, e.g., Ausubel, supra, and Fernandez and Hoeffler (eds. 1999) Gene Expression Systems Academic Press) to express proteins. The expression vectors may be either self-replicating extrachromosomal vectors or vectors which integrate into a host genome. Generally, these expression vectors include transcriptional and translational regulatory nucleic acid operably linked to the nucleic acid encoding the cancer protein. The term "control sequences" refers to DNA sequences used for the expression of an operably linked coding sequence in a particular host organism. Control sequences that are suitable for prokaryotes, e.g., include a promoter, optionally an operator sequence, and a ribosome binding site. Eukaryotic cells are known to utilize promoters, polyadenylation signals, and enhancers.

Nucleic acid is "operably linked" when it is placed into a functional relationship with another nucleic acid sequence. For example, DNA for a presequence or secretory leader is operably linked to DNA for a polypeptide if it is expressed as a preprotein that participates in

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the secretion of the polypeptide; a promoter or enhancer is operably linked to a coding sequence if it affects the transcription of the sequence; or a ribosome binding site is operably linked to a coding sequence if it is positioned so as to facilitate translation. Generally, "operably linked" means that the DNA sequences being linked are contiguous, and, in the case of a secretory  
5 leader, contiguous and in reading phase. However, enhancers do not have to be contiguous. Linking is typically accomplished by ligation at convenient restriction sites. If such sites do not exist, synthetic oligonucleotide adaptors or linkers are used in accordance with conventional practice. Transcriptional and translational regulatory nucleic acid will generally be appropriate to the host cell used to express the cancer protein. Numerous types of appropriate expression  
10 vectors and suitable regulatory sequences are known for a variety of host cells.

In general, transcriptional and translational regulatory sequences may include, but are not limited to, promoter sequences, ribosomal binding sites, transcriptional start and stop sequences, translational start and stop sequences, and enhancer or activator sequences. In a preferred embodiment, the regulatory sequences include a promoter and transcriptional start and  
15 stop sequences.

Promoter sequences may be either constitutive or inducible promoters. The promoters may be either naturally occurring promoters or hybrid promoters. Hybrid promoters, which combine elements of more than one promoter, are also known, and are useful in the present invention.

20 An expression vector may comprise additional elements. For example, the expression vector may have two replication systems, thus allowing it to be maintained in two organisms, e.g., in mammalian or insect cells for expression and in a prokaryotic host for cloning and amplification. Furthermore, for integrating expression vectors, the expression vector often contains at least one sequence homologous to the host cell genome, and preferably two  
25 homologous sequences which flank the expression construct. The integrating vector may be directed to a specific locus in the host cell by selecting the appropriate homologous sequence for inclusion in the vector. Constructs for integrating vectors are available. See, e.g., Fernandez and Hoeffler, *supra*; and Kitamura, et al. (1995) Proc. Nat'l Acad. Sci. USA 92:9146-9150.

30 In addition, in a preferred embodiment, the expression vector contains a selectable marker gene to allow the selection of transformed host cells. Selection genes are well known and will vary with the host cell used.

The cancer proteins of the present invention are usually produced by culturing a host cell transformed with an expression vector containing nucleic acid encoding a cancer protein, under the appropriate conditions to induce or cause expression of the cancer protein. Conditions appropriate for cancer protein expression will vary with the choice of the expression vector and the host cell, and will be easily ascertained through routine experimentation or optimization. For example, the use of constitutive promoters in the expression vector will require optimizing the growth and proliferation of the host cell, while the use of an inducible promoter requires the appropriate growth conditions for induction. In addition, in some embodiments, the timing of the harvest is important. For example, the baculoviral systems used in insect cell expression are lytic viruses, and thus harvest time selection can be crucial for product yield.

Appropriate host cells include yeast, bacteria, archaeobacteria, fungi, and insect and animal cells, including mammalian cells. Of particular interest are *Saccharomyces cerevisiae* and other yeasts, *E. coli*, *Bacillus subtilis*, Sf9 cells, C129 cells, 293 cells, *Neurospora*, BHK, CHO, COS, HeLa cells, HUVEC (human umbilical vein endothelial cells), THP1 cells (a macrophage cell line), and various other human cells and cell lines.

In a preferred embodiment, the cancer proteins are expressed in mammalian cells. Mammalian expression systems may be used, and include retroviral and adenoviral systems. One expression vector system is a retroviral vector system such as is generally described in PCT/US97/01019 and PCT/US97/01048. Of particular use as mammalian promoters are the promoters from mammalian viral genes, since the viral genes are often highly expressed and have a broad host range. Examples include the SV40 early promoter, mouse mammary tumor virus LTR promoter, adenovirus major late promoter, herpes simplex virus promoter, and the CMV promoter (see, e.g., Fernandez and Hoeffler, *supra*). Typically, transcription termination and polyadenylation sequences recognized by mammalian cells are regulatory regions located 3' to the translation stop codon and thus, together with the promoter elements, flank the coding sequence. Examples of transcription terminator and polyadenylation signals include those derived from SV40.

Methods of introducing exogenous nucleic acid into mammalian hosts, as well as other hosts, are available, and will vary with the host cell used. Techniques include dextran-mediated transfection, calcium phosphate precipitation, polybrene mediated transfection, protoplast fusion, electroporation, viral infection, encapsulation of the polynucleotide(s) in liposomes, and direct microinjection of the DNA into nuclei.

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In a preferred embodiment, cancer proteins are expressed in bacterial systems. Promoters from bacteriophage may also be used. In addition, synthetic promoters and hybrid promoters are also useful; e.g., the tac promoter is a hybrid of the trp and lac promoter sequences. Furthermore, a bacterial promoter can include naturally occurring promoters of non-bacterial origin that have the ability to bind bacterial RNA polymerase and initiate transcription. In addition to a functioning promoter sequence, an efficient ribosome binding site is desirable. The expression vector may also include a signal peptide sequence that provides for secretion of the cancer protein in bacteria. The protein is either secreted into the growth media (gram-positive bacteria) or into the periplasmic space, located between the inner and outer membrane of the cell (gram-negative bacteria). The bacterial expression vector may also include a selectable marker gene to allow for the selection of bacterial strains that have been transformed. Suitable selection genes include genes which render the bacteria resistant to drugs such as ampicillin, chloramphenicol, erythromycin, kanamycin, neomycin, and tetracycline. Selectable markers also include biosynthetic genes, such as those in the histidine, tryptophan, and leucine biosynthetic pathways. These components are assembled into expression vectors. Expression vectors for bacteria are well known, and include vectors for *Bacillus subtilis*, *E. coli*, *Streptococcus cremoris*, and *Streptococcus lividans*, among others (e.g., Fernandez and Hoeffler, supra). The bacterial expression vectors are transformed into bacterial host cells using techniques such as calcium chloride treatment, electroporation, and others.

20 In one embodiment, cancer proteins are produced in insect cells using, e.g., expression vectors for the transformation of insect cells, and in particular, baculovirus-based expression vectors.

In a preferred embodiment, a cancer protein is produced in yeast cells. Yeast expression systems are well known, and include expression vectors for *Saccharomyces cerevisiae*, *Candida albicans* and *C. maltosa*, *Hansenula polymorpha*, *Kluyveromyces fragilis* and *K. lactis*, *Pichia guillermondii* and *P. pastoris*, *Schizosaccharomyces pombe*, and *Yarrowia lipolytica*.

The cancer protein may also be made as a fusion protein, using available techniques. Thus, e.g., for the creation of monoclonal antibodies, if the desired epitope is small, the cancer protein may be fused to a carrier protein to form an immunogen. Alternatively, the cancer protein may be made as a fusion protein to increase expression, or for other reasons. For example, when the cancer protein is a cancer peptide, the nucleic acid encoding the peptide may



be linked to other nucleic acid for expression purposes. Fusion with detection epitope tags can be made, e.g., with FLAG, His6, myc, HA, etc.

In a preferred embodiment, the cancer protein is purified or isolated after expression. Cancer proteins may be isolated or purified in a variety of ways depending on what other components are present in the sample and the requirements for purified product, e.g., natural conformation or denatured. Standard purification methods include ammonium sulfate precipitations, electrophoretic, molecular, immunological, and chromatographic techniques, including ion exchange, hydrophobic, affinity, and reverse-phase HPLC chromatography, and chromatofocusing. For example, the cancer protein may be purified using a standard anti-cancer protein antibody column. Ultrafiltration and diafiltration techniques, in conjunction with protein concentration, are also useful. See, e.g., Walsh (2002) Proteins: Biochemistry and Biotechnology Wiley; Hardin, et al. (eds. 2001) Cloning, Gene Expression and Protein Purification Oxford Univ. Press; Wilson, et al. (eds. 2000) Encyclopedia of Separation Science Academic Press; and Scopes (1993) Protein Purification Springer-Verlag. The degree of purification necessary will vary depending on the use of the cancer protein. In some instances no purification will be necessary.

Once expressed and purified if necessary, the cancer proteins and nucleic acids are useful in a number of applications. They may be used as immunoselection reagents, as vaccine reagents, as screening agents, therapeutic entities, for production of antibodies, as transcription or translation inhibitors, etc.

#### Variants of cancer proteins

Also included within one embodiment of cancer proteins are amino acid variants of the naturally occurring sequences, as determined herein. Preferably, the variants are preferably greater than about 75% homologous to the wild-type sequence, more preferably greater than about 80%, even more preferably greater than about 85%, and most preferably greater than 90%. In some embodiments the homology will be as high as about 93-95% or 98%. As for nucleic acids, homology in this context means sequence similarity or identity, with identity being preferred. This homology will be determined using standard techniques, as are outlined above for nucleic acid homologies.

Cancer proteins of the present invention may be shorter or longer than the wild type amino acid sequences. Thus, in a preferred embodiment, included within the definition of cancer proteins are portions or fragments of the wild type sequences herein. In addition, as

outlined above, the cancer nucleic acids of the invention may be used to obtain additional coding regions, and thus additional protein sequence.

In one embodiment, the cancer proteins are derivative or variant cancer proteins as compared to the wild-type sequence. That is, as outlined more fully below, the derivative cancer peptide will often contain at least one amino acid substitution, deletion, or insertion, with amino acid substitutions being particularly preferred. The amino acid substitution, insertion, or deletion may occur at many residue positions within the cancer peptide.

Also included within one embodiment of cancer proteins of the present invention are amino acid sequence variants. These variants typically fall into one or more of three classes: substitutional, insertional, or deletional variants. These variants ordinarily are prepared by site specific mutagenesis of nucleotides in the DNA encoding the cancer protein, using cassette or PCR mutagenesis or other techniques, to produce DNA encoding the variant, and thereafter expressing the DNA in recombinant cell culture as outlined above. However, variant cancer protein fragments having up to about 100-150 residues may be prepared by in vitro synthesis using established techniques. Amino acid sequence variants are characterized by the predetermined nature of the variation, a feature that sets them apart from naturally occurring allelic or interspecies variation of the cancer protein amino acid sequence. The variants typically exhibit a similar qualitative biological activity as a naturally occurring analogue, although variants can also be selected which have modified characteristics.

While the site or region for introducing an amino acid sequence variation is often predetermined, the mutation per se need not be predetermined. For example, in order to optimize the performance of a mutation at a given site, random mutagenesis may be conducted at the target codon or region and the expressed cancer variants screened for the optimal combination of desired activity. Techniques for making substitution mutations at predetermined sites in DNA having a known sequence are well known, e.g., M13 primer mutagenesis and PCR mutagenesis. Screening of mutants is often done using assays of cancer protein activities.

Amino acid substitutions are typically of single residues; insertions usually will be on the order of from about 1-20 amino acids, although considerably larger insertions may be tolerated. Deletions generally range from about 1-20 residues, although in some cases deletions may be much larger.

Substitutions, deletions, insertions, or combination thereof may be used to arrive at a final derivative. Generally these changes are done on a few amino acids to minimize the

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alteration of the molecule. However, larger changes may be tolerated in certain circumstances. When small alterations in the characteristics of the cancer protein are desired, substitutions are generally made in accordance with the amino acid substitution relationships described.

The variants typically exhibit essentially the same qualitative biological activity and will  
5 elicit the same immune response as a naturally-occurring analog, although variants also are selected to modify the characteristics of cancer proteins as needed. Alternatively, the variant may be designed such that a biological activity of the cancer protein is altered. For example, glycosylation sites may be added, altered, or removed.

Substantial changes in function or immunological identity are sometimes made by  
10 selecting substitutions that are less conservative than those described above. For example, substitutions may be made which more significantly affect: the structure of the polypeptide backbone in the area of the alteration, for example the alpha-helical or beta-sheet structure; the charge or hydrophobicity of the molecule at the target site; or the bulk of the side chain. Substitutions which generally are expected to produce the greatest changes in the polypeptide's  
15 properties are those in which (a) a hydrophilic residue, e.g., serine or threonine is substituted for (or by) a hydrophobic residue, e.g., leucine, isoleucine, phenylalanine, valine, or alanine; (b) a cysteine or proline is substituted for (or by) another residue; (c) a residue having an electropositive side chain, e.g., lysine, arginine, or histidine, is substituted for (or by) an electronegative residue, e.g., glutamic or aspartic acid; (d) a residue having a bulky side chain,  
20 e.g., phenylalanine, is substituted for (or by) one not having a side chain, e.g., glycine; or (e) a proline residue is incorporated or substituted, which changes the degree of rotational freedom of the peptidyl bond.

Variants typically exhibit a similar qualitative biological activity and will elicit the same  
immune response as the naturally-occurring analog, although variants also are selected to  
25 modify the characteristics of the skin cancer proteins as needed. Alternatively, the variant may be designed such that the biological activity of the cancer protein is altered. For example, glycosylation sites may be altered or removed.

Covalent modifications of cancer polypeptides are included within the scope of this  
invention. One type of covalent modification includes reacting targeted amino acid residues of  
30 a cancer polypeptide with an organic derivatizing agent that is capable of reacting with selected side chains or the N-or C-terminal residues of a cancer polypeptide. Derivatization with bifunctional agents is useful, for instance, for crosslinking cancer polypeptides to a water-

insoluble support matrix or surface for use in a method for purifying anti-cancer polypeptide antibodies or screening assays, as is more fully described below. Commonly used crosslinking agents include, e.g., 1,1-bis(diazoacetyl)-2-phenylethane, glutaraldehyde, N-hydroxysuccinimide esters, e.g., esters with 4-azidosalicylic acid, homobifunctional imidoesters, including disuccinimidyl esters such as 3,3'-dithiobis(succinimidylpropionate), bifunctional maleimides such as bis-N-maleimido-1,8-octane and agents such as methyl-3-((p-azidophenyl)dithio)propioimide.

Other modifications include deamidation of glutaminyl and asparaginy residues to the corresponding glutamyl and aspartyl residues, respectively, hydroxylation of proline and lysine, phosphorylation of hydroxyl groups of serinyl, threonyl, or tyrosyl residues, methylation of the amino groups of the lysine, arginine, and histidine side chains (e.g., pp. 79-86, Creighton (1992) Proteins: Structure and Molecular Properties Freeman), acetylation of the N-terminal amine, and amidation of a C-terminal carboxyl group.

Another type of covalent modification of the cancer polypeptide included within the scope of this invention comprises altering the native glycosylation pattern of the polypeptide. "Altering the native glycosylation pattern" is intended for purposes herein to mean deleting one or more carbohydrate moieties found in native sequence cancer polypeptide, and/or adding one or more glycosylation sites that are not present in the native sequence cancer polypeptide. Glycosylation patterns can be altered in many ways. Different cell types to express cancer-associated sequences can result in different glycosylation patterns.

Addition of glycosylation sites to cancer polypeptides may also be accomplished by altering the amino acid sequence thereof. The alteration may be made, e.g., by the addition of, or substitution by, one or more serine or threonine residues to the native sequence cancer polypeptide (for O-linked glycosylation sites). The cancer amino acid sequence may optionally be altered through changes at the DNA level, particularly by mutating the DNA encoding the cancer polypeptide at preselected bases such that codons are generated that will translate into the desired amino acids.

Another means of increasing the number of carbohydrate moieties on the cancer polypeptide is by chemical or enzymatic coupling of glycosides to the polypeptide. See, e.g., WO 87/05330; pp. 259-306 in Apelin and Wriston (1981) CRC Crit. Rev. Biochem.

Removal of carbohydrate moieties present on the cancer polypeptide may be accomplished chemically or enzymatically or by mutational substitution of codons encoding for

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amino acid residues that serve as targets for glycosylation. Chemical deglycosylation techniques are applicable. See, e.g., Sojar and Bahl (1987) Arch. Biochem. Biophys. 259:52-57 and Edge, et al. (1981) Anal. Biochem. 118:131-137. Enzymatic cleavage of carbohydrate moieties on polypeptides can be achieved by the use of a variety of endo- and exo-glycosidases. See, e.g., Thotakura, et al. (1987) Meth. Enzymol. 138:350-359.

Another type of covalent modification of cancer comprises linking the cancer polypeptide to one of a variety of nonproteinaceous polymers, e.g., polyethylene glycol, polypropylene glycol, or polyoxyalkylenes, in the manner set forth in U.S. Patent Nos. 4,640,835; 4,496,689; 4,301,144; 4,670,417; 4,791,192, or 4,179,337.

Cancer polypeptides of the present invention may also be modified in a way to form chimeric molecules comprising a cancer polypeptide fused to another heterologous polypeptide or amino acid sequence. In one embodiment, such a chimeric molecule comprises a fusion of a cancer polypeptide with a tag polypeptide which provides an epitope to which an anti-tag antibody can selectively bind. The epitope tag is generally placed at the amino- or carboxyl-terminus of the cancer polypeptide. The presence of such epitope-tagged forms of a cancer polypeptide can be detected using an antibody against the tag polypeptide. Also, provision of the epitope tag enables the cancer polypeptide to be readily purified by affinity purification using an anti-tag antibody or another type of affinity matrix that binds to the epitope tag. In an alternative embodiment, the chimeric molecule may comprise a fusion of a cancer polypeptide with an immunoglobulin or a particular region of an immunoglobulin. For a bivalent form of the chimeric molecule, such a fusion could be to the Fc region of an IgG molecule.

Various tag polypeptides and their respective antibodies are available. Examples include poly-histidine (poly-his) or poly-histidine-glycine (poly-his-gly) tags; HIS6 and metal chelation tags, the flu HA tag polypeptide and its antibody 12CA5 (Field, et al. (1988) Mol. Cell. Biol. 8:2159-2165); the c-myc tag and the 8F9, 3C7, 6E10, G4, B7, and 9E10 antibodies thereto (Evan, et al. (1985) Molecular and Cellular Biology 5:3610-3616); and the Herpes Simplex virus glycoprotein D (gD) tag and its antibody (Paborsky, et al. (1990) Protein Engineering 3(6):547-553). Other tag polypeptides include the Flag-peptide (Hopp, et al. (1988) BioTechnology 6:1204-1210); the KT3 epitope peptide (Martin, et al. (1992) Science 255:192-194); tubulin epitope peptide (Skinner, et al. (1991) J. Biol. Chem. 266:15163-15166); and the T7 gene 10 protein peptide tag (Lutz-Freyermuth, et al. (1990) Proc. Natl. Acad. Sci. USA 87:6393-6397).

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Also included are other cancer proteins of the cancer family, and cancer proteins from other organisms, which are cloned and expressed as outlined below. Thus, probe or degenerate polymerase chain reaction (PCR) primer sequences may be used to find other related cancer proteins from humans or other organisms. Particularly useful probe and/or PCR primer  
5 sequences include the unique areas of the cancer nucleic acid sequence. Preferred PCR primers are from about 15-35 nucleotides in length, with from about 20-30 being preferred, and may contain inosine as needed. The conditions for PCR reaction have been well described (e.g., Innis, PCR Protocols, supra).

In addition, cancer proteins can be made that are longer than those encoded by the  
10 nucleic acids of the Tables, e.g., by the elucidation of extended sequences, the addition of epitope or purification tags, the addition of other fusion sequences, etc.

Cancer proteins may also be identified as being encoded by cancer nucleic acids. Thus, cancer proteins are encoded by nucleic acids that will hybridize to the sequences of the sequence listings, or their complements, as outlined herein.

15 Antibodies to cancer proteins

In a preferred embodiment, when the cancer protein is to be used to generate antibodies, e.g., for immunotherapy or immunodiagnosis, the cancer protein should share at least one epitope or determinant with the full length protein. By "epitope" or "determinant" herein is typically meant a portion of a protein which will generate and/or bind an antibody or T-cell  
20 receptor in the context of MHC. Thus, in most instances, antibodies made to a smaller cancer protein will be able to bind to the full-length protein, particularly linear epitopes. In a preferred embodiment, the epitope is unique; that is, antibodies generated to a unique epitope show little or no cross-reactivity. In a preferred embodiment, the epitope is selected from a protein sequence set out in the tables.

25 Methods of preparing polyclonal antibodies exist (e.g., Coligan, supra; and Harlow and Lane, supra). Polyclonal antibodies can be raised in a mammal, e.g., by one or more injections of an immunizing agent and, if desired, an adjuvant. Typically, the immunizing agent and/or adjuvant will be injected in the mammal by multiple subcutaneous or intraperitoneal injections. The immunizing agent may include a protein encoded by a nucleic acid of Tables 1-68 or  
30 fragment thereof or a fusion protein thereof. It may be useful to conjugate the immunizing agent to a protein known to be immunogenic in the mammal being immunized. Examples of such immunogenic proteins include but are not limited to keyhole limpet hemocyanin, serum

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albumin, bovine thyroglobulin, and soybean trypsin inhibitor. Examples of adjuvants which may be employed include Freund's complete adjuvant and MPL-TDM adjuvant (monophosphoryl Lipid A, synthetic trehalose dicorynomycolate). Various immunization protocols may be used.

- 5           The antibodies may, alternatively, be monoclonal antibodies. Monoclonal antibodies may be prepared using hybridoma methods, such as those described by Kohler and Milstein (1975) Nature 256:495. In a hybridoma method, a mouse, hamster, or other appropriate host animal, is typically immunized with an immunizing agent to elicit lymphocytes that produce or are capable of producing antibodies that will specifically bind to the immunizing agent.
- 10          Alternatively, the lymphocytes may be immunized in vitro. The immunizing agent will typically include a polypeptide encoded by a nucleic acid of the tables or fragment thereof, or a fusion protein thereof. Generally, either peripheral blood lymphocytes ("PBLs") are used if cells of human origin are desired, or spleen cells or lymph node cells are used if non-human mammalian sources are desired. The lymphocytes are then fused with an immortalized cell line
- 15          using a suitable fusing agent, such as polyethylene glycol, to form a hybridoma cell (e.g., pp. 59-103 in Goding (1986) Monoclonal Antibodies: Principles and Practice Academic Press). Immortalized cell lines are usually transformed mammalian cells, particularly myeloma cells of rodent, bovine, or human origin. Usually, rat or mouse myeloma cell lines are employed. The hybridoma cells may be cultured in a suitable culture medium that preferably contains one or
- 20          more substances that inhibit the growth or survival of the unfused, immortalized cells. For example, if the parental cells lack the enzyme hypoxanthine guanine phosphoribosyl transferase (HGPRT or HPRT), the culture medium for the hybridomas typically will include hypoxanthine, aminopterin, and thymidine ("HAT medium"), which substances prevent the growth of HGPRT-deficient cells.
- 25          In one embodiment, the antibodies are bispecific antibodies. Bispecific antibodies are monoclonal, preferably human or humanized, antibodies that have binding specificities for at least two different antigens or that have binding specificities for two epitopes on the same antigen. In one embodiment, one of the binding specificities is for a protein encoded by a nucleic acid of the tables or a fragment thereof, the other one is for another antigen, and
- 30          preferably for a cell-surface protein or receptor or receptor subunit, preferably one that is tumor specific. Alternatively, tetramer-type technology may create multivalent reagents.

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In a preferred embodiment, the antibodies to cancer protein are capable of reducing or eliminating a biological function of a cancer protein, in a naked form or conjugated to an effector moiety, as is described below. That is, the addition of anti-cancer protein antibodies (either polyclonal or preferably monoclonal) to cancer tissue (or cells containing cancer) may  
5 reduce or eliminate the cancer. Generally, at least a 25% decrease in activity, growth, size, or the like is preferred, with at least about 50% being particularly preferred and about a 95-100% decrease being especially preferred.

In a preferred embodiment the antibodies to the cancer proteins are humanized antibodies (e.g., Xenerex Biosciences, Medarex, Inc., Abgenix, Inc., Protein Design Labs, Inc.)  
10 Humanized forms of non-human (e.g., murine) antibodies are chimeric molecules of immunoglobulins, immunoglobulin chains or fragments thereof (such as Fv, Fab, Fab', F(ab')<sub>2</sub> or other antigen-binding subsequences of antibodies) which contain minimal sequence derived from non-human immunoglobulin. Humanized antibodies include human immunoglobulins (recipient antibody) in which residues from a complementary determining region (CDR) of the  
15 recipient are replaced by residues from a CDR of a non-human species (donor antibody) such as mouse, rat, or rabbit having the desired specificity, affinity, and capacity. In some instances, Fv framework residues of a human immunoglobulin are replaced by corresponding non-human residues. Humanized antibodies may also comprise residues which are found neither in the recipient antibody nor in the imported CDR or framework sequences. In general, a humanized  
20 antibody will comprise substantially all of at least one, and typically two, variable domains, in which all or substantially all of the CDR regions correspond to those of a non-human immunoglobulin and all or substantially all of the framework (FR) regions are those of a human immunoglobulin consensus sequence. The humanized antibody optimally also will typically comprise at least a portion of an immunoglobulin constant region (Fc), typically that of a human  
25 immunoglobulin (Jones, et al. (1986) Nature 321:522-525; Riechmann, et al. (1988) Nature 332:323-329; and Presta (1992) Curr. Op. Struct. Biol. 2:593-596). Humanization can be essentially performed following the method of Winter and co-workers (Jones, et al. (1986) Nature 321:522-525; Riechmann, et al. (1988) Nature 332:323-327; Verhoeyen, et al. (1988) Science 239:1534-1536), by substituting rodent CDRs or CDR sequences for corresponding  
30 sequences of a human antibody. Accordingly, such humanized antibodies are chimeric antibodies (U.S. Patent No. 4,816,567), wherein substantially less than an intact human variable domain has been substituted by corresponding sequence from a non-human species.



Human antibodies can also be produced using phage display libraries (Hoogenboom and Winter (1992) J. Mol. Biol. 227:381-388; Marks, et al. (1991) J. Mol. Biol. 222:581-597) or human monoclonal antibodies (e.g., p. 77, Cole, et al. in Reisfeld and Sell (1985) Monoclonal Antibodies and Cancer Therapy Liss; and Boerner, et al. (1991) J. Immunol. 147:86-95).

5 Similarly, human antibodies can be made by introducing human immunoglobulin loci into transgenic animals, e.g., mice in which the endogenous immunoglobulin genes have been partially or completely inactivated. Upon challenge, human antibody production is observed, which closely resembles that seen in humans in nearly all respects, including gene rearrangement, assembly, and antibody repertoire. This approach is described, e.g., in U.S.  
10 Patent Nos. 5,545,807; 5,545,806; 5,569,825; 5,625,126; 5,633,425; 5,661,016, and in the following scientific publications: Marks, et al. (1992) Bio/Technology 10:779-783; Lonberg, et al. (1994) Nature 368:856-859; Morrison (1994) Nature 368:812-13; Fishwild, et al. (1996) Nature Biotechnology 14:845-851; Neuberger (1996) Nature Biotechnology 14:826; and Lonberg and Huszar (1995) Intern. Rev. Immunol. 13:65-93.

15 By immunotherapy is meant treatment of cancer with an antibody raised against cancer proteins. As used herein, immunotherapy can be passive or active. Passive immunotherapy as defined herein is the passive transfer of antibody to a recipient (patient). Active immunization is the induction of antibody and/or T-cell responses in a recipient (patient). Induction of an immune response is the result of providing the recipient with an antigen to which antibodies are  
20 raised. The antigen may be provided by injecting a polypeptide against which antibodies are desired to be raised into a recipient, or contacting the recipient with a nucleic acid capable of expressing the antigen and under conditions for expression of the antigen, leading to an immune response.

In a preferred embodiment the cancer proteins against which antibodies are raised are  
25 secreted proteins as described above. Without being bound by theory, antibodies used for treatment may bind and prevent the secreted protein from binding to its receptor, thereby inactivating the secreted cancer protein, e.g., in autocrine signaling.

In another preferred embodiment, the cancer protein to which antibodies are raised is a transmembrane protein. Without being bound by theory, antibodies used for treatment may  
30 bind the extracellular domain of the cancer protein and prevent it from binding to other proteins, such as circulating ligands or cell-associated molecules. The antibody may cause down-regulation of the transmembrane cancer protein. The antibody may be a competitive, non-

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competitive or uncompetitive inhibitor of protein binding to the extracellular domain of the cancer protein. The antibody may also be an antagonist of the cancer protein. Further, the antibody may prevent activation of the transmembrane cancer protein, or may induce or suppress a particular cellular pathway. In one aspect, when the antibody prevents the binding of other molecules to the cancer protein, the antibody prevents growth of the cell. The antibody may also be used to target or sensitize the cell to cytotoxic agents, including, but not limited to TNF- $\alpha$ , TNF- $\beta$ , IL-1, INF- $\gamma$ , and IL-2, or chemotherapeutic agents including 5FU, vinblastine, actinomycin D, cisplatin, methotrexate, and the like. In some instances the antibody may belong to a sub-type that activates serum complement when complexed with the transmembrane protein thereby mediating cytotoxicity or antigen-dependent cytotoxicity (ADCC). Thus, cancer may be treated by administering to a patient antibodies directed against the transmembrane cancer protein. Antibody-labeling may activate a co-toxin, localize a toxin payload, or otherwise provide means to locally ablate cells.

In another preferred embodiment, the antibody is conjugated to an effector moiety. The effector moiety can be various molecules, including labeling moieties such as radioactive labels or fluorescent labels, or can be a therapeutic moiety. In one aspect the therapeutic moiety is a small molecule that modulates the activity of a cancer protein. In another aspect the therapeutic moiety may modulate the activity of molecules associated with or in close proximity to a cancer protein. The therapeutic moiety may inhibit enzymatic or signaling activity such as protease or collagenase or protein kinase activity associated with cancer, or be an attractant of other cells, such as NK cells.

In a preferred embodiment, the therapeutic moiety can also be a cytotoxic agent. In this method, targeting the cytotoxic agent to cancer tissue or cells results in a reduction in the number of afflicted cells, thereby reducing symptoms associated with cancer. Cytotoxic agents are numerous and varied and include, but are not limited to, cytotoxic drugs or toxins or active fragments of such toxins. Suitable toxins and their corresponding fragments include diphtheria A chain, exotoxin A chain, ricin A chain, abrin A chain, curcin, crotin, phenomycin, enomycin, saporin, auristatin, and the like. Cytotoxic agents also include radiochemicals made by conjugating radioisotopes to antibodies raised against cancer proteins, or binding of a radionuclide to a chelating agent that has been covalently attached to the antibody. Targeting the therapeutic moiety to transmembrane cancer proteins not only serves to increase the local

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concentration of therapeutic moiety in the cancer afflicted area, but also serves to reduce deleterious side effects that may be associated with the untargeted therapeutic moiety.

In another preferred embodiment, the cancer protein against which the antibodies are raised is an intracellular protein. In this case, the antibody may be conjugated to a protein  
5 which facilitates entry into the cell. In one case, the antibody enters the cell by endocytosis. In another embodiment, a nucleic acid encoding the antibody is administered to the individual or cell. Moreover, wherein the cancer protein can be targeted within a cell, e.g., the nucleus, an antibody thereto may contain a signal for that target localization, e.g., a nuclear localization signal.

10 The cancer antibodies of the invention specifically bind to cancer proteins. By "specifically bind" herein is meant that the antibodies bind to the protein with a  $K_D$  of at least about 0.1 mM, more usually at least about 1  $\mu$ M, preferably at least about 0.1  $\mu$ M or better, and most preferably, 0.01  $\mu$ M or better. Selectivity of binding to the specific target and not to related sequences is often also important.

#### 15 Detection of cancer sequence for diagnostic and therapeutic applications

In one aspect, the RNA expression levels of genes are determined for different cellular states in the cancer phenotype. Expression levels of genes in normal tissue (e.g., not  
undergoing cancer) and in cancer tissue (and in some cases, for varying severities of cancer that relate to prognosis, as outlined below), or in non-malignant disease are evaluated to provide  
20 expression profiles. A gene expression profile of a particular cell state or point of development is essentially a "fingerprint" of the state of the cell. While two states may have a particular gene similarly expressed, the evaluation of a number of genes simultaneously allows the generation of a gene expression profile that is reflective of the state of the cell. By comparing expression profiles of cells in different states, information regarding which genes are important (including  
25 both up- and down-regulation of genes) in each of these states is obtained. Then, diagnosis may be performed or confirmed to determine whether a tissue sample has the gene expression profile of normal or cancerous tissue. This will provide for molecular diagnosis of related conditions.

"Differential expression," or grammatical equivalents as used herein, refers to qualitative or quantitative differences in the temporal and/or cellular gene expression patterns within and  
30 among cells and tissue. Thus, a differentially expressed gene can qualitatively have its expression altered, including an activation or inactivation, in, e.g., normal versus cancer tissue. Genes may be turned on or turned off in a particular state, relative to another state thus

permitting comparison of two or more states. A qualitatively regulated gene will exhibit an expression pattern within a state or cell type which is detectable by standard techniques. Some genes will be expressed in one state or cell type, but not in both. Alternatively, the difference in expression may be quantitative, e.g., in that expression is increased or decreased; e.g., gene  
5 expression is either upregulated, resulting in an increased amount of transcript, or downregulated, resulting in a decreased amount of transcript. The degree to which expression differs need only be large enough to quantify via standard characterization techniques as outlined below, such as by use of Affymetrix GeneChip™ expression arrays. See, Lockhart (1996) Nature Biotechnology 14:1675-1680. Other techniques include, but are not limited to,  
10 quantitative reverse transcriptase PCR, northern analysis, and RNase protection. As outlined above, preferably the change in expression (e.g., upregulation or downregulation) is at least about 50%, more preferably at least about 100%, more preferably at least about 150%, more preferably at least about 200%, with from 300 to at least 1000% being especially preferred.

Evaluation may be at the gene transcript or the protein level. The amount of gene  
15 expression may be monitored using nucleic acid probes to the RNA or DNA equivalent of the gene transcript, and the quantification of gene expression levels, or, alternatively, the final gene product itself (protein) can be monitored, e.g., with antibodies to the cancer protein and standard immunoassays (ELISAs, etc.) or other techniques, including mass spectroscopy assays, 2D gel electrophoresis assays, etc. Proteins corresponding to cancer genes, e.g., those identified as  
20 being important in a cancer or disease phenotype, can be evaluated in a cancer diagnostic test. In a preferred embodiment, gene expression monitoring is performed simultaneously on a number of genes. Multiple protein expression monitoring can be performed as well.

In this embodiment, the cancer nucleic acid probes are attached to biochips as outlined herein for the detection and quantification of cancer sequences in a particular cell. The assays  
25 are further described below in the example. PCR techniques can be used to provide greater sensitivity.

In a preferred embodiment nucleic acids encoding the cancer protein are detected. Although DNA or RNA encoding the cancer protein may be detected, of particular interest are methods wherein an mRNA encoding a cancer protein is detected. Probes to detect mRNA can  
30 be a nucleotide/deoxynucleotide probe that is complementary to and hybridizes with the mRNA and includes, but is not limited to, oligonucleotides, cDNA, or RNA. Probes also should contain a detectable label, as defined herein. In one method the mRNA is detected after

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immobilizing the nucleic acid to be examined on a solid support such as nylon membranes and hybridizing the probe with the sample. Following washing to remove the non-specifically bound probe, the label is detected. In another method, detection of the mRNA is performed in situ. In this method permeabilized cells or tissue samples are contacted with a detectably  
5 labeled nucleic acid probe for sufficient time to allow the probe to hybridize with the target mRNA. Following washing to remove the non-specifically bound probe, the label is detected. For example a digoxigenin labeled riboprobe (RNA probe) that is complementary to the mRNA encoding a cancer protein is detected by binding the digoxigenin with an anti-digoxigenin secondary antibody and developed with nitro blue tetrazolium and 5-bromo-4-chloro-3-indoyl  
10 phosphate.

In a preferred embodiment, various proteins from the three classes of proteins as described herein (secreted, transmembrane, or intracellular proteins) are used in diagnostic assays. The cancer proteins, antibodies, nucleic acids, modified proteins, and cells containing cancer sequences are used in diagnostic assays. This can be performed on an individual gene or  
15 corresponding polypeptide level. In a preferred embodiment, the expression profiles are used, preferably in conjunction with high throughput screening techniques to allow monitoring for expression profile genes and/or corresponding polypeptides.

As described and defined herein, cancer proteins, including intracellular, transmembrane, or secreted proteins, find use as markers of cancer, e.g., for prognostic or  
20 diagnostic purposes. Detection of these proteins in putative cancer tissue allows for detection, prognosis, or diagnosis of cancer or similar disease, and for selection of therapeutic strategy. In one embodiment, antibodies are used to detect cancer proteins. A preferred method separates proteins from a sample by electrophoresis on a gel (typically a denaturing and reducing protein gel, but may be another type of gel, including isoelectric focusing gels and the like). Following  
25 separation of proteins, the cancer protein is detected, e.g., by immunoblotting with antibodies raised against the cancer protein.

In another preferred method, antibodies to the cancer protein find use in in situ imaging techniques, e.g., in histology. See, e.g., Asai, et al. (eds. 1993) Methods in Cell Biology: Antibodies in Cell Biology (vol. 37) Academic Press. In this method, cells are contacted with  
30 from one to many antibodies to the cancer protein(s). Following washing to remove non-specific antibody binding, the presence of the antibody or antibodies is detected. In one embodiment the antibody is detected by incubating with a secondary antibody that contains a

detectable label. In another method the primary antibody to the cancer protein(s) contains a detectable label, e.g., an enzyme marker that can act on a substrate. In another preferred embodiment each one of multiple primary antibodies contains a distinct and detectable label. This method finds particular use in simultaneous screening for a plurality of cancer proteins.

5 Many other histological imaging techniques are also provided by the invention.

In a preferred embodiment the label is detected in a fluorometer which has the ability to detect and distinguish emissions of different wavelengths. In addition, a fluorescence activated cell sorter (FACS) can be used in the method.

In another preferred embodiment, antibodies find use in diagnosing cancer from blood,  
10 serum, plasma, stool, and other samples. Such samples, therefore, are useful as samples to be probed or tested for the presence of cancer proteins. Antibodies can be used to detect a cancer protein by previously described immunoassay techniques including ELISA, immunoblotting (western blotting), immunoprecipitation, BIACORE technology and the like. Conversely, the presence of antibodies may indicate an immune response against an endogenous cancer protein.

15 In a preferred embodiment, in situ hybridization of labeled cancer nucleic acid probes to tissue arrays is done. For example, arrays of tissue samples, including cancer tissue and/or normal tissue, are made. In situ hybridization (see, e.g., Ausubel, supra) is then performed. When comparing the fingerprints between an individual and a standard, a diagnosis, a prognosis, or a prediction may be based on the findings. It is further understood that the genes  
20 which indicate the diagnosis may differ from those which indicate the prognosis and molecular profiling of the condition of the cells may lead to distinctions between responsive or refractory conditions or may be predictive of outcomes.

In a preferred embodiment, the cancer proteins, antibodies, nucleic acids, modified proteins, and cells containing cancer sequences are used in prognosis assays. As above, gene  
25 expression profiles can be generated that correlate to cancer, clinical, pathological, or other information, in terms of long term prognosis. Again, this may be done on either a protein or gene level, with the use of genes being preferred. Single or multiple genes may be useful in various combinations. As above, cancer probes may be attached to biochips for the detection and quantification of cancer sequences in a tissue or patient. The assays proceed as outlined  
30 above for diagnosis. PCR method may provide more sensitive and accurate quantification.

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### Assays for therapeutic compounds

In a preferred embodiment, the proteins, nucleic acids, and antibodies as described herein are used in drug screening assays. The cancer proteins, antibodies, nucleic acids, modified proteins, and cells containing cancer sequences are used in drug screening assays or  
5 by evaluating the effect of drug candidates on a "gene expression profile" or expression profile of polypeptides. In a preferred embodiment, the expression profiles are used, preferably in conjunction with high throughput screening techniques, to allow monitoring for expression profile genes after treatment with a candidate agent (e.g., Zlokarnik, et al. (1998) Science 279:84-88; Heid (1996) Genome Res. 6:986-994.

10 In a preferred embodiment, the cancer proteins, antibodies, nucleic acids, modified proteins and cells containing the native or modified cancer proteins are used in screening assays. That is, the present invention provides novel methods for screening for compositions which modulate the cancer phenotype or an identified physiological function of a cancer protein. As above, this can be done on an individual gene level or by evaluating the effect of  
15 drug candidates on a "gene expression profile". In a preferred embodiment, the expression profiles are used, preferably in conjunction with high throughput screening techniques, to allow monitoring for expression profile genes after treatment with a candidate agent, see Zlokarnik, supra.

Having identified the differentially expressed genes herein, a variety of assays may be  
20 performed. In a preferred embodiment, assays may be run on an individual gene or protein level. That is, having identified a particular gene as up regulated in cancer, test compounds can be screened for the ability to modulate gene expression or for binding to the cancer protein. "Modulation" thus includes both an increase and a decrease in gene expression. The preferred amount of modulation will depend on the original change of the gene expression in normal  
25 versus tissue undergoing cancer, with changes of at least 10%, preferably 50%, more preferably 100-300%, and in some embodiments 300-1000% or greater. Thus, if a gene exhibits a 4-fold increase in cancer tissue compared to normal tissue, a decrease of about four-fold is often desired; similarly, a 10-fold decrease in cancer tissue compared to normal tissue often provides a target value of a 10-fold increase in expression to be induced by the test compound.

30 The amount of gene expression may be monitored using nucleic acid probes and the quantification of gene expression levels, or, alternatively, the gene product itself can be

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monitored, e.g., through the use of antibodies to the cancer protein and standard immunoassays. Proteomics and separation techniques may also allow quantification of expression.

In a preferred embodiment, gene expression or protein monitoring of a number of entities, e.g., an expression profile, is monitored simultaneously. Such profiles will typically  
5 involve a plurality of those entities described herein.

In this embodiment, the cancer nucleic acid probes are attached to biochips as outlined herein for the detection and quantification of cancer sequences in a particular cell. Alternatively, PCR may be used. Thus, a series, e.g., of microtiter plate, may be used with dispensed primers in desired wells. A PCR reaction can then be performed and analyzed for  
10 each well.

#### Modulators of cancer

Expression monitoring can be performed to identify compounds that modify the expression of one or more cancer-associated sequences, e.g., a polynucleotide sequence set out  
15 in the tables. Generally, in a preferred embodiment, a test modulator is added to the cells prior to analysis. Moreover, screens are also provided to identify agents that modulate cancer, modulate cancer proteins, bind to a cancer protein, or interfere with the binding of a cancer protein and an antibody or other binding partner.

The term "test compound" or "drug candidate" or "modulator" or grammatical  
20 equivalents as used herein describes a molecule, e.g., protein, oligopeptide, small organic molecule, polysaccharide, polynucleotide, etc., to be tested for the capacity to directly or indirectly alter the cancer phenotype or the expression of a cancer sequence, e.g., a nucleic acid or protein sequence. In preferred embodiments, modulators alter expression profiles, or expression profile nucleic acids or proteins provided herein. In one embodiment, the modulator  
25 suppresses a cancer phenotype, e.g., to a normal or non-malignant tissue fingerprint. In another embodiment, a modulator induced a cancer phenotype. Generally, a plurality of assay mixtures are run in parallel with different agent concentrations to obtain a differential response to the various concentrations. Typically, one of these concentrations serves as a negative control, e.g., at zero concentration or below the level of detection.

30 Drug candidates encompass numerous chemical classes, though typically they are organic molecules, preferably small organic compounds having a molecular weight of more than 100 and less than about 2,500 daltons. Preferred small molecules are less than 2000, or



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less than 1500, or less than 1000, or less than 500 D. Candidate agents comprise functional groups necessary for structural interaction with proteins, particularly hydrogen bonding, and typically include at least an amine, carbonyl, hydroxyl or carboxyl group, preferably at least two of the functional chemical groups. The candidate agents often comprise cyclical carbon or heterocyclic structures and/or aromatic or polyaromatic structures substituted with one or more of the above functional groups. Candidate agents are also found among biomolecules including peptides, saccharides, fatty acids, steroids, purines, pyrimidines, derivatives, structural analogs, or combinations thereof. Particularly preferred are peptides.

In one aspect, a modulator will neutralize the effect of a cancer protein. By "neutralize" is meant that activity of a protein is inhibited or blocked and the consequent effect on the cell.

In certain embodiments, combinatorial libraries of potential modulators will be screened for an ability to bind to a cancer polypeptide or to modulate activity. Conventionally, new chemical entities with useful properties are generated by identifying a chemical compound (called a "lead compound") with some desirable property or activity, e.g., inhibiting activity, creating variants of the lead compound, and evaluating the property and activity of those variant compounds. Often, high throughput screening (HTS) methods are employed for such an analysis. See, e.g., Janzen (2002) High Throughput Screening: Methods and Protocols Humana; Devlin (ed. 1997) High Throughput Screening: The Discovery of Bioactive Substances Dekker; and Mei and Czarnik (eds. 2002) Integrated Drug Discovery Techniques Dekker.

In one preferred embodiment, high throughput screening methods involve providing a library containing a large number of potential therapeutic compounds (candidate compounds). Such "combinatorial chemical libraries" are then screened in one or more assays to identify those library members (particular chemical species or subclasses) that display a desired characteristic activity. The compounds thus identified can serve as conventional "lead compounds" or can themselves be used as potential or actual therapeutics.

A combinatorial chemical library is a collection of diverse chemical compounds generated by either chemical synthesis or biological synthesis by combining a number of chemical "building blocks" such as reagents. For example, a linear combinatorial chemical library, such as a polypeptide (e.g., mutein) library, is formed by combining a set of chemical building blocks called amino acids in every possible way for a given compound length (e.g., the number of amino acids in a polypeptide compound). Millions of chemical compounds can be

synthesized through such combinatorial mixing of chemical building blocks (Gallop, et al. (1994) J. Med. Chem. 37:1233-1251).

Preparation and screening of combinatorial chemical libraries is well known. Such combinatorial chemical libraries include, but are not limited to, peptide libraries (see, e.g., U.S. Patent No. 5,010,175, Furka (1991) Pept. Prot. Res. 37:487-493, Houghton, et al. (1991) Nature 354:84-88), peptoids (PCT Publication No WO 91/19735), encoded peptides (PCT Publication WO 93/20242), random bio-oligomers (PCT Publication WO 92/00091), benzodiazepines (U.S. Pat. No. 5,288,514), diversomers such as hydantoins, benzodiazepines and dipeptides (Hobbs, et al. (1993) Proc. Nat. Acad. Sci. USA 90:6909-6913, vinylogous polypeptides (Hagihara, et al. (1992) J. Amer. Chem. Soc. 114:6568-570), nonpeptidal peptidomimetics with a Beta-D-Glucose scaffolding (Hirschmann, et al. (1992) J. Amer. Chem. Soc. 114:9217-9218), analogous organic syntheses of small compound libraries (Chen, et al. (1994) J. Amer. Chem. Soc. 116:2661-662), oligocarbamates (Cho, et al. (1993) Science 261:1303-1305), and/or peptidyl phosphonates (Campbell, et al. (1994) J. Org. Chem. 59:658-xxx). See, generally, Gordon, et al. (1994) J. Med. Chem. 37:1385-1401, nucleic acid libraries (see, e.g., Stratagene, Corp.), peptide nucleic acid libraries (see, e.g., U.S. Patent 5,539,083), antibody libraries (see, e.g., Vaughn, et al. (1996) Nature Biotechnology 14(3):309-314, and PCT/US96/10287), carbohydrate libraries (see, e.g., Liang, et al. (1996) Science 274:1520-1522, and U.S. Patent No. 5,593,853), and small organic molecule libraries (see, e.g., benzodiazepines, page 33 Baum (Jan 18, 1993) C&EN; isoprenoids, U.S. Patent No. 5,569,588; thiazolidinones and metathiazanones, U.S. Patent No. 5,549,974; pyrrolidines, U.S. Patent Nos. 5,525,735 and 5,519,134; morpholino compounds, U.S. Patent No. 5,506,337; benzodiazepines, U.S. Patent No. 5,288,514; and the like).

Devices for the preparation of combinatorial libraries are commercially available (see, e.g., 357 MPS, 390 MPS, Advanced Chem Tech, Louisville KY, Symphony, Rainin, Woburn, MA, 433A Applied Biosystems, Foster City, CA, 9050 Plus, Millipore, Bedford, MA).

A number of well known robotic systems have also been developed for solution phase chemistries. These systems include automated workstations like the automated synthesis apparatus developed by Takeda Chemical Industries, LTD. (Osaka, Japan) and many robotic systems utilizing robotic arms (Zymate II, Zymark Corporation, Hopkinton, Mass.; Orca, Hewlett-Packard, Palo Alto, Calif.), which mimic the manual synthetic operations performed by a chemist. The above devices are suitable for use with the present invention. The nature and

implementation of modifications to these devices (if any) so that they can operate as discussed herein will be apparent. In addition, numerous combinatorial libraries are themselves commercially available (see, e.g., ComGenex, Princeton, N.J., Asinex, Moscow, Ru, Tripos, Inc., St. Louis, MO, ChemStar, Ltd, Moscow, RU, 3D Pharmaceuticals, Exton, PA, Martek Biosciences, Columbia, MD, etc.).

The assays to identify modulators are amenable to high throughput screening. Preferred assays thus detect enhancement or inhibition of cancer gene transcription, inhibition, or enhancement of polypeptide expression, and inhibition or enhancement of polypeptide activity.

High throughput assays for the presence, absence, quantification, or other properties of particular nucleic acids or protein products are well known. Similarly, binding assays and reporter gene assays are similarly well known. Thus, e.g., U.S. Patent No. 5,559,410 discloses high throughput screening methods for proteins, U.S. Patent No. 5,585,639 discloses high throughput screening methods for nucleic acid binding (e.g., in arrays), while U.S. Patent Nos. 5,576,220 and 5,541,061 disclose high throughput methods of screening for ligand/antibody binding.

In addition, high throughput screening systems are commercially available (see, e.g., Zymark Corp., Hopkinton, MA; Air Technical Industries, Mentor, OH; Beckman Instruments, Inc. Fullerton, CA; Precision Systems, Inc., Natick, MA, etc.). These systems typically automate entire procedures, including sample and reagent pipetting, liquid dispensing, timed incubations, and final readings of the microplate in detector(s) appropriate for the assay. These configurable systems provide high throughput and rapid start up as well as a high degree of flexibility and customization. The manufacturers of such systems provide detailed protocols for various high throughput systems. Thus, e.g., Zymark Corp. provides technical bulletins describing screening systems for detecting the modulation of gene transcription, ligand binding, and the like.

In one embodiment, modulators are proteins, often naturally occurring proteins or fragments of naturally occurring proteins. Thus, e.g., cellular extracts containing proteins, or random or directed digests of proteinaceous cellular extracts, may be used. In this way libraries of proteins may be made for screening in the methods of the invention. Particularly preferred in this embodiment are libraries of bacterial, fungal, viral, and mammalian proteins, with the latter being preferred, and human proteins being especially preferred. Particularly useful test

compound will be directed to the class of proteins to which the target belongs, e.g., substrates for enzymes or ligands and receptors.

In a preferred embodiment, modulators are peptides of from about 5-30 amino acids, with from about 5-20 amino acids being preferred, and from about 7-15 being particularly preferred. The peptides may be digests of naturally occurring proteins, random peptides, or "biased" random peptides. By "randomized" or grammatical equivalents herein is meant that each nucleic acid and peptide consists of essentially random nucleotides and amino acids, respectively. Since generally these random peptides (or nucleic acids, discussed below) are chemically synthesized, they may incorporate a nucleotide or amino acid at any position. The synthetic process can be designed to generate randomized proteins or nucleic acids, to allow the formation of all or most of the possible combinations over the length of the sequence, thus forming a library of randomized candidate bioactive proteinaceous agents.

In one embodiment, the library is fully randomized, with no sequence preferences or constants at any position. In a preferred embodiment, the library is biased. That is, some positions within the sequence are either held constant, or are selected from a limited number of possibilities. For example, in a preferred embodiment, the nucleotides or amino acid residues are randomized within a defined class, e.g., of hydrophobic amino acids, hydrophilic residues, sterically biased (either small or large) residues, towards the creation of nucleic acid binding domains, the creation of cysteines, for cross-linking, prolines for SH-3 domains, serines, threonines, tyrosines, or histidines for phosphorylation sites, etc., or to purines, etc.

Modulators of cancer can also be nucleic acids, as defined above.

As described above generally for proteins, nucleic acid modulating agents may be naturally occurring nucleic acids, random nucleic acids, or "biased" random nucleic acids. For example, digests of prokaryotic or eukaryotic genomes may be used as is outlined above for proteins.

In a preferred embodiment, the candidate compounds are organic chemical moieties, a wide variety of which are available in the literature.

After the candidate agent has been added and the cells allowed to incubate for some period of time, the sample containing a target sequence to be analyzed is added to the biochip. If required, the target sequence is prepared using known techniques. For example, the sample may be treated to lyse the cells, using known lysis buffers, electroporation, etc., with purification and/or amplification such as PCR performed as appropriate. For example, an in

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vitro transcription with labels covalently attached to the nucleotides is performed. Generally, the nucleic acids are labeled with biotin-FITC or PE, or with cy3 or cy5.

In a preferred embodiment, the target sequence is labeled with, e.g., a fluorescent, a chemiluminescent, a chemical, or a radioactive signal, to provide a means of detecting the target sequence's specific binding to a probe. The label also can be an enzyme, such as, alkaline phosphatase or horseradish peroxidase, which when provided with an appropriate substrate produces a product that can be detected. Alternatively, the label can be a labeled compound or small molecule, such as an enzyme inhibitor, that binds but is not catalyzed or altered by the enzyme. The label also can be a moiety or compound, such as, an epitope tag or biotin which specifically binds to streptavidin. For the example of biotin, the streptavidin is labeled as described above, thereby, providing a detectable signal for the bound target sequence. Unbound labeled streptavidin is typically removed prior to analysis.

These assays can be direct hybridization assays or can comprise "sandwich assays", which include the use of multiple probes, as is generally outlined in U.S. Patent Nos. 5,681,702, 5,597,909, 5,545,730, 5,594,117, 5,591,584, 5,571,670, 5,580,731, 5,571,670, 5,591,584, 5,624,802, 5,635,352, 5,594,118, 5,359,100, 5,124,246, and 5,681,697, all of which are hereby incorporated by reference. In this embodiment, in general, the target nucleic acid is prepared as outlined above, and then added to the biochip comprising a plurality of nucleic acid probes, under conditions that allow the formation of a hybridization complex.

A variety of hybridization conditions may be used in the present invention, including high, moderate, and low stringency conditions as outlined above. The assays are generally run under stringency conditions which allows formation of the label probe hybridization complex only in the presence of target. Stringency can be controlled by altering a step parameter that is a thermodynamic variable, including, but not limited to, temperature, formamide concentration, salt concentration, chaotropic salt concentration, pH, organic solvent concentration, etc.

These parameters may also be used to control non-specific binding, as is generally outlined in U.S. Patent No. 5,681,697. Thus it may be desirable to perform certain steps at higher stringency conditions to reduce non-specific binding.

The reactions outlined herein may be accomplished in a variety of ways. Components of the reaction may be added simultaneously, or sequentially, in different orders, with preferred embodiments outlined below. In addition, the reaction may include a variety of other reagents. These include salts, buffers, neutral proteins, e.g., albumin, detergents, etc. which may be used

to facilitate optimal hybridization and detection, and/or reduce non-specific or background interactions. Reagents that otherwise improve the efficiency of the assay, such as protease inhibitors, nuclease inhibitors, anti-microbial agents, etc., may also be used as appropriate, depending on the sample preparation methods and purity of the target.

5           The assay data are analyzed to determine the expression levels, and changes in expression levels as between states of individual genes, forming a gene expression profile.

          Screens are performed to identify modulators of the cancer phenotype. In one embodiment, screening is performed to identify modulators that can induce or suppress a particular expression profile, thus preferably generating the associated phenotype. In another  
10   embodiment, e.g., for diagnostic applications, having identified differentially expressed genes important in a particular state, screens can be performed to identify modulators that alter expression of individual genes. In an another embodiment, screening is performed to identify modulators that alter a biological function of the expression product of a differentially  
15   expressed gene. Again, having identified the importance of a gene in a particular state, screens are performed to identify agents that bind and/or modulate the biological activity of the gene product.

          In addition, screens can be done for genes that are induced in response to a candidate agent or treatment process. After identifying a modulator based upon its ability to suppress a cancer expression pattern leading to a normal expression pattern (or its converse), or to  
20   modulate a single cancer gene expression profile so as to mimic the expression of the gene from normal tissue, a screen as described above can be performed to identify genes that are specifically modulated in response to the agent. Comparing expression profiles between normal tissue and agent treated cancer tissue reveals genes that are not expressed in normal tissue or cancer tissue, but are expressed in agent treated tissue. These agent-specific sequences can be  
25   identified and used by methods described herein for cancer genes or proteins. In particular, these sequences and the proteins they encode find use in marking or identifying agent treated cells. In addition, antibodies can be raised against the agent induced proteins and used to target novel therapeutics to the treated cancer tissue sample.

          Thus, in one embodiment, a test compound is administered to a population of cancer  
30   cells that have an associated cancer expression profile. By "administration" or "contacting" herein is meant that the candidate agent is added to the cells in such a manner as to allow the agent to act upon the cell, whether by uptake and intracellular action, or by action at the cell

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surface. In some embodiments, nucleic acid encoding a proteinaceous candidate agent (e.g., a peptide) may be put into a viral construct such as an adenoviral or retroviral construct, and added to the cell, such that expression of the peptide agent is accomplished, e.g., PCT US97/01019. Regulatable gene therapy systems can also be used.

5           Once a test compound has been administered to the cells, the cells can be washed if desired and are allowed to incubate under preferably physiological conditions for some period of time. The cells are then harvested and a new gene expression profile is generated, as outlined herein.

          Thus, e.g., cancer or non-malignant tissue may be screened for agents that modulate, e.g., induce or suppress a cancer phenotype. A change in at least one gene, preferably many, of the expression profile indicates that the agent has an effect on cancer activity. By defining such a signature for the cancer phenotype, screens for new drugs that alter the phenotype can be devised. With this approach, the drug target need not be known and need not be represented in the original expression screening platform, nor does the level of transcript for the target protein  
15           need to change.

          In a preferred embodiment, as outlined above, screens may be done on individual genes and gene products (proteins). That is, having identified a particular differentially expressed gene as important in a particular state, screening of modulators of either the expression of the gene or the gene product itself can be done. The gene products of differentially expressed genes are sometimes referred to herein as "cancer proteins" or a "cancer modulatory protein". The cancer modulatory protein may be a fragment, or alternatively, be the full length protein to the fragment encoded by the nucleic acids of the Tables. Preferably, the cancer modulatory protein is a fragment. In a preferred embodiment, the cancer amino acid sequence which is used to determine sequence identity or similarity is encoded by a nucleic acid of the Tables. In another  
20           embodiment, the sequences are naturally occurring allelic variants of a protein encoded by a nucleic acid of the Tables. In another embodiment, the sequences are sequence variants as further described herein.

          Preferably, the cancer modulatory protein is a fragment of about 14-24 amino acids long. More preferably the fragment is a soluble fragment. Preferably, the fragment includes a non-transmembrane region. In a preferred embodiment, the fragment has an N-terminal Cys to  
30           aid in solubility. In one embodiment, the C-terminus of the fragment is kept as a free acid and the N-terminus is a free amine to aid in coupling, e.g., to cysteine.

In one embodiment the cancer proteins are conjugated to an immunogenic agent as discussed herein. In one embodiment the cancer protein is conjugated to BSA.

Measurements of cancer polypeptide activity, or of cancer or the cancer phenotype can be performed using a variety of assays. For example, the effects of the test compounds upon the function of the cancer polypeptides can be measured by examining parameters described above. A suitable physiological change that affects activity can be used to assess the influence of a test compound on the polypeptides of this invention. When the functional consequences are determined using intact cells or animals, one can also measure a variety of effects such as, in the case of cancer associated with tumors, tumor growth, tumor metastasis, neovascularization, hormone release, transcriptional changes to both known and uncharacterized genetic markers (e.g., northern blots), changes in cell metabolism such as cell growth or pH changes, and changes in intracellular second messengers such as cGMP. In the assays of the invention, mammalian cancer polypeptide is typically used, e.g., mouse, preferably human.

Assays to identify compounds with modulating activity can be performed in vitro. For example, a cancer polypeptide is first contacted with a potential modulator and incubated for a suitable amount of time, e.g., from 0.5-48 hours. In one embodiment, the cancer polypeptide levels are determined in vitro by measuring the level of protein or mRNA. The level of protein is typically measured using immunoassays such as western blotting, ELISA, and the like with an antibody that selectively binds to the cancer polypeptide or a fragment thereof. For measurement of mRNA, amplification, e.g., using PCR, LCR, or hybridization assays, e.g., northern hybridization, RNase protection, dot blotting, are preferred. The level of protein or mRNA is typically detected using directly or indirectly labeled detection agents, e.g., fluorescently or radioactively labeled nucleic acids, radioactively or enzymatically labeled antibodies, and the like, as described herein.

Alternatively, a reporter gene system can be devised using a cancer protein promoter operably linked to a reporter gene such as luciferase, green fluorescent protein, CAT, or  $\beta$ -gal. The reporter construct is typically transfected into a cell. After treatment with a potential modulator, the amount of reporter gene transcription, translation, or activity is measured according to standard techniques.

In a preferred embodiment, as outlined above, screens may be done on individual genes and gene products (proteins). That is, having identified a particular differentially expressed gene as important in a particular state, screening of modulators of the expression of the gene or



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the gene product itself can be done. The gene products of differentially expressed genes are sometimes referred to herein as "cancer proteins." The cancer protein may be a fragment, or alternatively, the full length protein to a fragment shown herein.

5 In one embodiment, screening for modulators of expression of specific genes is performed. Typically, the expression of only one or a few genes are evaluated. In another embodiment, screens are designed to first find compounds that bind to differentially expressed proteins. These compounds are then evaluated for the ability to modulate differentially expressed activity. Moreover, once initial candidate compounds are identified, variants can be further screened to better evaluate structure activity relationships.

10 In a preferred embodiment, binding assays are done. In general, purified or isolated gene product is used; that is, the gene products of one or more differentially expressed nucleic acids are made. For example, antibodies are generated to the protein gene products, and standard immunoassays are run to determine the amount of protein present. Alternatively, cells comprising the cancer proteins can be used in the assays.

15 Thus, in a preferred embodiment, the methods comprise combining a cancer protein and a candidate compound, and determining the binding of the compound to the cancer protein. Preferred embodiments utilize the human cancer protein, although other mammalian proteins may also be used, e.g., for the development of animal models of human disease. In some embodiments, as outlined herein, variant or derivative cancer proteins may be used.

20 Generally, in a preferred embodiment of the methods herein, the cancer protein or the candidate agent is non-diffusably bound to an insoluble support, preferably having isolated sample receiving areas (e.g., a microtiter plate, an array, etc.). The insoluble supports may be made of a composition to which the compositions can be bound, is readily separated from soluble material, and is otherwise compatible with the overall method of screening. The surface  
25 of such supports may be solid or porous and of a convenient shape. Examples of suitable insoluble supports include microtiter plates, arrays, membranes, and beads. These are typically made of glass, plastic (e.g., polystyrene), polysaccharides, nylon or nitrocellulose, teflon™, etc. Microtiter plates and arrays are especially convenient because a large number of assays can be carried out simultaneously, using small amounts of reagents and samples. The particular  
30 manner of binding of the composition is typically not crucial so long as it is compatible with the reagents and overall methods of the invention, maintains the activity of the composition, and is nondiffusable. Preferred methods of binding include the use of antibodies (which do not

sterically block either the ligand binding site or activation sequence when the protein is bound to the support), direct binding to "sticky" or ionic supports, chemical crosslinking, the synthesis of the protein or agent on the surface, etc. Following binding of the protein or agent, excess unbound material is removed by washing. The sample receiving areas may then be blocked  
5 through incubation with bovine serum albumin (BSA), casein, or other innocuous protein or other moiety.

In a preferred embodiment, the cancer protein is bound to the support, and a test compound is added to the assay. Alternatively, the candidate agent is bound to the support and the cancer protein is added. Novel binding agents include specific antibodies, non-natural  
10 binding agents identified in screens of chemical libraries, peptide analogs, etc. Of particular interest are screening assays for agents that have a low toxicity for human cells. A wide variety of assays may be used for this purpose, including labeled in vitro protein-protein binding assays, electrophoretic mobility shift assays, immunoassays for protein binding, functional assays (phosphorylation assays, etc.), and the like.

The determination of the binding of the test modulating compound to the cancer protein may be done in a number of ways. In a preferred embodiment, the compound is labeled, and binding determined directly, e.g., by attaching all or a portion of the cancer protein to a solid support, adding a labeled candidate agent (e.g., a fluorescent label), washing off excess reagent, and determining whether the label is present on the solid support. Various blocking and  
15 washing steps may be utilized as appropriate.

In some embodiments, only one of the components is labeled, e.g., the proteins (or proteinaceous candidate compounds) can be labeled. Alternatively, more than one component can be labeled with different labels, e.g.,  $^{125}\text{I}$  for the proteins and a fluorophor for the compound. Proximity reagents, e.g., quenching or energy transfer reagents are also useful.

In one embodiment, the binding of the test compound is determined by competitive  
25 binding assay. The competitor may be a binding moiety known to bind to the target molecule (e.g., a cancer protein), such as an antibody, peptide, binding partner, ligand, etc. Under certain circumstances, there may be competitive binding between the compound and the binding moiety, with the binding moiety displacing the compound. In one embodiment, the test  
30 compound is labeled. Either the compound, or the competitor, or both, is added first to the protein for a time sufficient to allow binding, if present. Incubations may be performed at a temperature which facilitates optimal activity, typically between about 4-40° C. Incubation

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periods are typically optimized, e.g., to facilitate rapid high throughput screening. Typically between 0.1-1 hour will be sufficient. Excess reagent is generally removed or washed away. The second component is then added, and the presence or absence of the labeled component is followed, to indicate binding.

5 In a preferred embodiment, the competitor is added first, followed by a test compound. Displacement of the competitor is an indication that the test compound is binding to the cancer protein and thus is capable of binding to, and potentially modulating, the activity of the cancer protein. In this embodiment, either component can be labeled. Thus, e.g., if the competitor is labeled, the presence of label in the wash solution indicates displacement by the agent.

10 Alternatively, if the test compound is labeled, the presence of the label on the support indicates displacement.

In an alternative embodiment, the test compound is added first, with incubation and washing, followed by the competitor. The absence of binding by the competitor may indicate that the test compound is bound to the cancer protein with a higher affinity. Thus, if the test  
15 compound is labeled, the presence of the label on the support, coupled with a lack of competitor binding, may indicate that the test compound is capable of binding to the cancer protein.

In a preferred embodiment, the methods comprise differential screening to identify agents that are capable of modulating the activity of the cancer proteins. In one embodiment, the methods comprise combining a cancer protein and a competitor in a first sample. A second  
20 sample comprises a test compound, a cancer protein, and a competitor. The binding of the competitor is determined for both samples, and a change, or difference in binding between the two samples indicates the presence of an agent capable of binding to the cancer protein and potentially modulating its activity. That is, if the binding of the competitor is different in the second sample relative to the first sample, the agent is capable of binding to the cancer protein.

25 Alternatively, differential screening is used to identify drug candidates that bind to the native cancer protein, but cannot bind to modified cancer proteins. The structure of the cancer protein may be modeled, and used in rational drug design to synthesize agents that interact with that site. Drug candidates that affect the activity of a cancer protein are also identified by screening drugs for the ability to either enhance or reduce the activity of the protein.

30 Positive controls and negative controls may be used in the assays. Preferably control and test samples are performed in at least triplicate to obtain statistically significant results. Incubation of all samples is for a time sufficient for the binding of the agent to the protein.

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Following incubation, samples are washed free of non-specifically bound material and the amount of bound, generally labeled agent determined. For example, where a radiolabel is employed, the samples may be counted in a scintillation counter to determine the amount of bound compound.

5           A variety of other reagents may be included in the screening assays. These include reagents like salts, neutral proteins, e.g., albumin, detergents, etc., which may be used to facilitate optimal protein-protein binding and/or reduce non-specific or background interactions. Also reagents that otherwise improve the efficiency of the assay, such as protease inhibitors, nuclease inhibitors, anti-microbial agents, etc., may be used. The mixture of components may  
10       be added in an order that provides for the requisite binding.

          In a preferred embodiment, the invention provides methods for screening for a compound capable of modulating the activity of a cancer protein. The methods comprise adding a test compound, as defined above, to a cell comprising cancer proteins. Preferred cell types include almost any cell. The cells contain a recombinant nucleic acid that encodes a  
15       cancer protein. In a preferred embodiment, a library of candidate agents are tested on a plurality of cells.

          In one aspect, the assays are evaluated in the presence or absence or previous or subsequent exposure of physiological signals, e.g., hormones, antibodies, peptides, antigens, cytokines, growth factors, action potentials, pharmacological agents including  
20       chemotherapeutics, radiation, carcinogenics, or other cells (e.g., cell-cell contacts). In another example, the determinations are determined at different stages of the cell cycle process.

          In this way, compounds that modulate cancer agents are identified. Compounds with pharmacological activity are able to enhance or interfere with the activity of the cancer protein. Once identified, similar structures are evaluated to identify critical structural feature of the  
25       compound.

          In one embodiment, a method of inhibiting cancer cell division is provided. The method comprises administration of a cancer inhibitor. In another embodiment, a method of inhibiting cancer is provided. The method may comprise administration of a cancer inhibitor. In a further embodiment, methods of treating cells or individuals with cancer are provided, e.g., comprising  
30       administration of a cancer inhibitor.

          In one embodiment, a cancer inhibitor is an antibody as discussed above. In another embodiment, the cancer inhibitor is an antisense molecule.

A variety of cell growth, proliferation, viability, and metastasis assays are available, as described below.

#### Soft agar growth or colony formation in suspension

Normal cells require a solid substrate to attach and grow. When the cells are transformed, they lose this phenotype and grow detached from the substrate. For example, transformed cells can grow in stirred suspension culture or suspended in semi-solid media, such as semi-solid or soft agar. The transformed cells, when transfected with tumor suppressor genes, regenerate normal phenotype and require a solid substrate to attach and grow. Soft agar growth or colony formation in suspension assays can be used to identify modulators of cancer sequences, which when expressed in host cells, inhibit abnormal cellular proliferation and transformation. A therapeutic compound would reduce or eliminate the host cells' ability to grow in stirred suspension culture or suspended in semi-solid media, such as semi-solid or soft.

Techniques for soft agar growth or colony formation in suspension assays are described, e.g., in Freshney (1998) Culture of Animal Cells: A Manual of Basic Technique (3d ed.) Wiley-Liss; Freshney (2000) Culture of Animal Cells: A Manual of Basic Technique (4th ed.) Wiley-Liss; and Garkavtsev, et al. (1996) Nature Genet. 14:415-20.

#### Contact inhibition and density limitation of growth

Normal cells typically grow in a flat and organized pattern in a petri dish until they touch other cells. When the cells touch one another, they are contact inhibited and stop growing. When cells are transformed, however, the cells are not contact inhibited and continue to grow to high densities in disorganized foci. Thus, the transformed cells grow to a higher saturation density than normal cells. This can be detected morphologically by the formation of a disoriented monolayer of cells or rounded cells in foci within the regular pattern of normal surrounding cells. Alternatively, labeling index with (<sup>3</sup>H)-thymidine at saturation density can be used to measure density limitation of growth. See Freshney (2000), supra. The transformed cells, when transfected with tumor suppressor genes, regenerate a normal phenotype and become contact inhibited and would grow to a lower density.

In this assay, labeling index with (<sup>3</sup>H)-thymidine at saturation density is a preferred method of measuring density limitation of growth. Transformed host cells are transfected with a cancer-associated sequence and are grown for 24 hours at saturation density in non-limiting medium conditions. The percentage of cells labeling with (<sup>3</sup>H)-thymidine is determined autoradiographically. See, Freshney (1998), supra.

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#### Growth factor or serum dependence

Transformed cells typically have a lower serum dependence than their normal counterparts (see, e.g., Temin (1966) J. Natl. Cancer Inst. 37:167-175; Eagle, et al.(1970) J. Exp. Med. 131:836-879); Freshney, supra. This is in part due to release of various growth factors by the transformed cells. Growth factor or serum dependence of transformed host cells can be compared with that of control.

#### Tumor specific markers levels

Tumor cells release an increased amount of certain factors (hereinafter "tumor specific markers") than their normal counterparts. For example, plasminogen activator (PA) is released from human glioma at a higher level than from normal brain cells (see, e.g., Gullino "Angiogenesis, tumor vascularization, and potential interference with tumor growth" pp. 178-184 in Mihich (ed. 1985) Biological Responses in Cancer Plenum. Similarly, tumor angiogenesis factor (TAF) is released at a higher level in tumor cells than their normal counterparts. See, e.g., Folkman (1992) Sem. Cancer Biol. 3:89-96.

Various techniques which measure the release of these factors are described in Freshney (1998), supra. Also, see, Unkeless, et al. (1974) J. Biol. Chem. 249:4295-4305; Strickland and Beers (1976) J. Biol. Chem. 251:5694-5702; Whur, et al. (1980) Br. J. Cancer 42:305-312; Gullino "Angiogenesis, tumor vascularization, and potential interference with tumor growth" pp. 178-184 in Mihich (ed. 1985) Biological Responses in Cancer Plenum; Freshney (1985) Anticancer Res. 5:111-130.

#### Invasiveness into Matrigel

The degree of invasiveness into Matrigel or some other extracellular matrix constituent can be used as an assay to identify compounds that modulate cancer-associated sequences. Tumor cells exhibit a good correlation between malignancy and invasiveness of cells into Matrigel or some other extracellular matrix constituent. In this assay, tumorigenic cells are typically used as host cells. Expression of a tumor suppressor gene in these host cells would decrease invasiveness of the host cells.

Techniques described in Freshney (1994), supra, can be used. Briefly, the level of invasion of host cells can be measured by using filters coated with Matrigel or some other extracellular matrix constituent. Penetration into the gel, or through to the distal side of the filter, is rated as invasiveness, and rated histologically by number of cells and distance moved,

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or by prelabeling the cells with  $^{125}\text{I}$  and counting the radioactivity on the distal side of the filter or bottom of the dish. See, e.g., Freshney (1984), supra.

#### Tumor growth in vivo

Effects of cancer-associated sequences on cell growth can be tested in transgenic or immune-suppressed mice. Knock-out transgenic mice can be made, in which the cancer gene is disrupted or in which a cancer gene is inserted. Knock-out transgenic mice can be made by insertion of a marker gene or other heterologous gene into the endogenous cancer gene site in the mouse genome via homologous recombination. Such mice can also be made by substituting the endogenous cancer gene with a mutated version of the cancer gene, or by mutating the endogenous cancer gene, e.g., by exposure to carcinogens.

A DNA construct is introduced into the nuclei of embryonic stem cells. Cells containing the newly engineered genetic lesion are injected into a host mouse embryo, which is re-implanted into a recipient female. Some of these embryos develop into chimeric mice that possess germ cells partially derived from the mutant cell line. Therefore, by breeding the chimeric mice it is possible to obtain a new line of mice containing the introduced genetic lesion (see, e.g., Capecchi, et al. (1989) Science 244:1288-1292). Chimeric targeted mice can be derived according to Hogan, et al. (1988) Manipulating the Mouse Embryo: A Laboratory Manual CSH Press; and Robertson (ed. 1987) Teratocarcinomas and Embryonic Stem Cells: A Practical Approach IRL Press, Washington, D.C.

Alternatively, various immune-suppressed or immune-deficient host animals can be used. For example, genetically athymic "nude" mouse (see, e.g., Giovanella, et al. (1974) J. Natl. Cancer Inst. 52:921-930), a SCID mouse, a thymectomized mouse, or an irradiated mouse (see, e.g., Bradley, et al. (1978) Br. J. Cancer 38:263-272; Selby, et al. (1980) Br. J. Cancer 41:52-61) can be used as a host. Transplantable tumor cells (typically about  $10^6$  cells) injected into isogenic hosts will produce invasive tumors in a high proportions of cases, while normal cells of similar origin will not. In hosts which developed invasive tumors, cells expressing a cancer-associated sequences are injected subcutaneously. After a suitable length of time, preferably 4-8 weeks, tumor growth is measured (e.g., by volume or by its two largest dimensions) and compared to the control. Tumors that have statistically significant reduction (using, e.g., Student's T test) are said to have inhibited growth.

## Polynucleotide modulators of cancer

### Antisense and RNAi Polynucleotides

In certain embodiments, the activity of a cancer-associated protein is down-regulated, or entirely inhibited, by the use of an inhibitory or antisense polynucleotide, e.g., a nucleic acid  
5 complementary to, and which can preferably hybridize specifically to, a coding mRNA nucleic acid sequence, e.g., a cancer protein mRNA, or a subsequence thereof. Binding of the antisense polynucleotide to the mRNA reduces the translation and/or stability of the mRNA.

In the context of this invention, antisense polynucleotides can comprise naturally-  
occurring nucleotides, or synthetic species formed from naturally-occurring subunits or their  
10 close homologs. Antisense polynucleotides may also have altered sugar moieties or inter-sugar linkages. Exemplary among these are the phosphorothioate and other sulfur containing species. Analogs are comprehended by this invention so long as they function effectively to hybridize with the cancer protein mRNA. See, e.g., Isis Pharmaceuticals, Carlsbad, CA; Sequitor, Inc., Natick, MA.

15 Such antisense polynucleotides can readily be synthesized using recombinant means, or can be synthesized in vitro. Equipment for such synthesis is sold by several vendors, including Applied Biosystems. The preparation of other oligonucleotides such as phosphorothioates and alkylated derivatives is also well known.

Antisense molecules as used herein include antisense or sense oligonucleotides. Sense  
20 oligonucleotides can, e.g., be employed to block transcription by binding to the anti-sense strand. The antisense and sense oligonucleotide comprise a single-stranded nucleic acid sequence (either RNA or DNA) capable of binding to target mRNA (sense) or DNA (antisense) sequences for cancer molecules. A preferred antisense molecule is for a cancer sequences in the  
Tables, or for a ligand or activator thereof. Antisense or sense oligonucleotides, according to  
25 the present invention, comprise a fragment generally at least about 14 nucleotides, preferably from about 14-30 nucleotides. The ability to derive an antisense or a sense oligonucleotide, based upon a cDNA sequence encoding a given protein is described in, e.g., Stein and Cohen (1988) Cancer Res. 48:2659-2668; and van der Krol, et al. (1988) BioTechniques 6:958-976.

RNA interference is a mechanism to suppress gene expression in a sequence specific  
30 manner. See, e.g., Brumelkamp, et al. (2002) Scienceexpress (21March2002); Sharp (1999) Genes Dev. 13:139-141; and Cathew (2001) Curr. Op. Cell Biol. 13:244-248. In mammalian cells, short, e.g., 21 nt, double stranded small interfering RNAs (siRNA) have been shown to be



effective at inducing an RNAi response. See, e.g., Elbashir, et al. (2001) Nature 411:494-498. The mechanism may be used to downregulate expression levels of identified genes, e.g., treatment of or validation of relevance to disease.

### Ribozymes

5           In addition to antisense polynucleotides, ribozymes can be used to target and inhibit transcription of cancer-associated nucleotide sequences. A ribozyme is an RNA molecule that catalytically cleaves other RNA molecules. Different kinds of ribozymes have been described, including group I ribozymes, hammerhead ribozymes, hairpin ribozymes, RNase P, and axhead ribozymes (see, e.g., Castanotto, et al. (1994) Adv. in Pharmacology 25: 289-317 for a general  
10          review of the properties of different ribozymes).

          The general features of hairpin ribozymes are described, e.g., in Hampel, et al. (1990) Nucl. Acids Res. 18:299-304; European Patent Publication No. 0 360 257; U.S. Patent No. 5,254,678. Methods of preparation are described in, e.g., WO 94/26877; Ojwang, et al. (1993) Proc. Natl. Acad. Sci. USA 90:6340-6344; Yamada, et al. (1994) Human Gene Therapy 1:39-  
15          45; Leavitt, et al. (1995) Proc. Natl. Acad. Sci. USA 92:699-703; Leavitt, et al. (1994) Human Gene Therapy 5:1151-120; and Yamada, et al. (1994) Virology 205: 121-126.

          Polynucleotide modulators of cancer may be introduced into a cell containing the target nucleotide sequence by formation of a conjugate with a ligand binding molecule, as described in WO 91/04753. Suitable ligand binding molecules include, but are not limited to, cell surface  
20          receptors, growth factors, other cytokines, or other ligands that bind to cell surface receptors. Preferably, conjugation of the ligand binding molecule does not substantially interfere with the ability of the ligand binding molecule to bind to its corresponding molecule or receptor, or block entry of the sense or antisense oligonucleotide or its conjugated version into the cell. Alternatively, a polynucleotide modulator of cancer may be introduced into a cell containing the  
25          target nucleic acid sequence, e.g., by formation of an polynucleotide-lipid complex, as described in WO 90/10448. It is understood that the use of antisense molecules or knock out and knock in models may also be used in screening assays as discussed above, in addition to methods of treatment.

          Thus, in one embodiment, methods of modulating cancer in cells or organisms are  
30          provided. In one embodiment, the methods comprise administering to a cell an anti-cancer antibody that reduces or eliminates the biological activity of an endogenous cancer protein. Alternatively, the methods comprise administering to a cell or organism a recombinant nucleic

acid encoding a cancer protein. This may be accomplished in any number of ways. In a preferred embodiment, e.g., when the cancer sequence is down-regulated in cancer, such state may be reversed by increasing the amount of cancer gene product in the cell. This can be accomplished, e.g., by overexpressing the endogenous cancer gene or administering a gene  
5 encoding the cancer sequence, using known gene-therapy techniques. In a preferred embodiment, the gene therapy techniques include the incorporation of the exogenous gene using enhanced homologous recombination (EHR), e.g., as described in PCT/US93/0386. Alternatively, e.g., when the cancer sequence is up-regulated in cancer, the activity of the endogenous cancer gene is decreased, e.g., by the administration of a cancer antisense or other  
10 inhibitor, e.g., RNAi.

In one embodiment, the cancer proteins of the present invention may be used to generate polyclonal and monoclonal antibodies to cancer proteins. Similarly, the cancer proteins can be coupled, using standard technology, to affinity chromatography columns. These columns may then be used to purify cancer antibodies useful for production, diagnostic, or therapeutic  
15 purposes. In a preferred embodiment, the antibodies are generated to epitopes unique to a cancer protein; that is, the antibodies show little or no cross-reactivity to other proteins. The cancer antibodies may be coupled to standard affinity chromatography columns and used to purify cancer proteins. The antibodies may also be used as blocking polypeptides, as outlined above, since they will specifically bind to the cancer protein.

#### 20 Methods of identifying variant cancer-associated sequences

Without being bound by theory, expression of various cancer sequences is correlated with cancer. Accordingly, disorders based on mutant or variant cancer genes may be determined. In one embodiment, the invention provides methods for identifying cells containing variant cancer genes, e.g., determining all or part of the sequence of at least one  
25 endogenous cancer gene in a cell. In a preferred embodiment, the invention provides methods of identifying the cancer genotype of an individual, e.g., determining all or part of the sequence of at least one cancer gene of the individual. This is generally done in at least one tissue of the individual, and may include the evaluation of a number of tissues or different samples of the same tissue. The method may include comparing the sequence of the sequenced cancer gene to  
30 a known cancer gene, e.g., a wild-type gene.

The sequence of all or part of the cancer gene can then be compared to the sequence of a known cancer gene to determine if any differences exist. This can be done using known

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homology programs, such as Bestfit, etc. In a preferred embodiment, the presence of a difference in the sequence between the cancer gene of the patient and the known cancer gene correlates with a disease state or a propensity for a disease state, as outlined herein.

In a preferred embodiment, the cancer genes are used as probes to determine the number  
5 of copies of the cancer gene in the genome.

In another preferred embodiment, the cancer genes are used as probes to determine the chromosomal localization of the cancer genes. Information such as chromosomal localization finds use in providing a diagnosis or prognosis in particular when chromosomal abnormalities such as translocations, and the like are identified in the cancer gene locus.

#### 10 Administration of pharmaceutical and vaccine compositions

In one embodiment, a therapeutically effective dose of a cancer protein or modulator thereof, is administered to a patient. By "therapeutically effective dose" herein is meant a dose that produces effects for which it is administered. The exact dose will depend on the purpose of the treatment, and will be ascertainable using known techniques. See, e.g., Ansel, et al. (1999)  
15 Pharmaceutical Dosage Forms and Drug Delivery Lippincott; Lieberman (1992) Pharmaceutical Dosage Forms (vols. 1-3) Dekker, ISBN 0824770846, 082476918X, 0824712692, 0824716981; Lloyd (1999) The Art, Science and Technology of Pharmaceutical Compounding Amer. Pharmaceut. Assn.; and Pickar (1998) Dosage Calculations Thomson. Adjustments for cancer degradation, systemic versus localized delivery, and rate of new protease synthesis, as well as  
20 the age, body weight, general health, sex, diet, time of administration, drug interaction and the severity of the condition may be necessary. U.S. Patent Application No. 09/687,576, further discloses the use of compositions and methods of diagnosis and treatment in cancer.

A "patient" for the purposes of the present invention includes both humans and other animals, particularly mammals. Thus the methods are applicable to both human therapy and  
25 veterinary applications. In the preferred embodiment the patient is a mammal, preferably a primate, and in the most preferred embodiment the patient is human.

The administration of the cancer proteins and modulators thereof of the present invention can be done in a variety of ways, including, but not limited to, orally, subcutaneously, intravenously, intranasally, transdermally, intraperitoneally, intramuscularly, intrapulmonary,  
30 vaginally, rectally, or intraocularly. In some instances, e.g., in the treatment of wounds and inflammation, the cancer proteins and modulators may be directly applied as a solution or spray.

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The pharmaceutical compositions of the present invention comprise a cancer protein in a form suitable for administration to a patient. In the preferred embodiment, the pharmaceutical compositions are in a water soluble form, such as being present as pharmaceutically acceptable salts, which is meant to include both acid and base addition salts. "Pharmaceutically acceptable acid addition salt" refers to those salts that retain the biological effectiveness of the free bases and that are not biologically or otherwise undesirable, formed with inorganic acids such as hydrochloric acid, hydrobromic acid, sulfuric acid, nitric acid, phosphoric acid, and the like, and organic acids such as acetic acid, propionic acid, glycolic acid, pyruvic acid, oxalic acid, maleic acid, malonic acid, succinic acid, fumaric acid, tartaric acid, citric acid, benzoic acid, cinnamic acid, mandelic acid, methanesulfonic acid, ethanesulfonic acid, p-toluenesulfonic acid, salicylic acid, and the like. "Pharmaceutically acceptable base addition salts" include those derived from inorganic bases such as sodium, potassium, lithium, ammonium, calcium, magnesium, iron, zinc, copper, manganese, aluminum salts, and the like. Particularly preferred are the ammonium, potassium, sodium, calcium, and magnesium salts. Salts derived from pharmaceutically acceptable organic non-toxic bases include salts of primary, secondary, and tertiary amines, substituted amines including naturally occurring substituted amines, cyclic amines and basic ion exchange resins, such as isopropylamine, trimethylamine, diethylamine, triethylamine, tripropylamine, and ethanolamine.

The pharmaceutical compositions may also include one or more of the following: carrier proteins such as serum albumin; buffers; fillers such as microcrystalline cellulose, lactose, corn and other starches; binding agents; sweeteners and other flavoring agents; coloring agents; and polyethylene glycol.

The pharmaceutical compositions can be administered in a variety of unit dosage forms depending upon the method of administration. For example, unit dosage forms suitable for oral administration include, but are not limited to, powder, tablets, pills, capsules and lozenges. It is recognized that cancer protein modulators (e.g., antibodies, antisense constructs, ribozymes, small organic molecules, etc.) when administered orally, should be protected from digestion. This is typically accomplished either by complexing the molecule(s) with a composition to render it resistant to acidic and enzymatic hydrolysis, or by packaging the molecule(s) in an appropriately resistant carrier, such as a liposome or a protection barrier. Means of protecting agents from digestion are available.

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The compositions for administration will commonly comprise a cancer protein modulator dissolved in a pharmaceutically acceptable carrier, preferably an aqueous carrier. A variety of aqueous carriers can be used, e.g., buffered saline and the like. These solutions are sterile and generally free of undesirable matter. These compositions may be sterilized by conventional, well known sterilization techniques. The compositions may contain pharmaceutically acceptable auxiliary substances as required to approximate physiological conditions such as pH adjusting and buffering agents, toxicity adjusting agents, and the like, e.g., sodium acetate, sodium chloride, potassium chloride, calcium chloride, sodium lactate, and the like. The concentration of active agent in these formulations can vary widely, and will be selected primarily based on fluid volumes, viscosities, body weight, and the like in accordance with the particular mode of administration selected and the patient's needs (e.g., (1980) Remington's Pharmaceutical Science (18th ed.) Mack, and Hardman and Limbird (eds. 2001) Goodman and Gilman: The Pharmacological Basis of Therapeutics (10th ed.) McGraw-Hill.

Thus, a typical pharmaceutical composition for intravenous administration would be about 0.1 to 10 mg per patient per day. Dosages from 0.1 up to about 100 mg per patient per day may be used, particularly when the drug is administered to a secluded site and not into the blood stream, such as into a body cavity or into a lumen of an organ. Substantially higher dosages are possible in topical administration. Actual methods for preparing parenterally administrable compositions will be known or apparent.

The compositions containing modulators of cancer proteins can be administered for therapeutic or prophylactic treatments. In therapeutic applications, compositions are administered to a patient suffering from a disease (e.g., a cancer) in an amount sufficient to cure or at least partially arrest the disease and its complications. An amount adequate to accomplish this is defined as a "therapeutically effective dose." Amounts effective for this use will depend upon the severity of the disease and the general state of the patient's health. Single or multiple administrations of the compositions may be administered depending on the dosage and frequency as required and tolerated by the patient. In any event, the composition should provide a sufficient quantity of the agents of this invention to effectively treat the patient. An amount of modulator that is capable of preventing or slowing the development of cancer in a mammal is referred to as a "prophylactically effective dose." The particular dose required for a prophylactic treatment will depend upon the medical condition and history of the mammal, the particular cancer being prevented, as well as other factors such as age, weight, gender,

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administration route, efficiency, etc. Such prophylactic treatments may be used, e.g., in a mammal who has previously had cancer to prevent a recurrence of the cancer, or in a mammal who is suspected of having a significant likelihood of developing cancer based, at least in part, upon gene expression profiles. Vaccine strategies may be used, in either a DNA vaccine form, or protein vaccine.

It will be appreciated that the present cancer protein-modulating compounds can be administered alone or in combination with additional cancer modulating compounds or with other therapeutic agent, e.g., other anti-cancer agents or treatments.

In numerous embodiments, one or more nucleic acids, e.g., polynucleotides comprising nucleic acid sequences set forth in the Tables, such as RNAi, antisense polynucleotides or ribozymes, will be introduced into cells, in vitro or in vivo. The present invention provides methods, reagents, vectors, and cells useful for expression of cancer-associated polypeptides and nucleic acids using in vitro (cell-free), ex vivo or in vivo (cell or organism-based) recombinant expression systems.

The particular procedure used to introduce the nucleic acids into a host cell for expression of a protein or nucleic acid is application specific. Many procedures for introducing foreign nucleotide sequences into host cells may be used. These include the use of calcium phosphate transfection, spheroplasts, electroporation, liposomes, microinjection, plasma vectors, viral vectors, and other well known methods for introducing cloned genomic DNA, cDNA, synthetic DNA, or other foreign genetic material into a host cell (see, e.g., Berger and Kimmel (1987) Guide to Molecular Cloning Techniques from Methods in Enzymology (vol. 152) Academic Press; Ausubel, et al. (eds. 1999 and supplements) Current Protocols Lippincott; and Sambrook, et al. (2001) Molecular Cloning: A Laboratory Manual (3d ed., Vol. 1-3) CSH Press.

In a preferred embodiment, cancer proteins and modulators are administered as therapeutic agents, and can be formulated as outlined above. Similarly, cancer genes (including both the full-length sequence, partial sequences, or regulatory sequences of the cancer coding regions) can be administered in a gene therapy application. These cancer genes can include inhibitory applications, e.g., as inhibitory RNA, gene therapy (e.g., for incorporation into the genome), or antisense compositions.

Cancer polypeptides and polynucleotides can also be administered as vaccine compositions to stimulate HTL, CTL, and antibody responses. Such vaccine compositions can

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include, e.g., lipidated peptides (see, e.g., Vitiello, et al. (1995) J. Clin. Invest. 95:341-349), peptide compositions encapsulated in poly(DL-lactide-co-glycolide) ("PLG") microspheres (see, e.g., Eldridge, et al. (1991) Molec. Immunol. 28:287-294; Alonso, et al. (1994) Vaccine 12:299-306; Jones, et al. (1995) Vaccine 13:675-681), peptide compositions contained in  
5 immune stimulating complexes (ISCOMS) (see, e.g., Takahashi, et al. (1990) Nature 344:873-875; Hu, et al. (1998) Clin Exp Immunol. 113:235-243), multiple antigen peptide systems (MAPs) (see, e.g., Tam (1988) Proc. Natl. Acad. Sci. USA 85:5409-5413; Tam (1996) J. Immunol. Methods 196:17-32), peptides formulated as multivalent peptides; peptides for use in ballistic delivery systems, typically crystallized peptides, viral delivery vectors (Perkus, et al., p.  
10 379, in Kaufmann (ed. 1996) Concepts in Vaccine Development de Gruyter; Chakrabarti, et al. (1986) Nature 320:535-537; Hu, et al. (1986) Nature 320:537-540; Kieny, et al. (1986) Bio/Technology 4:790-795; Top, et al. (1971) J. Infect. Dis. 124:148-154; Chanda, et al. (1990) Virology 175:535-547), particles of viral or synthetic origin (see, e.g., Kofler, et al. (1996) J. Immunol. Methods 192:25-35; Eldridge, et al. (1993) Sem. Hematol. 30:16-24; Falo, et al.  
15 (1995) Nature Med. 1:649-653), adjuvants (Warren, et al. (1986) Annu. Rev. Immunol. 4:369-388; Gupta, et al. (1993) Vaccine 11:293-306), liposomes (Reddy, et al. (1992) J. Immunol. 148:1585-1589; Rock (1996) Immunol. Today 17:131-137), or, naked or particle absorbed cDNA (Ulmer, et al. (1993) Science 259:1745-1749; Robinson, et al. (1993) Vaccine 11:957-960; Shiver, et al., p 423, in Kaufmann (ed. 1996) Concepts in Vaccine Development de  
20 Gruyter; Cease and Berzofsky (1994) Annu. Rev. Immunol. 12:923-989; and Eldridge, et al. (1993) Sem. Hematol. 30:16-24). Toxin-targeted delivery technologies, also known as receptor mediated targeting, such as those of Avant Immunotherapeutics, Inc. (Needham, Massachusetts) may also be used.

Vaccine compositions often include adjuvants. Many adjuvants contain a substance  
25 designed to protect the antigen from rapid catabolism, such as aluminum hydroxide or mineral oil, and a stimulator of immune responses, such as lipid A, Bortadella pertussis, or Mycobacterium tuberculosis derived proteins. Certain adjuvants are commercially available as, e.g., Freund's Incomplete Adjuvant and Complete Adjuvant (Difco Laboratories, Detroit, MI); Merck Adjuvant 65 (Merck and Company, Inc., Rahway, NJ); AS-2 (SmithKline Beecham,  
30 Philadelphia, PA); aluminum salts such as aluminum hydroxide gel (alum) or aluminum phosphate; salts of calcium, iron, or zinc; an insoluble suspension of acylated tyrosine; acylated sugars; cationically or anionically derivatized polysaccharides; polyphosphazenes;

biodegradable microspheres; monophosphoryl lipid A and quil A. Cytokines, such as GM-CSF, interleukin-2, -7, -12, and other like growth factors, may also be used as adjuvants.

Vaccines can be administered as nucleic acid compositions wherein DNA or RNA encoding one or more of the polypeptides, or a fragment thereof, is administered to a patient.

5 This approach is described, for instance, in Wolff et. al. (1990) Science 247:1465-1468, as well as U.S. Patent Nos. 5,580,859; 5,589,466; 5,804,566; 5,739,118; 5,736,524; 5,679,647; WO 98/04720; and in more detail below. Examples of DNA-based delivery technologies include "naked DNA", facilitated (bupivacaine, polymers, peptide-mediated) delivery, cationic lipid complexes, and particle-mediated ("gene gun") or pressure-mediated delivery (see, e.g., U.S.  
10 Patent No. 5,922,687).

For therapeutic or prophylactic immunization purposes, the peptides of the invention can be expressed by viral or bacterial vectors. Examples of expression vectors include attenuated viral hosts, such as vaccinia or fowlpox. This approach involves the use of vaccinia virus, e.g., as a vector to express nucleotide sequences that encode cancer polypeptides or polypeptide  
15 fragments. Upon introduction into a host, the recombinant vaccinia virus expresses the immunogenic peptide, and thereby elicits an immune response. Vaccinia vectors and methods useful in immunization protocols are described in, e.g., U.S. Patent No. 4,722,848. Another vector is BCG (Bacille Calmette Guerin). BCG vectors are described in Stover, et al. (1991) Nature 351:456-460. A wide variety of other vectors are available for therapeutic  
20 administration or immunization, e.g., adeno and adeno-associated virus vectors, retroviral vectors, Salmonella typhi vectors, detoxified anthrax toxin vectors, and the like. See, e.g., Shata, et al. (2000) Mol Med Today 6:66-71; Shedlock, et al. (2000) J. Leukoc. Biol. 68:793-806; Hipp, et al. (2000) In Vivo 14:571-85.

Methods for the use of genes as DNA vaccines are well known, and include placing a  
25 cancer gene or portion of a cancer gene under the control of a regulatable promoter or a tissue-specific promoter for expression in a cancer patient. The cancer gene used for DNA vaccines can encode full-length cancer proteins, but more preferably encodes portions of the cancer proteins including peptides derived from the cancer protein. In one embodiment, a patient is immunized with a DNA vaccine comprising a plurality of nucleotide sequences derived from a  
30 cancer gene. For example, cancer-associated genes or sequence encoding subfragments of a cancer protein are introduced into expression vectors and tested for their immunogenicity in the context of Class I MHC and an ability to generate cytotoxic T cell responses. This procedure



provides for production of cytotoxic T cell responses against cells which present antigen, including intracellular epitopes.

In a preferred embodiment, DNA vaccines include a gene encoding an adjuvant molecule with the DNA vaccine. Such adjuvant molecules include cytokines that increase the immunogenic response to the cancer polypeptide encoded by the DNA vaccine. Additional or alternative adjuvants are available.

In another preferred embodiment, cancer genes find use in generating animal models of cancer. When the cancer gene identified is repressed or diminished in cancer tissue, gene therapy technology, e.g., wherein inhibitory or antisense RNA directed to the cancer gene will also diminish or repress expression of the gene. Animal models of cancer find use in screening for modulators of a cancer-associated sequence or modulators of cancer. Similarly, transgenic animal technology, including gene knockout technology, e.g., as a result of homologous recombination with an appropriate gene targeting vector, will result in the absence or increased expression of the cancer protein. When desired, tissue-specific expression or knockout of the cancer protein may be necessary.

It is also possible that the cancer protein is overexpressed in cancer. As such, transgenic animals can be generated that overexpress the cancer protein. Depending on the desired expression level, promoters of various strengths can be employed to express the transgene. Also, the number of copies of the integrated transgene can be determined and compared for a determination of the expression level of the transgene. Animals generated by such methods will find use as animal models of cancer and are additionally useful in screening for modulators to treat cancer.

#### Kits for Use in Diagnostic and/or Prognostic Applications

For use in diagnostic, research, and therapeutic applications suggested above, kits are also provided by the invention. In diagnostic and research applications, such kits may include at least one of the following: assay reagents, buffers, cancer-specific nucleic acids or antibodies, hybridization probes and/or primers, antisense polynucleotides, ribozymes, dominant negative cancer polypeptides or polynucleotides, small molecule inhibitors of cancer-associated sequences etc. A therapeutic product may include sterile saline or another pharmaceutically acceptable emulsion and suspension base.

In addition, the kits may include instructional materials containing instructions (e.g., protocols) for the practice of the methods of this invention. While the instructional materials

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typically comprise written or printed materials, they are not limited to such. A medium capable of storing such instructions and communicating them to an end user is contemplated by this invention. Such media include, but are not limited to, electronic storage media (e.g., magnetic discs, tapes, cartridges, chips), optical media (e.g., CD ROM), and the like. Such media may include addresses to internet sites that provide such instructional materials.

The present invention also provides for kits for screening for modulators of cancer-associated sequences. Such kits can be prepared from readily available materials and reagents. For example, such kits can comprise one or more of the following materials: a cancer-associated polypeptide or polynucleotide, reaction tubes, and instructions for testing cancer-associated activity. Optionally, the kit contains biologically active cancer protein. A wide variety of kits and components can be prepared according to the present invention, depending upon the intended user of the kit and the particular needs of the user. Diagnosis would typically involve evaluation of a plurality of genes or products. The genes will typically be selected based on correlations with important parameters in disease which may be identified in historical or outcome data.

## EXAMPLES

### Example 1: Gene Chip Analysis

Molecular profiles of various normal and cancerous tissues were determined and analyzed using gene chips. RNA was isolated and gene chip analysis was performed as described (Glynne, et al. (2000) Nature 403:672-676; Zhao, et al. (2000) Genes Dev. 14:981-993).

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Table 1 lists medical conditions, abnormalities, or organs affected by disease, referred to in Tables 2A-68, for which markers have been identified, and other related medical conditions (including various stages and/or metastases) in which those markers will also be useful, e.g., in therapeutic, diagnostic, prognostic, subsetting, vaccine, and other uses.

- 5 blood vessels/angiogenesis: hemangiomas, lymphangiomas, wound healing, tissue remodeling, psoriasis, ischemic, heart disease, inflammatory diseases (e.g., arthritis, asthma, chronic bronchitis), atherosclerosis, endometriosis, presumed ocular histoplasmosis syndrome, hypoxia, solid tumors, lymphomas, autoimmune diseases (e.g., RA, SLE, juvenile chronic arthritis, pigmented villonodular synovitis, etc.), retinal neovascularization syndromes (e.g., diabetic retinopathy, macular degeneration, presumed ocular histoplasmosis syndrome, etc.), scleritis/conjunctivitis, hypertrophic scars (keloid), birth control, uterine fibroids
- 10 bladder: carcinoma in situ, papillary carcinomas, transitional cell carcinoma  
bone marrow: Ewing sarcoma, sarcomas arising from skeletal and extraskelatal connective tissues, including the peripheral nervous system  
brain: glioblastoma, oligodendroglioma, anaplastic astrocytoma, meningioma, medulloblastoma, neuroblastoma, ependymoma, schwannoma, craniopharyngioma, pineoblastoma, pineocytoma
- 15 breast: ductal carcinoma in situ, lobular carcinoma in situ  
cervix: cancer of the cervix, vagina, or vulva  
colon/rectum: precancerous colorectal disease (e.g., neoplastic polyps (adenomas), familial adenomatous polyposis, ulcerative colitis), colon cancer, e.g., epithelial tumor (e.g., adenocarcinoma, mucinous adenocarcinoma, signet-ring cell adenocarcinoma, squamous cell carcinoma, adenosquamous carcinoma, undifferentiated carcinoma, unclassified carcinoma), carcinoid tumor (e.g., argentaffin, nonargentaffin, composite), non-epithelial tumor (e.g., leiomyo sarcoma, others), inflammatory bowel disease (e.g., ulcerative colitis, Crohn's disease (granulomatous colitis), dysplasia), rectal cancer, cancer of the anal region (e.g., squamous cell carcinoma, transitional carcinoma, adenocarcinoma, carcinoma, papillary villous carcinoma, mucinous adenocarcinoma, melanoma)
- 20 esophagus: premalignant or predisposing conditions (e.g., esophagitis), squamous cell cancers (e.g., cancers of the head and neck, lung, or cervix), gastrodigestive carcinomas (e.g., cancers of the stomach, colon, or rectum)  
fibrosis: lung fibrosis (idiopathic pulmonary fibrosis, hypersensitivity pneumonitis, interstitial pneumonitis, nonspecific idiopathic pneumonitis), chronic obstructive pulmonary disease (e.g., emphysema, chronic bronchitis), asthma, bronchiectasis, cirrhosis (liver fibrosis), renal fibrosis, scleroderma, wound healing
- 25 head and neck: tumors of the nasal cavity, paranasal sinuses, nasopharynx, oral cavity, oral pharynx, lip, larynx, hypopharynx, salivary glands, paragangliomas, esophagus  
kidney: clear cell (nonpapillary) carcinoma, papillary carcinoma, chromophobe renal carcinoma, hypemephroma, adenocarcinoma, sporadic renal carcinomas, hereditary renal carcinomas (von Hippel-Lindau disease), carcinoma of the renal pelvis, ureteral carcinoma, fibroma, papillary adenoma, angiomyolipoma, oncocytoma  
leukocytes: acute lymphoblastic leukemia/lymphoma, malignant transformation of immature, precursor B (pre-B) or precursor T (pre-T) lymphocytes, or lymphoblasts, arthritis, inflammation, wound healing
- 30 liver: hepatitis (e.g., types A, B, C), benign epithelial tumors and tumor bile conditions, primary malignant epithelial tumors, primary malignant mesenchymal tumors, tumors of the gallbladder or bile duct  
lung: lung cancer, small cell lung carcinoma (oat cell carcinoma), non-small cell carcinomas (e.g., squamous cell carcinoma, adenocarcinoma, large cell lung carcinoma, carcinoid, granulomatous), fibrosis (idiopathic pulmonary fibrosis, hypersensitivity pneumonitis, interstitial pneumonitis, nonspecific idiopathic pneumonitis), chronic obstructive pulmonary disease (e.g., emphysema, chronic bronchitis), asthma, bronchiectasis, esophageal cancer
- 35 ovary: ovarian carcinoma (e.g., epithelial (serous tumors, mucinous tumors, endometrioid tumors), germ cell (e.g., teratomas, choriocarcinomas, polyembryomas, embryonal carcinoma, endodermal sinus tumor, dysgerminoma, gonadoblastoma), stromal carcinomas (e.g., granulosa stromal cell tumors)), fallopian tube carcinoma, peritoneal carcinoma, leiomyoma  
pancreas: adenocarcinoma, ductal adenocarcinoma, mucinous cyst adenocarcinoma, acinar cell carcinoma, unclassified large cell carcinoma, small cell carcinoma, pancreatoblastoma, duct-ectatic mucin-hypersecreting tumor, mucinous cyst adenoma, papillary cystic neoplasm, serous cyst adenoma, diabetes mellitus, chronic pancreatitis
- 40 prostate: epithelial neoplasms (e.g., adenocarcinoma, small cell tumors, transitional cell carcinoma, carcinoma in situ, and basal cell carcinoma), carcinosarcoma, non-epithelial neoplasms (e.g., mesenchymal and lymphoma), germ cell tumors, prostatic intraepithelial neoplasia (PIN), hormone independent prostate cancer, benign prostate hyperplasia, prostatitis
- 45 skin/melanoma: melanoma, lentigo (common benign localized hyperplasia of melanocytes), nevocellular nevi (congenital or acquired neoplasm of melanocytes), actinic keratosis (overgrowth of outer layers of skin), basal cell carcinoma, Merkel cell carcinoma, benign fibrous histiocytoma (dermal neoplasms of fibroblasts and histiocytes), dermatofibrosarcoma protuberans (well differentiated fibrosarcoma of the skin), xanthomas (tumor-like collections of foamy histiocytes within the dermis), dermal vascular tumors, seborrheic keratoses (benign tumor), acanthosis nigricans (benign or malignant hyperplasia and hyperpigmentation of skin), and squamous cell carcinomas of the skin, lung, cervix, esophagus, uterus, head, neck, or bladder
- 50 stomach: adenocarcinoma, squamous cell carcinoma, adenoacanthoma, carcinoid, leiomyosarcoma, gastritis (chronic atrophic, H. pylori associated), hyperplastic polyps, lipoma, leiomyoma, esophageal adenocarcinomas  
testicles: germ cell tumors (including seminomas, embryonal carcinomas, teratomas, choriocarcinomas, yolk sac tumors), sex chord stromal tumors (including Leydig cell tumors, Sertoli cell tumors, and Granulosa cell tumors), germ cell and gonadal stromal elements (e.g., gonadoblastomas), adnexal and paratesticular tumors (e.g., mesotheliomas, soft tissue sarcomas, and adnexal of the rete testes), miscellaneous neoplasms (including carcinoid, lymphoma, and cysts)
- uterus: epithelial tumors (e.g., endometrioid, papillary endometrioid, papillary serous, clear cell, mucinous), mesenchymal tumors (e.g., endometrial stromal sarcoma, leiomyosarcoma, nonspecific sarcomas), mixed tumors (e.g., malignant mixed mullerian tumors, adenosarcoma)

55 Tables 2B-66C list accession numbers for Pkeys lacking UnigenelD's for Tables 2A-66C, respectively. For each probeset is listed gene cluster number from which oligonucleotides were designed. Gene clusters were compiled using sequences derived from Genbank ESTs and mRNAs. These sequences were clustered based on sequence similarity using Clustering and Alignment Tools (DoubleTwist, Oakland California). Genbank accession numbers for sequences comprising each cluster are listed in the "Accession" column.

60 Tables 2C-66C list genomic positioning for Pkeys lacking Unigene ID's and accession numbers in Tables 2A-66C, respectively. For each predicted exon is listed genomic sequence source used for prediction. Nucleotide locations of each predicted exon are also listed.

#### TABLE 2A: ABOUT 1031 GENES UP-REGULATED IN ACUTE LYMPHOCYTIC LEUKEMIA (ALL)

65 Table 2A lists about 1031 genes up-regulated in acute lymphocytic leukemia (ALL) compared to normal adult tissues. These were selected from 35403 probesets on the Affymetrix/Eos Hu01 GeneChip array such that the ratio of "average" leukemia to "average" normal adult tissues was greater than or equal to 1.7. The "average" leukemia level was set to the 75<sup>th</sup> percentile amongst various ALL samples. The "average" normal adult tissue level was set to the 85<sup>th</sup> percentile amongst various non-malignant tissues. In order to remove gene-specific background levels of non-specific hybridization, the 7.5<sup>th</sup> percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

70 Pkey: Unique Eos probeset identifier number  
ExAccn: Exemplar Accession number, Genbank accession number  
UnigenelD: Unigene number  
Unigene Title: Unigene gene title  
R1: Ratio of leukemia to normal body tissue

| Pkey   | ExAcc     | UniGeneID | UniGene Title                            | R1   |
|--------|-----------|-----------|--|------|
| 100458 | S74019    | Hs.247979 | pre-B lymphocyte gene 1                  | 46.8 |
| 113089 | T40707    | Hs.270862 | ESTs                                     | 20.4 |
| 106956 | R06428    | Hs.226351 | ESTs                                     | 15.8 |
| 101447 | M21305    |           | gb:Human alpha satellite and satellite 3 | 13.8 |
| 113009 | T23699    | Hs.7246   | ESTs                                     | 12.5 |
| 126947 | Z40778    | Hs.191837 | ESTs                                     | 11.4 |
| 100893 | BE245294  | Hs.180789 | S164 protein                             | 11.1 |
| 101050 | AU077324  | Hs.1832   | neuropeptide Y                           | 11.0 |
| 132114 | NM_006152 | Hs.40202  | lymphoid-restricted membrane protein     | 10.7 |

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|    |        |          |           |  |      |
|----|--------|----------|-----------|--|------|
| 5  | 101304 | AA001021 | Hs.6685   | thyroid hormone receptor interactor 8    | 10.4 |
|    | 105667 | AA767526 | Hs.22030  | paired box gene 5 (B-cell lineage specif | 9.1  |
|    | 112727 | T91029   | Hs.15069  | ESTs                                     | 9.0  |
|    | 109788 | T79971   | Hs.12432  | Homo sapiens clone 24407 mRNA sequence   | 8.7  |
|    | 113374 | T79925   | Hs.269165 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 7.8  |
| 10 | 130466 | W19744   | Hs.180059 | Homo sapiens cDNA FLJ20653 fis, clone KA | 7.7  |
|    | 109384 | AA219172 | Hs.86849  | ESTs                                     | 7.6  |
|    | 112602 | AW004045 | Hs.203365 | ESTs                                     | 6.6  |
|    | 125278 | AI218439 | Hs.129998 | enhancer of polycomb 1                   | 6.5  |
|    | 112167 | N99591   | Hs.25587  | ESTs, Weakly similar to T00329 hypotheli | 6.4  |
| 15 | 116355 | AA789133 | Hs.88650  | ESTs                                     | 5.8  |
|    | 123440 | AI733692 | Hs.112488 | ESTs                                     | 5.5  |
|    | 100918 | AK001335 | Hs.31137  | protein tyrosine phosphatase, receptor t | 5.4  |
|    | 101879 | AA176374 | Hs.243886 | nuclear autoantigenic sperm protein (his | 5.4  |
|    | 109260 | AW978515 | Hs.131915 | KIAA0863 protein                         | 5.4  |
| 20 | 129213 | AI146494 | Hs.109525 | ESTs, Weakly similar to IRX2_HUMAN IROQU | 5.4  |
|    | 120809 | AA346495 |           | gb:EST52657 Fetal heart II Homo sapiens  | 5.4  |
|    | 105498 | H68279   | Hs.24937  | transformer-2 alpha (htra-2 alpha)       | 5.1  |
|    | 114840 | AA447591 | Hs.87359  | ESTs, Highly similar to RB18_HUMAN RAS-R | 5.0  |
|    | 103304 | BE561801 | Hs.2484   | T-cell leukemia/lymphoma 1A              | 4.9  |
| 25 | 113983 | W87415   | Hs.55296  | HLA-B associated transcript-1            | 4.8  |
|    | 115844 | AI373062 | Hs.332938 | hypothetical protein MGC5370             | 4.8  |
|    | 120712 | AF193339 | Hs.102506 | eukaryotic translation initiation factor | 4.8  |
|    | 107794 | AA019255 |           | gb:ze56e10.s1 Soares retina N2b4HR Homo  | 4.7  |
|    | 135101 | U82275   | Hs.94498  | leukocyte immunoglobulin-like receptor,  | 4.6  |
| 30 | 129898 | AI672731 | Hs.13256  | ESTs                                     | 4.6  |
|    | 113494 | T91451   | Hs.86538  | ESTs                                     | 4.6  |
|    | 115004 | AA329340 | Hs.4867   | mannosyl (alpha-1,3)-glycoprotein beta-  | 4.5  |
|    | 113074 | AK001335 | Hs.31137  | protein tyrosine phosphatase, receptor t | 4.5  |
|    | 112326 | R55822   | Hs.4268   | ESTs                                     | 4.4  |
| 35 | 105169 | BE245294 | Hs.180789 | S164 protein                             | 4.4  |
|    | 117048 | H89732   | Hs.230113 | EST                                      | 4.3  |
|    | 123133 | AA487264 | Hs.154974 | Homo sapiens mRNA; cDNA DKFZp667N064 (fr | 4.3  |
|    | 111394 | AA412227 | Hs.16131  | hypothetical protein FLJ12876            | 4.3  |
|    | 105112 | AL117518 | Hs.3586   | KIAA0978 protein                         | 4.2  |
| 40 | 114414 | AW152166 | Hs.182113 | ESTs                                     | 4.2  |
|    | 125219 | AI804331 | Hs.99423  | ATP-dependent RNA helicase               | 4.2  |
|    | 114995 | AA769266 | Hs.193657 | ESTs                                     | 4.2  |
|    | 123338 | AA504249 | Hs.187585 | ESTs                                     | 4.1  |
|    | 126666 | AA648886 | Hs.151999 | ESTs                                     | 4.1  |
| 45 | 112908 | BE281000 | Hs.3530   | TLS-associated serine-arginine protein 2 | 4.1  |
|    | 116640 | X89984   | Hs.211563 | B-cell CLL/lymphoma 7A                   | 4.0  |
|    | 109292 | AW975746 | Hs.188652 | KIAA1702 protein                         | 4.0  |
|    | 131724 | AK001335 | Hs.31137  | protein tyrosine phosphatase, receptor t | 4.0  |
|    | 119772 | AJ250839 | Hs.58241  | gene for serine/threonine protein kinase | 4.0  |
| 50 | 134453 | AI272141 | Hs.83484  | SRY (sex determining region Y)-box 4     | 4.0  |
|    | 123562 | AA177088 | Hs.190065 | ESTs                                     | 4.0  |
|    | 103226 | X75042   | Hs.44313  | v-rel avian reticuloendotheliosis viral  | 3.9  |
|    | 127610 | AA960867 | Hs.150271 | ESTs, Highly similar to unnamed protein  | 3.9  |
|    | 119873 | AI660149 | Hs.44865  | lymphoid enhancer-binding factor 1       | 3.9  |
| 55 | 115553 | AJ275986 | Hs.71414  | transcription factor (SMIF gene)         | 3.9  |
|    | 131844 | AI419294 | Hs.324342 | ESTs                                     | 3.8  |
|    | 123360 | AA532718 | Hs.178604 | ESTs                                     | 3.8  |
|    | 111180 | AI798851 | Hs.283108 | hemoglobin, gamma G                      | 3.8  |
|    | 129426 | AF077953 | Hs.111323 | Protein inhibitor of activated STAT X    | 3.8  |
| 60 | 105434 | AA252111 | Hs.15200  | ESTs                                     | 3.8  |
|    | 119073 | BE245360 | Hs.279477 | ESTs                                     | 3.8  |
|    | 127003 | AW816615 | Hs.173540 | ATPase, Class V, type 10D                | 3.7  |
|    | 118325 | T51136   | Hs.90489  | ESTs                                     | 3.7  |
|    | 115998 | AA448488 | Hs.336629 | ribosomal protein L44                    | 3.7  |
| 65 | 119830 | AW054922 | Hs.53478  | Homo sapiens cDNA FLJ12366 fis, clone MA | 3.7  |
|    | 104584 | AA704538 | Hs.193777 | ESTs                                     | 3.6  |
|    | 105212 | AA205334 | Hs.324278 | Homo sapiens mRNA; cDNA DKFZp556M063 (f  | 3.6  |
|    | 109223 | AW000714 | Hs.65818  | ESTs                                     | 3.6  |
|    | 112605 | R79374   | Hs.29852  | ESTs                                     | 3.5  |
| 70 | 105733 | AA767669 | Hs.10242  | ESTs                                     | 3.5  |
|    | 120562 | BE244580 | Hs.302267 | hypothetical protein FLJ10330            | 3.5  |
|    | 112268 | W39609   | Hs.22003  | solute carrier family 6 (neurotransmitte | 3.5  |
|    | 127834 | AW301022 | Hs.337631 | EST                                      | 3.5  |
|    | 115147 | AA745781 | Hs.38399  | hypothetical protein MGC2454             | 3.5  |
| 75 | 115185 | BE299677 | Hs.105461 | hypothetical protein FLJ20357            | 3.5  |
|    | 113921 | AW976530 | Hs.28355  | hypothetical protein FLJ22402            | 3.5  |
|    | 115835 | AA521410 | Hs.41371  | ESTs                                     | 3.5  |
|    | 123503 | AW975051 | Hs.293156 | ESTs, Weakly similar to I78885 serine/th | 3.5  |
|    | 128527 | AA504593 | Hs.101047 | transcription factor 3 (E2A immunoglobul | 3.4  |
| 80 | 128743 | R44284   | Hs.2730   | heterogeneous nuclear ribonucleoprotein  | 3.4  |
|    | 117031 | H88353   |           | gb:yw21a02.s1 Morion Fetal Cochlea Homo  | 3.4  |
|    | 123149 | AI734179 | Hs.105676 | ESTs                                     | 3.4  |
|    | 102581 | AI077228 | Hs.77256  | enhancer of zeste (Drosophila) homolog 2 | 3.4  |
|    | 103158 | BE242587 | Hs.118651 | hematopoietically expressed homeobox     | 3.4  |
|    | 107599 | AW664072 | Hs.60136  | ESTs                                     | 3.4  |
|    | 125556 | AB033064 | Hs.334806 | KIAA1238 protein                         | 3.4  |
|    | 103331 | AI825463 | Hs.147996 | protein kinase, X-linked                 | 3.4  |

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| 5  | 114387 | AI655141  | Hs.107720 | ESTs, Weakly similar to A54295 interfer  | 3.4 |
|    | 119040 | R02394    | Hs.269436 | ESTs, Moderately similar to PC4259 fem   | 3.4 |
|    | 100305 | NM_004941 | Hs.171872 | DEAD/H (Asp-Glu-Ala-Asp/His) box polypep | 3.4 |
|    | 129618 | T71092    | Hs.172572 | hypothetical protein FLJ20093            | 3.3 |
|    | 133445 | AC005262  | Hs.73797  | guanine nucleotide binding protein (G pr | 3.3 |
| 10 | 132111 | AW500857  | Hs.40137  | anaphase-promoting complex 1; meiotic ch | 3.3 |
|    | 105292 | AF128542  | Hs.166845 | polymerase (DNA directed), epsilon       | 3.3 |
|    | 118397 | BE139479  | Hs.161492 | ESTs                                     | 3.3 |
|    | 118922 | AW206193  | Hs.91065  | hypothetical protein DKFZp761B2423       | 3.2 |
|    | 132344 | AW977189  | Hs.45719  | KIAA0823 protein                         | 3.2 |
| 15 | 129889 | AA810932  | Hs.131899 | ESTs, Weakly similar to T00370 hypotheti | 3.2 |
|    | 123670 | AI189644  | Hs.112708 | ESTs, Moderately similar to ZN91_HUMAN Z | 3.2 |
|    | 116291 | AW410377  | Hs.41502  | hypothetical protein FLJ21276            | 3.2 |
|    | 105289 | AB020638  | Hs.103000 | KIAA0831 protein                         | 3.2 |
|    | 105583 | AA278907  | Hs.3530   | TLS-associated serine-arginine protein   | 3.2 |
| 20 | 104796 | BE620712  | Hs.33025  | hypothetical protein PP2447              | 3.2 |
|    | 111557 | R07364    | Hs.268667 | ESTs, Weakly similar to ALU1_HUMAN ALU   | 3.2 |
|    | 134174 | AF283770  | Hs.79630  | CD79A antigen (immunoglobulin-associated | 3.2 |
|    | 126077 | M78772    | Hs.210836 | ESTs                                     | 3.1 |
|    | 133733 | AK000476  | Hs.75798  | hypothetical protein                     | 3.1 |
| 25 | 124847 | W07701    | Hs.304177 | Homo sapiens clone FLB8503 PRO2286 mRNA, | 3.1 |
|    | 127879 | AA768098  | Hs.189079 | ESTs                                     | 3.1 |
|    | 113108 | AW516695  | Hs.8438   | ESTs                                     | 3.1 |
|    | 110343 | AW136703  | Hs.17268  | ESTs                                     | 3.1 |
|    | 102935 | BE561850  | Hs.80506  | small nuclear ribonucleoprotein polypept | 3.1 |
| 30 | 111676 | AB040882  | Hs.109778 | KIAA1449 protein                         | 3.1 |
|    | 127311 | AA492582  | Hs.322404 | hypothetical protein MGC4175             | 3.1 |
|    | 109830 | AA131743  | Hs.193352 | ESTs                                     | 3.1 |
|    | 111330 | BE247767  | Hs.18166  | KIAA0870 protein                         | 3.1 |
|    | 104246 | AF016032  | Hs.201377 | lysosomal apyrase-like 1                 | 3.1 |
| 35 | 126668 | AA011616  | Hs.269877 | ESTs                                     | 3.1 |
|    | 124724 | H20816    | Hs.112423 | Homo sapiens mRNA; cDNA DKFZp586i1420 (f | 3.1 |
|    | 114794 | AI751157  | Hs.101395 | hypothetical protein MGC11352            | 3.1 |
|    | 134599 | X99226    | Hs.284153 | Fanconi anemia, complementation group A  | 3.0 |
|    | 130314 | NM_014674 | Hs.154332 | KIAA0212 gene product                    | 3.0 |
| 40 | 100265 | D39521    | Hs.112396 | KIAA0077 protein                         | 3.0 |
|    | 115005 | AI760825  | Hs.111339 | ESTs                                     | 3.0 |
|    | 123433 | AW450922  | Hs.112478 | ESTs                                     | 3.0 |
|    | 127798 | AA737068  | Hs.294078 | ESTs                                     | 3.0 |
|    | 117403 | H84455    | Hs.40639  | ESTs                                     | 3.0 |
| 45 | 107111 | AI298448  | Hs.22670  | chromodomain helicase DNA binding protei | 3.0 |
|    | 105698 | AW957300  | Hs.294142 | ESTs, Weakly similar to C55663 oligodend | 3.0 |
|    | 108358 | M81933    | Hs.1634   | cell division cycle 25A                  | 3.0 |
|    | 132066 | AI929392  | Hs.181195 | DnaJ (Hsp40) homolog, subfamily B, membe | 2.9 |
|    | 130303 | BE245294  | Hs.180789 | S164 protein                             | 2.9 |
| 50 | 104596 | AF067804  | Hs.15423  | hypothetical protein HDCMC04P            | 2.9 |
|    | 112197 | NM_003655 | Hs.5637   | ESTs                                     | 2.9 |
|    | 132809 | AF036144  | Hs.5734   | meningioma expressed antigen 5 (hyaluron | 2.9 |
|    | 100877 | X80821    | Hs.27973  | KIAA0874 protein                         | 2.9 |
|    | 108147 | AI972094  | Hs.286221 | Homo sapiens cDNA FLJ13741 fis, clone PL | 2.9 |
| 55 | 133674 | AW851121  | Hs.75497  | Homo sapiens cDNA: FLJ22139 fis, clone H | 2.9 |
|    | 129001 | AA443323  | Hs.107812 | BPOZ protein                             | 2.9 |
|    | 131920 | BE002320  | Hs.287864 | Homo sapiens cDNA FLJ14030 fis, clone HE | 2.9 |
|    | 134709 | NM_006290 | Hs.211600 | tumor necrosis factor, alpha-induced pro | 2.8 |
|    | 113577 | AI300699  | Hs.278937 | PRO0470 protein                          | 2.8 |
| 60 | 115839 | BE300266  | Hs.28935  | transducin-like enhancer of split 1, hom | 2.8 |
|    | 129869 | N57818    |           | gb:yy59d07.s1 Soares fetal liver spleen  | 2.8 |
|    | 128659 | AW630087  | Hs.103315 | trinucleotide repeat containing 1        | 2.8 |
|    | 105011 | BE091926  | Hs.16244  | mitotic spindle coiled-coil related prot | 2.8 |
|    | 129294 | AF172940  | Hs.184542 | CGI-127 protein                          | 2.8 |
| 65 | 104518 | H20816    | Hs.112423 | Homo sapiens mRNA; cDNA DKFZp586i1420 (f | 2.7 |
|    | 107796 | AA058848  | Hs.60797  | ESTs                                     | 2.7 |
|    | 106331 | AB037742  | Hs.24336  | KIAA1321 protein                         | 2.7 |
|    | 127692 | AI021912  | Hs.187983 | ESTs                                     | 2.7 |
|    | 131916 | AA025976  | Hs.34569  | ESTs                                     | 2.7 |
| 70 | 124971 | T23800    | Hs.151001 | hypothetical protein FLJ14728            | 2.7 |
|    | 129428 | AA256906  | Hs.111364 | ESTs, Weakly similar to ubiquitous TPR m | 2.7 |
|    | 118348 | AW408586  | Hs.91052  | ESTs, Moderately similar to ALU5_HUMAN A | 2.7 |
|    | 113219 | T59257    | Hs.269528 | ESTs, Moderately similar to ALU8_HUMAN A | 2.7 |
|    | 131720 | Z68128    | Hs.3109   | Rho GTPase activating protein 4          | 2.7 |
| 75 | 109593 | AW196801  | Hs.6685   | thyroid hormone receptor interactor 8    | 2.7 |
|    | 135369 | AF043722  | Hs.99491  | RAS guanyl releasing protein 2 (calcium  | 2.7 |
|    | 131689 | AB012124  | Hs.30696  | transcription factor-like 5 (basic helix | 2.7 |
|    | 117457 | N29682    | Hs.44071  | ESTs, Weakly similar to ALU5_HUMAN ALU   | 2.7 |
|    | 121073 | H46199    | Hs.112184 | DKFZP586J0619 protein                    | 2.7 |
| 80 | 125069 | H81306    | Hs.194485 | ESTs                                     | 2.7 |
|    | 116456 | AI381911  | Hs.334859 | KIAA1814 protein                         | 2.7 |
|    | 124271 | AW293223  | Hs.8928   | hypothetical protein FLJ20291            | 2.7 |
|    | 112369 | AW966243  | Hs.4243   | hypothetical protein FLJ12650            | 2.7 |
|    | 115866 | AW062629  | Hs.52081  | KIAA0867 protein                         | 2.7 |
|    | 132543 | BE568452  | Hs.5101   | protein regulator of cytokinesis 1       | 2.7 |
|    | 124494 | N54831    | Hs.271381 | ESTs, Weakly similar to I38022 hypothet  | 2.7 |
|    | 104799 | AA029703  |           | gb:ze95f08.s1 Soares_fetal_heart_NbHH19W | 2.7 |

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|    | 120510 | AI796395  | Hs.111377 | ESTs                                      | 2.6 |
|    | 129781 | AA306090  | Hs.124707 | ESTs                                      | 2.6 |
|    | 122698 | AA456112  | Hs.99410  | ESTs                                      | 2.6 |
| 5  | 106995 | AB023139  | Hs.37892  | KIAA0922 protein                          | 2.6 |
|    | 105502 | BE464016  | Hs.238956 | ESTs                                      | 2.6 |
|    | 128671 | AI885045  | Hs.211586 | phosphoinositide-3-kinase, regulatory s   | 2.6 |
|    | 107059 | BE614410  | Hs.23044  | RAD51 (S. cerevisiae) homolog (E. coli Re | 2.6 |
|    | 126502 | T10077    | Hs.13453  | hypothetical protein FLJ14753             | 2.6 |
| 10 | 129703 | BE388665  | Hs.179999 | Homo sapiens, clone IMAGE:3457003, mRNA   | 2.6 |
|    | 111219 | N68836    | Hs.19247  | ESTs, Moderately similar to ALUC_HUMAN    | 2.6 |
|    | 133529 | W45623    | Hs.74571  | ADP-ribosylation factor 1                 | 2.6 |
|    | 125626 | AI038854  | Hs.180789 | S164 protein                              | 2.6 |
|    | 111189 | N67603    | Hs.272130 | ESTs, Weakly similar to S65824 reverse    | 2.6 |
| 15 | 113146 | BE151985  | Hs.5722   | hypothetical protein FLJ23316             | 2.6 |
|    | 125562 | AI494372  | Hs.98968  | hypothetical protein FLJ23058             | 2.6 |
|    | 102263 | U29171    | Hs.75852  | casein kinase 1, delta                    | 2.6 |
|    | 118835 | AA535246  | Hs.50852  | ESTs                                      | 2.6 |
|    | 103141 | X66113    | Hs.75584  | polymyositis/scleroderma autoantigen 2 (  | 2.6 |
| 20 | 109598 | R40515    | Hs.21246  | ESTs                                      | 2.6 |
|    | 127262 | AA828125  |           | gb:cd71a09.s1 NCI_CGAP_Ov2 Homo sapiens   | 2.6 |
|    | 129620 | D79338    | Hs.239720 | CCR4-NOT transcription complex, subunit   | 2.6 |
|    | 125905 | AI678638  | Hs.6456   | chaperonin containing TCP1, subunit 2 (b  | 2.6 |
|    | 123255 | AA830335  | Hs.105273 | ESTs                                      | 2.6 |
| 25 | 133160 | N54968    | Hs.66309  | hypothetical protein MGC11061             | 2.6 |
|    | 109638 | AW977747  | Hs.119120 | E3 ubiquitin ligase SMURF1                | 2.6 |
|    | 119896 | AA731836  | Hs.137319 | ESTs                                      | 2.6 |
|    | 134770 | M89957    | Hs.89575  | CD79B antigen (immunoglobulin-associated  | 2.6 |
|    | 119403 | AL117554  | Hs.119908 | nucleolar protein NOP5/NOP58              | 2.6 |
| 30 | 129563 | AF119664  | Hs.27299  | transcriptional regulator protein         | 2.6 |
|    | 111719 | AI655806  | Hs.179262 | ESTs                                      | 2.6 |
|    | 103982 | AA218558  | Hs.7905   | sorting nexin 9                           | 2.6 |
|    | 125032 | T74884    |           | gb:yc58d02.s1 Stratagene liver (937224)   | 2.5 |
|    | 131426 | AL122045  | Hs.26703  | CCR4-NOT transcription complex, subunit   | 2.5 |
| 35 | 131938 | AF176085  | Hs.34956  | neural polypyrimidine tract binding prot  | 2.5 |
|    | 102450 | U48251    | Hs.75871  | protein kinase C binding protein 1        | 2.5 |
|    | 133761 | AF041430  | Hs.75922  | brain protein I3                          | 2.5 |
|    | 126339 | AA152106  | Hs.4859   | cyclin L an/a-6a                          | 2.5 |
|    | 118967 | AI668670  | Hs.216756 | ESTs                                      | 2.5 |
| 40 | 123110 | AA486256  | Hs.193510 | EST                                       | 2.5 |
|    | 114092 | H81213    | Hs.14825  | ESTs, Weakly similar to KIAA1503 protein  | 2.5 |
|    | 113247 | T63856    | Hs.193430 | ESTs, Weakly similar to 2109260A B cell   | 2.5 |
|    | 122024 | AA431296  | Hs.139433 | ESTs                                      | 2.5 |
|    | 105657 | AW854339  | Hs.33476  | hypothetical protein FLJ11937             | 2.5 |
| 45 | 126127 | N95428    |           | gb:zb80d09.s1 Soares_senescent_fibroblas  | 2.5 |
|    | 111836 | R58394    | Hs.25119  | ESTs, Weakly similar to YEX0_YEAST HYPOT  | 2.5 |
|    | 121470 | AA558958  | Hs.324751 | ESTs                                      | 2.5 |
|    | 120132 | W57554    | Hs.125019 | ESTs                                      | 2.5 |
|    | 107731 | AA016086  | Hs.272106 | ESTs, Weakly similar to I38022 hypotheli  | 2.5 |
| 50 | 118122 | AI186671  | Hs.48008  | ESTs                                      | 2.5 |
|    | 106589 | AK000933  | Hs.28661  | Homo sapiens cDNA FLJ10071 fis, clone HE  | 2.5 |
|    | 129948 | AI537162  | Hs.263988 | ESTs                                      | 2.5 |
|    | 115652 | BE093589  | Hs.38178  | hypothetical protein FLJ23458             | 2.5 |
| 55 | 103076 | NM_001034 | Hs.75319  | ribonucleotide reductase M2 polypeptide   | 2.5 |
|    | 131019 | W28614    | Hs.306155 | chorionic somatomammotropin hormone 1 (p  | 2.5 |
|    | 100512 | D13317    | Hs.78915  | GA-binding protein transcription factor,  | 2.5 |
|    | 105393 | AF167570  | Hs.256583 | interleukin enhancer binding factor 3, 9  | 2.5 |
|    | 100571 | L14561    | Hs.78546  | ATPase, Ca++ transporting, plasma membra  | 2.5 |
| 60 | 106890 | AA489245  | Hs.88500  | mitogen-activated protein kinase 8 inte   | 2.5 |
|    | 104276 | AW965275  | Hs.284288 | hqp0256 protein                           | 2.5 |
|    | 113283 | T66813    | Hs.12947  | EST                                       | 2.5 |
|    | 118078 | N54321    | Hs.47790  | EST                                       | 2.5 |
|    | 120796 | AI247356  | Hs.96820  | ESTs                                      | 2.5 |
| 65 | 106265 | AA412176  | Hs.236463 | Homo sapiens mRNA; cDNA DKFZp58610521 (f  | 2.5 |
|    | 102507 | U52154    | Hs.193044 | potassium inwardly-rectifying channel, s  | 2.5 |
|    | 106508 | AI205785  | Hs.30348  | ESTs                                      | 2.5 |
|    | 104568 | AW629981  | Hs.172182 | poly(A)-binding protein, cytoplasmic 1    | 2.5 |
|    | 103698 | AA001021  | Hs.6685   | thyroid hormone receptor interactor 8     | 2.5 |
| 70 | 113947 | W84768    |           | gb:zh53d03.s1 Soares_fetal_liver_spleen_  | 2.5 |
|    | 132112 | AL021938  | Hs.40154  | jumonji (mouse) homolog                   | 2.5 |
|    | 129052 | BE275031  | Hs.158210 | hypothetical protein MGC2555              | 2.4 |
|    | 117265 | AA451966  | Hs.43005  | RAB9-like protein                         | 2.4 |
|    | 107834 | AA253162  | Hs.40838  | ESTs                                      | 2.4 |
|    | 113119 | T47910    |           | gb:yb18b11.s1 Stratagene fetal spleen (9  | 2.4 |
| 75 | 133726 | AI803188  | Hs.252716 | oxysterol-binding protein-related protei  | 2.4 |
|    | 120548 | AA280356  | Hs.187634 | ESTs                                      | 2.4 |
|    | 121545 | AA412442  | Hs.98132  | ESTs                                      | 2.4 |
|    | 131136 | AB033099  | Hs.23413  | KIAA1273 protein                          | 2.4 |
|    | 126589 | AW027809  | Hs.187698 | Homo sapiens cytomegalovirus partial fus  | 2.4 |
| 80 | 115475 | AB033085  | Hs.40193  | hypothetical protein KIAA1259             | 2.4 |
|    | 103760 | AA642973  | Hs.183842 | ubiquitin B                               | 2.4 |
|    | 127889 | AI147408  | Hs.144941 | ESTs                                      | 2.4 |
|    | 124457 | AK000680  | Hs.266175 | phosphoprotein associated with GEMs       | 2.4 |
|    | 113721 | AF143885  | Hs.18190  | EST                                       | 2.4 |

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|    | 129079 | AK000157  | Hs.108502 | hypothetical protein FLJ20150            | 2.4 |
|    | 123530 | AA608705  | Hs.187772 | ESTs                                     | 2.4 |
|    | 123592 | AA805331  | Hs.112637 | ESTs                                     | 2.4 |
| 5  | 113474 | R50752    | Hs.23856  | hypothetical protein MGC5297             | 2.4 |
|    | 116728 | F13687    | Hs.227976 | EST                                      | 2.4 |
|    | 101759 | M80244    | Hs.184601 | solute carrier family 7 (cationic amino  | 2.4 |
|    | 131686 | NM_012296 | Hs.30687  | GRB2-associated binding protein 2        | 2.4 |
|    | 127841 | AW136558  | Hs.125246 | ESTs                                     | 2.4 |
| 10 | 102737 | R51790    | Hs.239483 | Human clone 23933 mRNA sequence          | 2.4 |
|    | 129673 | D38552    | Hs.1191   | KIAA0073 protein                         | 2.4 |
|    | 133095 | BE046490  | Hs.180677 | zinc finger protein 162                  | 2.4 |
|    | 124540 | N63232    |           | gb:yz39a12.s1 Morton Fetal Cochlea Homo  | 2.4 |
|    | 113609 | T93263    | Hs.16875  | ESTs, Weakly similar to S23650 retrovir  | 2.4 |
| 15 | 128826 | Z40313    | Hs.106330 | Homo sapiens clone IMAGE:23371, mRNA seq | 2.4 |
|    | 129059 | AW069534  | Hs.279583 | CGI-81 protein                           | 2.4 |
|    | 134092 | AA218558  | Hs.7905   | sorting nexin 9                          | 2.4 |
|    | 132317 | BE262438  | Hs.44592  | beta-1,4 mannosyltransferase             | 2.4 |
|    | 135278 | AA399542  | Hs.229671 | EST, Moderately similar to PEPTIDYL-PROL | 2.4 |
| 20 | 128468 | T23625    | Hs.150580 | putative translation initiation factor   | 2.4 |
|    | 127407 | AW089514  | Hs.279681 | heterogeneous nuclear ribonucleoprotein  | 2.4 |
|    | 132342 | AW162758  | Hs.45232  | ESTs, Weakly similar to ALU5_HUMAN ALU S | 2.4 |
|    | 113518 | AW367788  | Hs.323954 | postmeiotic segregation increased 2-lik  | 2.4 |
|    | 100330 | AW410976  | Hs.77152  | minichromosome maintenance deficient (S. | 2.4 |
| 25 | 116046 | BE395293  | Hs.94491  | hypothetical protein FLJ20297            | 2.4 |
|    | 123910 | AA621262  | Hs.179923 | ESTs, Weakly similar to S65657 alpha-1C- | 2.4 |
|    | 101651 | AL037111  | Hs.75541  | galactose-1-phosphate uridylyltransferas | 2.4 |
|    | 100114 | X02308    | Hs.82962  | thymidylate synthetase                   | 2.4 |
|    | 125038 | AA812234  | Hs.270134 | hypothetical protein FLJ20280            | 2.4 |
| 30 | 135191 | X16866    | Hs.301086 | cytochrome P450, subfamily IID (debrisoq | 2.4 |
|    | 123258 | AA490929  | Hs.105274 | ESTs, Weakly similar to RMS1_HUMAN REGUL | 2.4 |
|    | 132380 | AW373665  | Hs.46853  | ESTs                                     | 2.4 |
|    | 114046 | BE018658  | Hs.141003 | Homo sapiens cDNA: FLJ21691 fis, clone C | 2.3 |
|    | 133582 | BE391579  | Hs.75087  | Fas-activated serine/threonine kinase    | 2.3 |
| 35 | 134839 | D63479    | Hs.115907 | diacylglycerol kinase, delta (130kD)     | 2.3 |
|    | 105734 | AI952797  | Hs.10888  | hypothetical protein FLJ21709            | 2.3 |
|    | 101086 | AA382524  | Hs.250959 | histatin 1                               | 2.3 |
|    | 118349 | N63786    | Hs.94149  | ESTs, Weakly similar to ALU1_HUMAN ALU S | 2.3 |
|    | 101194 | L20971    | Hs.188    | phosphodiesterase 4B, cAMP-specific (dun | 2.3 |
| 40 | 130588 | AL030996  | Hs.16411  | hypothetical protein LOC57187            | 2.3 |
|    | 101875 | BE241753  | Hs.74592  | special AT-rich sequence binding protein | 2.3 |
|    | 118751 | N74210    | Hs.50454  | ESTs                                     | 2.3 |
|    | 125174 | W51835    | Hs.231082 | EST                                      | 2.3 |
|    | 105966 | AA142984  | Hs.5344   | adaptor-related protein complex 1, gamma | 2.3 |
| 45 | 104624 | AA353125  | Hs.184721 | ESTs                                     | 2.3 |
|    | 131263 | AU077002  | Hs.24950  | regulator of G-protein signalling 5      | 2.3 |
|    | 105014 | AA121123  | Hs.269267 | ESTs, Weakly similar to AF161361 1 HSPC  | 2.3 |
|    | 123423 | AA598484  |           | gb:ae38f04.s1 Gessler Wilms tumor Homo s | 2.3 |
| 50 | 128531 | H03721    | Hs.2953   | ribosomal protein S15a                   | 2.3 |
|    | 108876 | AI733860  | Hs.191453 | ESTs                                     | 2.3 |
|    | 130215 | BE301883  | Hs.152707 | glioblastoma amplified sequence          | 2.3 |
|    | 132232 | AI522273  | Hs.42640  | ESTs                                     | 2.3 |
|    | 132664 | AI740461  | Hs.54542  | ESTs                                     | 2.3 |
|    | 105991 | AA215701  | Hs.186541 | ESTs, Weakly similar to I38022 hypotheti | 2.3 |
| 55 | 100253 | D38024    | Hs.157425 | double homeobox, 2                       | 2.3 |
|    | 105574 | AA045201  | Hs.266175 | phosphoprotein associated with GEMs      | 2.3 |
|    | 100780 | BE561958  | Hs.302063 | immunoglobulin heavy constant mu         | 2.3 |
|    | 134964 | AI803516  | Hs.272891 | hippocalcin-like protein 4               | 2.3 |
| 60 | 132786 | BE083422  | Hs.56851  | hypothetical protein MGC2668             | 2.3 |
|    | 104952 | AW076098  | Hs.74316  | desmoplakin (DPI, DPII)                  | 2.3 |
|    | 119127 | AA708035  | Hs.12248  | ESTs                                     | 2.3 |
|    | 104857 | AI920902  | Hs.19058  | ESTs, Moderately similar to S65657 alpha | 2.3 |
|    | 107592 | AA694264  | Hs.60049  | ESTs                                     | 2.3 |
|    | 113378 | T80738    | Hs.14757  | ESTs                                     | 2.3 |
| 65 | 129228 | U40714    | Hs.239307 | tyrosyl-tRNA synthetase                  | 2.3 |
|    | 106898 | AA490069  | Hs.306676 | Homo sapiens cDNA FLJ14302 fis, clone PL | 2.3 |
|    | 130734 | AW137091  | Hs.18624  | KIAA1052 protein                         | 2.3 |
|    | 125728 | AW954565  | Hs.57987  | B-cell CLL/lymphoma 11B (zinc finger pro | 2.3 |
|    | 113697 | T97183    | Hs.17992  | Homo sapiens mRNA; cDNA DKFZp434J1726 (f | 2.3 |
| 70 | 107104 | AU076640  | Hs.15243  | nucleolar protein 1 (120kD)              | 2.3 |
|    | 134267 | AI174596  | Hs.196209 | RAE1 (RNA export 1, S.pombe) homolog     | 2.3 |
|    | 105777 | R42755    | Hs.23096  | ESTs                                     | 2.3 |
|    | 115306 | AA280288  | Hs.88746  | ESTs                                     | 2.3 |
|    | 133363 | AI866286  | Hs.71962  | ESTs, Weakly similar to B36298 proline-r | 2.3 |
| 75 | 129535 | AA397972  | Hs.169965 | chimerin (chimaerin) 1                   | 2.3 |
|    | 121520 | AA412163  | Hs.164785 | ESTs                                     | 2.3 |
|    | 123808 | AA620552  |           | gb:ae58g11.s1 Stralagene lung carcinoma  | 2.3 |
|    | 105700 | AW580830  | Hs.35254  | hypothetical protein FLB6421             | 2.3 |
|    | 120820 | AA347417  | Hs.96869  | EST                                      | 2.3 |
| 80 | 128721 | AW403911  | Hs.266175 | phosphoprotein associated with GEMs      | 2.3 |
|    | 107711 | W95141    | Hs.220687 | ESTs                                     | 2.3 |
|    | 102564 | U59423    | Hs.79067  | MAD (mothers against decapentaplegic, Dr | 2.3 |
|    | 131868 | AW408296  | Hs.33532  | zinc finger protein 151 (pH2-67)         | 2.3 |
|    | 122333 | AA625872  | Hs.98977  | ESTs, Moderately similar to T34561 hypot | 2.3 |

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|    | 118865 | AA736405  | Hs.54530  | ESTs   | 2.3 |
|    | 128952 | AL043463  | Hs.6755   | RaP2 interacting protein 8   | 2.3 |
|    | 133772 | BE379867  | Hs.76038  | isopentenyl-diphosphate delta isomerase  | 2.3 |
| 5  | 111795 | AI435437  | Hs.24567  | ESTs, Weakly similar to KBF3_HUMAN NUCLEOTIDE PHOSPHATASE (mitochondrial processing) bet | 2.3 |
|    | 103437 | AV655598  | Hs.184211 | peptidase (mitochondrial processing) bet   | 2.3 |
|    | 123060 | AA482027  | Hs.142569 | ESTs, Weakly similar to I38022 hypothet  | 2.3 |
|    | 125466 | R08234    | Hs.180461 | ESTs   | 2.3 |
|    | 100892 | BE245294  | Hs.180789 | S164 protein   | 2.3 |
| 10 | 121613 | AA416879  | Hs.193195 | ESTs, Weakly similar to 2109260A B cell  | 2.3 |
|    | 133665 | AL036883  | Hs.75450  | delta sleep inducing peptide, immunoreac   | 2.2 |
|    | 129248 | W04606    | Hs.171637 | hypothetical protein MGC2628   | 2.2 |
|    | 126153 | H85692    | Hs.40730  | ESTs   | 2.2 |
|    | 125590 | R23858    | Hs.143375 | Homo sapiens, clone IMAGE:3840937, mRNA,   | 2.2 |
| 15 | 104960 | AA558677  | Hs.8928   | hypothetical protein FLJ120291   | 2.2 |
|    | 113941 | AA531016  | Hs.22399  | hypothetical protein FLJ14824  | 2.2 |
|    | 112540 | R69751    |           | gb:yi40a10.s1 Soares placenta Nb2HP Homo   | 2.2 |
|    | 105322 | T87179    | Hs.16346  | ESTs, Weakly similar to S57447 HPBRII-7  | 2.2 |
|    | 112003 | AW978731  | Hs.301824 | hypothetical protein PRO1331   | 2.2 |
| 20 | 134733 | N87353    | Hs.89421  | CBF1 interacting corepressor   | 2.2 |
|    | 114620 | AA642974  |           | gb:nr60h01.s1 NCL_CGAP_Lym3 Homo sapiens   | 2.2 |
|    | 123451 | AI793211  | Hs.165372 | ESTs, Moderately similar to ALU1_HUMAN A   | 2.2 |
|    | 130850 | AB040922  | Hs.20237  | DKFZP566C134 protein   | 2.2 |
|    | 105561 | AA262881  | Hs.323836 | ESTs, Weakly similar to alternatively s  | 2.2 |
| 25 | 125957 | H41694    |           | gb:yo06b06.r1 Soares adult brain N2b5HB5   | 2.2 |
|    | 130362 | BE513050  | Hs.279681 | heterogeneous nuclear ribonucleoprotein  | 2.2 |
|    | 122682 | AA984531  | Hs.159293 | ESTs   | 2.2 |
|    | 124250 | AA350256  | Hs.323875 | EST, Weakly similar to 2109260A B cell   | 2.2 |
|    | 131392 | AA235153  | Hs.26320  | TRABID protein   | 2.2 |
| 30 | 128845 | AW503976  | Hs.10649  | basement membrane-induced gene   | 2.2 |
|    | 130453 | U80735    | Hs.173854 | PAX transcription activation domain inte   | 2.2 |
|    | 126973 | W46653    | Hs.251928 | nuclear pore complex interacting protein   | 2.2 |
|    | 103156 | BE259039  | Hs.129953 | Ewing sarcoma breakpoint region 1  | 2.2 |
|    | 103163 | AU077018  | Hs.3235   | keratin 4  | 2.2 |
| 35 | 109252 | BE440157  | Hs.85944  | ESTs   | 2.2 |
|    | 131163 | AA099524  | Hs.23754  | ESTs   | 2.2 |
|    | 115292 | AA279956  | Hs.88672  | ESTs   | 2.2 |
|    | 122591 | AI188219  | Hs.99311  | ESTs, Weakly similar to HSJ2_HUMAN DNAJ  | 2.2 |
|    | 124977 | F04819    | Hs.190452 | KIAA0365 gene product  | 2.2 |
| 40 | 103319 | X83492    | Hs.82359  | tumor necrosis factor receptor superfam  | 2.2 |
|    | 100370 | D79989    | Hs.184884 | KIAA0167 gene product  | 2.2 |
|    | 128992 | H04150    | Hs.107708 | ESTs   | 2.2 |
|    | 129928 | AI338993  | Hs.134535 | ESTs   | 2.2 |
|    | 108451 | AA079195  |           | gb:zm92h12.s1 Stratagene ovarian cancer  | 2.2 |
| 45 | 133910 | AW835281  | Hs.77500  | ubiquitin specific protease 4 (proto-onc   | 2.2 |
|    | 106288 | AB037742  | Hs.24336  | KIAA1321 protein   | 2.2 |
|    | 134125 | NM_014781 | Hs.50421  | KIAA0203 gene product  | 2.2 |
|    | 101379 | X02994    | Hs.1217   | adenosine deaminase  | 2.2 |
|    | 112276 | R53442    | Hs.26038  | ESTs, Weakly similar to I38022 hypothet  | 2.2 |
| 50 | 106251 | R12607    | Hs.35101  | proline-rich Gla (G-carboxyglutamic acid   | 2.2 |
|    | 125394 | BE178502  | Hs.173772 | ESTs, Weakly similar to I78885 serine/th   | 2.2 |
|    | 103392 | X94563    |           | gb:HLsapiens dbi/acbp gene exon 1 & 2  | 2.2 |
|    | 112853 | T02843    |           | gb:FB11H5 Fetal brain, Stratagene Homo s   | 2.2 |
|    | 133195 | AI434760  | Hs.279949 | KIAA1007 protein   | 2.2 |
| 55 | 135060 | AK001387  | Hs.259842 | protein kinase, AMP-activated, gamma 2 n   | 2.2 |
|    | 131381 | M92642    | Hs.26208  | collagen, type XVI, alpha 1  | 2.2 |
|    | 134104 | L35253    | Hs.79107  | mitogen-activated protein kinase 14  | 2.2 |
|    | 105225 | AA211777  |           | gb:zn57d02.s1 Stratagene muscle 937209 H   | 2.2 |
| 60 | 131320 | AA505691  | Hs.145696 | splicing factor (CC1.3)  | 2.2 |
|    | 114419 | AI248013  | Hs.106532 | ESTs, Weakly similar to I38588 reverse t   | 2.2 |
|    | 103634 | BE541733  | Hs.190877 | H3 histone, family 3B (H3.3B)  | 2.2 |
|    | 134624 | AF035119  | Hs.8700   | deleted in liver cancer 1  | 2.2 |
|    | 126524 | Z45455    | Hs.182447 | heterogeneous nuclear ribonucleoprotein  | 2.2 |
| 65 | 115556 | AL031778  | Hs.797    | nuclear transcription factor Y, alpha  | 2.2 |
|    | 111898 | R38944    | Hs.183475 | Homo sapiens clone 25061 mRNA sequence   | 2.2 |
|    | 100415 | D86970    | Hs.75822  | TGFB1-induced anti-apoptotic factor 1  | 2.2 |
|    | 103898 | AA248884  |           | gb:k3517.seq.F Human fetal heart, Lambda   | 2.2 |
|    | 129501 | AI631811  | Hs.180403 | STRIN protein  | 2.2 |
|    | 127251 | AA936428  | Hs.128639 | ESTs   | 2.2 |
| 70 | 100613 | X52078    | Hs.101047 | transcription factor 3 (E2A immunoglobul   | 2.2 |
|    | 116332 | AA491208  | Hs.62620  | chromosome 6 open reading frame 1  | 2.2 |
|    | 128897 | AW979134  | Hs.10700  | hypothetical protein   | 2.2 |
|    | 111777 | AK001100  | Hs.41690  | desmocollin 3  | 2.2 |
|    | 128604 | AI879099  | Hs.102397 | GIOT-3 for gonadotropin inducible transc   | 2.2 |
| 75 | 125585 | AW298113  | Hs.92909  | SON DNA binding protein  | 2.2 |
|    | 129584 | AV656017  | Hs.184325 | CGI-76 protein   | 2.2 |
|    | 114461 | AA531187  | Hs.126705 | ESTs   | 2.2 |
|    | 121387 | AA405854  |           | gb:zu66g08.s1 Soares_testis_NHT Homo sap   | 2.2 |
|    | 109339 | AA314554  | Hs.27774  | ESTs, Highly similar to AF161349 1 HSPC0   | 2.2 |
| 80 | 129179 | AW969025  | Hs.109154 | ESTs   | 2.2 |
|    | 106711 | BE390125  | Hs.143187 | hypothetical protein   | 2.2 |
|    | 106424 | H61005    | Hs.37902  | ESTs   | 2.2 |
|    | 123949 | AA621665  | Hs.208957 | EST  | 2.2 |
|    | 127256 | AI738610  | Hs.267967 | ESTs, Moderately similar to ALU8_HUMAN   | 2.2 |



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|    | 104868 | AF173867  | Hs.28906  | glucocorticoid modulatory element bindin | 2.2 |
|    | 132984 | BE539199  | Hs.62112  | zinc finger protein 207                  | 2.2 |
|    | 126383 | AB032977  | Hs.6298   | KIAA1151 protein                         | 2.2 |
| 5  | 130557 | H51825    | Hs.268911 | ESTs, Weakly similar to S65824 reverse   | 2.2 |
|    | 119232 | AI655226  | Hs.117659 | ESTs, Weakly similar to T46481 hypotheti | 2.2 |
|    | 105715 | BE621800  | Hs.29444  | putative small membrane protein NID67    | 2.2 |
|    | 124691 | R05835    | Hs.110153 | ESTs                                     | 2.2 |
|    | 113649 | N94768    | Hs.16400  | ESTs, Weakly similar to KIAA1435 protein | 2.2 |
| 10 | 117040 | AW970600  | Hs.303261 | ESTs                                     | 2.2 |
|    | 128767 | M85169    | Hs.1050   | pleckstrin homology, Sec7 and coiled/coi | 2.2 |
|    | 120602 | AA808018  | Hs.109302 | ESTs                                     | 2.2 |
|    | 107182 | AI311782  | Hs.20013  | GCIP-interacting protein p29             | 2.2 |
|    | 107357 | U63973    | Hs.103501 | rhodopsin kinase                         | 2.2 |
| 15 | 125499 | H10543    |           | gb:ym04c06.r1 Soares infant brain 1N1B H | 2.1 |
|    | 126872 | AW450979  |           | gb:U1-H-B13-ala-a-12-0-U1.s1 NCL_CGAP_Su | 2.1 |
|    | 113233 | T61955    | Hs.279867 | CGI-59 protein                           | 2.1 |
|    | 128367 | AW611791  | Hs.150742 | ESTs                                     | 2.1 |
|    | 127432 | AW067708  | Hs.170311 | heterogeneous nuclear ribonucleoprotein  | 2.1 |
| 20 | 114021 | AW235215  | Hs.16145  | ESTs                                     | 2.1 |
|    | 104455 | AL110261  | Hs.157211 | DKFZP586B0621 protein                    | 2.1 |
|    | 134966 | AW402389  | Hs.920    | modulator recognition factor I           | 2.1 |
|    | 129765 | M86933    | Hs.1238   | amelogenin (Y chromosome)                | 2.1 |
|    | 133451 | NM_000762 | Hs.334345 | cytochrome P450, subfamily IIA (phenobar | 2.1 |
| 25 | 109539 | AA082650  | Hs.6217   | Homo sapiens cDNA FLJ12521 fis, clone NT | 2.1 |
|    | 129794 | AF161399  | Hs.23259  | hypothetical protein FLJ13433            | 2.1 |
|    | 134869 | AL157518  | Hs.90421  | PRO2463 protein                          | 2.1 |
|    | 110256 | H63947    | Hs.237955 | RAB7, member RAS oncogene family         | 2.1 |
|    | 128817 | BE395776  | Hs.168640 | ankylosis, progressive (mouse) homolog   | 2.1 |
| 30 | 120906 | NM_000734 | Hs.97087  | CD3Z antigen, zeta polypeptide (T1T3 com | 2.1 |
|    | 134354 | M90391    | Hs.82127  | interleukin 16 (lymphocyte chemoattracta | 2.1 |
|    | 106048 | AW833367  | Hs.301732 | hypothetical protein MGC5306             | 2.1 |
|    | 128352 | AW137413  | Hs.169942 | ESTs                                     | 2.1 |
|    | 115348 | AA281562  | Hs.292100 | ESTs                                     | 2.1 |
| 35 | 123474 | AA599209  |           | gb:ag34b11.s1 Jia bone marrow stroma Hom | 2.1 |
|    | 107121 | AB015427  | Hs.250493 | zinc finger protein 219                  | 2.1 |
|    | 118509 | N22617    | Hs.43228  | Homo sapiens cDNA FLJ11835 fis, clone HE | 2.1 |
|    | 135051 | AI272141  | Hs.83484  | SRY (sex determining region Y)-box 4     | 2.1 |
|    | 109442 | AW296134  | Hs.86999  | ESTs, Weakly similar to S65657 alpha-1C- | 2.1 |
| 40 | 126661 | AA009835  | Hs.268521 | ESTs                                     | 2.1 |
|    | 129270 | AA357185  | Hs.109918 | ras homolog gene family, member H        | 2.1 |
|    | 125568 | AW615396  | Hs.105613 | ESTs                                     | 2.1 |
|    | 132867 | AF226667  | Hs.58553  | CTP synthase II                          | 2.1 |
|    | 124656 | AW297702  | Hs.102915 | ESTs                                     | 2.1 |
| 45 | 128954 | AA346839  | Hs.209100 | DKFZP434C171 protein                     | 2.1 |
|    | 132985 | AL045579  | Hs.62113  | KIAA0717 protein                         | 2.1 |
|    | 119247 | BE269047  | Hs.65234  | hypothetical protein FLJ20596            | 2.1 |
|    | 106686 | N66397    | Hs.334825 | Homo sapiens cDNA FLJ14752 fis, clone NT | 2.1 |
|    | 131009 | AF169802  | Hs.22142  | cytochrome b5 reductase b5R.2            | 2.1 |
| 50 | 112170 | BE246743  | Hs.288529 | hypothetical protein FLJ22635            | 2.1 |
|    | 130755 | BE293520  | Hs.18910  | prostate cancer overexpressed gene 1     | 2.1 |
|    | 117357 | N24829    |           | gb:yx98h12.s1 Soares melanocyte 2NbHM Ho | 2.1 |
|    | 101613 | M24283    | Hs.168383 | intercellular adhesion molecule 1 (CD54) | 2.1 |
|    | 127644 | N88858    | Hs.155101 | ATP synthase, H+ transporting, mitochond | 2.1 |
| 55 | 101183 | AA442324  | Hs.795    | H2A histone family, member O             | 2.1 |
|    | 100420 | D86983    | Hs.118893 | Melanoma associated gene                 | 2.1 |
|    | 129879 | AK001696  | Hs.13109  | Ran binding protein 11                   | 2.1 |
|    | 122311 | NM_014913 | Hs.131915 | KIAA0863 protein                         | 2.1 |
|    | 130566 | R85474    | Hs.16073  | ESTs                                     | 2.1 |
| 60 | 113517 | AI874223  | Hs.293560 | ESTs                                     | 2.1 |
|    | 115810 | AA426026  | Hs.187615 | ESTs                                     | 2.1 |
|    | 108743 | AI580150  | Hs.71074  | ESTs                                     | 2.1 |
|    | 129255 | AI961727  | Hs.109804 | H1 histone family, member X              | 2.1 |
|    | 120766 | AA764879  | Hs.12570  | tubulin-specific chaperone d             | 2.1 |
| 65 | 126893 | AJ252060  | Hs.26320  | TRABID protein                           | 2.1 |
|    | 115254 | AA279024  | Hs.269316 | ESTs, Weakly similar to S65657 alpha-1C  | 2.1 |
|    | 105865 | BE279383  | Hs.26557  | plakophilin 3                            | 2.1 |
|    | 120999 | AI972375  | Hs.29626  | hypothetical brain protein my038         | 2.1 |
|    | 125636 | H12382    | Hs.25119  | ESTs, Weakly similar to YEX0_YEAST HYPOT | 2.1 |
| 70 | 117997 | N52090    | Hs.47420  | EST                                      | 2.1 |
|    | 104333 | D82418    | Hs.29626  | hypothetical brain protein my038         | 2.1 |
|    | 134315 | AA291183  | Hs.81648  | hypothetical protein FLJ11021 similar to | 2.1 |
|    | 135332 | AW393883  | Hs.98968  | hypothetical protein FLJ23058            | 2.1 |
|    | 107279 | S57296    | Hs.323910 | v-erb-b2 avian erythroblastic leukemia   | 2.1 |
| 75 | 133097 | W03512    | Hs.6479   | hypothetical protein MGC13272            | 2.1 |
|    | 112563 | AW961220  | Hs.29282  | mitogen-activated protein kinase kinase  | 2.1 |
|    | 121782 | AW452957  | Hs.334698 | Homo sapiens, clone MGC:15203, mRNA, com | 2.1 |
|    | 111567 | F12628    | Hs.334786 | hypothetical protein MGC16040            | 2.1 |
|    | 133912 | H42679    | Hs.77522  | major histocompatibility complex, class  | 2.1 |
| 80 | 134076 | AF086215  |           | gb:Homo sapiens full length insert cDNA  | 2.1 |
|    | 116665 | F04405    |           | gb:HSC2SB082 normalized infant brain cDN | 2.1 |
|    | 133562 | M60721    | Hs.74870  | H2.0 (Drosophila)-like homeo box 1       | 2.1 |
|    | 129092 | D56365    | Hs.63525  | poly(rC)-binding protein 2               | 2.1 |
|    | 106869 | AW975362  | Hs.292679 | ESTs                                     | 2.1 |

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| 5  | 130820 | AL353934  | Hs.288798 | hypothetical protein FLJ21012             | 2.1 |
|    | 126277 | AB037847  | Hs.15441  | Crm (Cramped Drosophila)-like             | 2.1 |
|    | 106392 | BE350058  | Hs.36787  | chromodomain helicase DNA binding protei  | 2.1 |
|    | 131902 | AA180145  | Hs.34348  | Homo sapiens mRNA; cDNA DKFZp434P0235 (f  | 2.1 |
|    | 120734 | AA299948  |           | gb:EST12544 Ulerus tumor I Homo sapiens   | 2.1 |
| 10 | 113070 | AB032977  | Hs.6298   | KIAA1151 protein                          | 2.1 |
|    | 116031 | AA452239  | Hs.103329 | KIAA0970 protein                          | 2.1 |
|    | 123869 | AA620924  | Hs.112923 | EST                                       | 2.1 |
|    | 106145 | AA424791  | Hs.5734   | meningioma expressed antigen 5 (hyaluron  | 2.1 |
|    | 109061 | AA160896  |           | gb:zo79c07.s1 Stratagene pancreas (93720  | 2.1 |
| 15 | 126348 | T16243    | Hs.6473   | Homo sapiens cDNA FLJ13992 fis, clone Y7  | 2.1 |
|    | 133231 | AK000517  | Hs.6844   | hypothetical protein FLJ20510             | 2.1 |
|    | 123132 | AI061582  | Hs.324179 | Homo sapiens cDNA FLJ12371 fis, clone MA  | 2.1 |
|    | 117452 | N34687    | Hs.44054  | ninein (GSK3B interacting protein)        | 2.1 |
|    | 128538 | R44214    | Hs.101189 | ESTs                                      | 2.1 |
| 20 | 111945 | R40663    | Hs.124944 | ESTs                                      | 2.1 |
|    | 119155 | R61715    | Hs.310598 | ESTs, Moderately similar to ALU1_HUMAN    | 2.1 |
|    | 124362 | AL046406  | Hs.103483 | KIAA1798 protein                          | 2.1 |
|    | 129198 | N57532    | Hs.109315 | KIAA1415 protein                          | 2.1 |
|    | 122059 | AA431737  | Hs.98749  | EST, Moderately similar to T42671 hypoth  | 2.1 |
| 25 | 115643 | AA404276  | Hs.123253 | hypothetical protein FLJ22009             | 2.0 |
|    | 112558 | AK001621  | Hs.15921  | hypothetical protein FLJ10759             | 2.0 |
|    | 115355 | AA262292  | Hs.88445  | ESTs                                      | 2.0 |
|    | 130724 | AK001507  | Hs.306084 | Homo sapiens clone FLB6914 PRO1821 mRNA,  | 2.0 |
|    | 125360 | AW898892  | Hs.189741 | ESTs                                      | 2.0 |
| 30 | 104926 | BE298808  | Hs.33363  | DKFZP434N093 protein                      | 2.0 |
|    | 119468 | AI911535  | Hs.6657   | hypothetical protein bK1048E9.5           | 2.0 |
|    | 132891 | BE267143  | Hs.59271  | U2(RNU2) small nuclear RNA auxiliary fac  | 2.0 |
|    | 100237 | D30715    | Hs.306333 | Human PAP (pancreatitis-associated prot   | 2.0 |
|    | 105335 | AW291165  | Hs.25447  | ESTs                                      | 2.0 |
| 35 | 106727 | AA357001  | Hs.34045  | hypothetical protein FLJ20764             | 2.0 |
|    | 126053 | H64450    |           | gb:yu62d01.r1 Weizmann Olfactory Epithel  | 2.0 |
|    | 115084 | BE383668  | Hs.42484  | hypothetical protein FLJ10618             | 2.0 |
|    | 128408 | AI183407  | Hs.143704 | EST                                       | 2.0 |
|    | 132311 | AI765559  | Hs.20072  | myosin regulatory light chain interactin  | 2.0 |
| 40 | 113626 | T94318    | Hs.17359  | ESTs, Moderately similar to RL44_HUMAN 6  | 2.0 |
|    | 116379 | AA448588  | Hs.71252  | hypothetical protein DKFZp761C169         | 2.0 |
|    | 105474 | AL134843  | Hs.219614 | f-box and leucine-rich repeat protein 11  | 2.0 |
|    | 108922 | AA115268  | Hs.269263 | ESTs                                      | 2.0 |
|    | 123720 | AA609734  | Hs.112755 | EST                                       | 2.0 |
| 45 | 128902 | AA036637  | Hs.107052 | ESTs                                      | 2.0 |
|    | 113226 | AI821008  | Hs.10697  | ESTs                                      | 2.0 |
|    | 106798 | BE252749  | Hs.20558  | hypothetical protein FLJ20345             | 2.0 |
|    | 106665 | BE090009  | Hs.323164 | hypothetical protein MGC2217              | 2.0 |
|    | 105952 | AI767152  | Hs.181400 | ESTs, Weakly similar to I78885 serine/th  | 2.0 |
| 50 | 127248 | AA364195  |           | gb:EST75015 Pineal gland II Homo sapiens  | 2.0 |
|    | 112972 | AI684745  | Hs.165983 | hypothetical C2H2 zinc finger protein FL  | 2.0 |
|    | 128148 | AA918175  | Hs.126637 | ESTs                                      | 2.0 |
|    | 116176 | AA311152  | Hs.288708 | hypothetical protein FLJ21562             | 2.0 |
|    | 126457 | AA007489  | Hs.50382  | ESTs                                      | 2.0 |
| 55 | 112610 | AW500106  | Hs.23643  | serine/threonine protein kinase MASK      | 2.0 |
|    | 109249 | AA194730  | Hs.268189 | hypothetical protein FLJ20436             | 2.0 |
|    | 121292 | AA401807  |           | gb:zv65f1.1.s1 Soares_total_fetus_Nb2HF8_ | 2.0 |
|    | 128605 | AW058113  | Hs.102402 | Mad4 homolog                              | 2.0 |
|    | 127705 | AJ003322  |           | gb:AJ003322 Selected chromosome 21 cDNA   | 2.0 |
| 60 | 134674 | AF219139  | Hs.87726  | KIAA0154 protein; ADP-ribosylation facto  | 2.0 |
|    | 107529 | BE515065  | Hs.296585 | nucleolar protein (KKE/D repeat)          | 2.0 |
|    | 116411 | AA608897  | Hs.321618 | hypothetical protein FLJ12525             | 2.0 |
|    | 111576 | T88827    | Hs.15489  | ESTs                                      | 2.0 |
|    | 127002 | AL353940  | Hs.24979  | hypothetical protein DKFZp761P1010        | 2.0 |
| 65 | 112662 | R85436    | Hs.268814 | ESTs                                      | 2.0 |
|    | 126250 | AL050391  | Hs.321247 | Homo sapiens mRNA; cDNA DKFZp586A181 (fr  | 2.0 |
|    | 101045 | J05614    |           | gb:Human proliferating cell nuclear anti  | 2.0 |
|    | 117186 | H98988    | Hs.42612  | ESTs, Weakly similar to ALU1_HUMAN ALU S  | 2.0 |
|    | 122110 | AI123000  | Hs.301240 | melanocortin 1 receptor; (alpha melanocyt | 2.0 |
| 70 | 119849 | AI074585  | Hs.58440  | ESTs                                      | 2.0 |
|    | 124395 | N29963    | Hs.272095 | ESTs, Weakly similar to I38022 hypotheti  | 2.0 |
|    | 131600 | NM_004377 | Hs.29331  | carnitine palmitoyltransferase I, muscle  | 2.0 |
|    | 112774 | R95770    | Hs.35455  | ESTs                                      | 2.0 |
|    | 109751 | AB033492  | Hs.6679   | hHDC for homolog of Drosophila headcase   | 2.0 |
| 75 | 102377 | U40343    | Hs.29656  | cyclin-dependent kinase inhibitor 2D (p1  | 2.0 |
|    | 115197 | R18656    | Hs.6749   | ESTs                                      | 2.0 |
|    | 102808 | BE242818  | Hs.179606 | nuclear RNA helicase, DECD variant of DE  | 2.0 |
|    | 128869 | AA768242  | Hs.80618  | hypothetical protein                      | 2.0 |
|    | 111229 | AW389845  | Hs.110855 | ESTs                                      | 2.0 |
| 80 | 129330 | AL079310  | Hs.92260  | high-mobility group protein 2-like 1      | 2.0 |
|    | 105448 | NM_001186 | Hs.154276 | BTB and CNC homology 1, basic leucine zi  | 2.0 |
|    | 127391 | AW380893  | Hs.11039  | hypothetical protein MGC2722              | 2.0 |
|    | 102337 | AI814663  | Hs.170133 | forkhead box O1A (habdomyosarcoma)        | 2.0 |
|    | 121897 | AA427419  | Hs.229162 | EST, Weakly similar to ZN91_HUMAN ZINC    | 2.0 |
|    | 107902 | AA026627  | Hs.61358  | ESTs                                      | 2.0 |
|    | 129340 | H75334    | Hs.11050  | F-box only protein 9                      | 2.0 |
|    | 101097 | BE245301  | Hs.89414  | chemokine (C-X-C motif), receptor 4 (fus  | 2.0 |

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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
| 5  | 124864 | AW970168  | Hs.185706 | ESTs                                     | 2.0 |
|    | 118485 | AA508515  | Hs.291049 | ESTs                                     | 2.0 |
|    | 116715 | AL117440  | Hs.170263 | tumor protein p53-binding protein, 1     | 2.0 |
|    | 130743 | AL049266  | Hs.18724  | Homo sapiens mRNA; cDNA DKFZp564F093 (fr | 2.0 |
|    | 118677 | AW971146  | Hs.293187 | ESTs                                     | 2.0 |
| 10 | 100020 |           |           |  | 2.0 |
|    | 123252 | AW968776  | Hs.287586 | Homo sapiens cDNA FLJ13648 fis, clone PL | 2.0 |
|    | 134977 | AL044963  | Hs.306121 | leukocyte receptor cluster (LRC) encoded | 2.0 |
|    | 115334 | AA702972  | Hs.65300  | ESTs                                     | 2.0 |
|    | 111790 | AW769583  | Hs.6734   | ESTs, Weakly similar to S26650 DNA-bind  | 2.0 |
| 15 | 129101 | NM_013403 | Hs.108665 | zinedin                                  | 2.0 |
|    | 132676 | N92589    | Hs.261038 | ESTs, Weakly similar to I38022 hypothet  | 2.0 |
|    | 111018 | AI287912  | Hs.3628   | mitogen-activated protein kinase kinase  | 2.0 |
|    | 105933 | AF078544  | Hs.194686 | solute carrier family 25 (mitochondrial  | 2.0 |
|    | 110679 | AA004798  | Hs.108311 | ESTs, Weakly similar to T00351 hypotheti | 2.0 |
| 20 | 120661 | AA350394  | Hs.96952  | ESTs                                     | 2.0 |
|    | 132430 | AW973652  | Hs.283105 | ESTs                                     | 2.0 |
|    | 115026 | AA251972  | Hs.188718 | ESTs                                     | 2.0 |
|    | 128660 | AA011597  | Hs.177398 | ESTs                                     | 2.0 |
|    | 134554 | AI184316  | Hs.85273  | retinoblastoma-binding protein 6         | 2.0 |
| 25 | 109592 | AI198059  | Hs.26370  | ESTs                                     | 2.0 |
|    | 123636 | AA609263  |           | gb:af13c08.s1 Soares_lectls_NHT Homo sap | 2.0 |
|    | 132610 | AA160511  | Hs.5326   | amino acid system N transporter 2; porcu | 2.0 |
|    | 122652 | AA454641  |           | gb:zx99d05.s1 Soares_NhHMPu_S1 Homo sapi | 2.0 |
|    | 120467 | AW292562  | Hs.137628 | ESTs                                     | 2.0 |
| 30 | 126046 | AA804957  | Hs.119840 | ESTs                                     | 2.0 |
|    | 128179 | AW293669  | Hs.127116 | ESTs                                     | 2.0 |
|    | 123349 | AB033042  | Hs.29679  | cofactor required for Sp1 transcriptiona | 2.0 |
|    | 106208 | AK001674  | Hs.22630  | cofactor required for Sp1 transcriptiona | 2.0 |
|    | 125832 | AA628600  | Hs.117587 | ESTs                                     | 2.0 |
| 35 | 133317 | AC005258  | Hs.70830  | U6 snRNA-associated Sm-like protein LSm7 | 2.0 |
|    | 132886 | AW978168  | Hs.5912   | F-box only protein 7                     | 2.0 |
|    | 127447 | AA386132  | Hs.193482 | Homo sapiens cDNA FLJ11903 fis, clone HE | 2.0 |
|    | 133149 | AA370045  | Hs.6607   | AXIN1 up-regulated                       | 2.0 |
|    | 120468 | AW967675  | Hs.96487  | ESTs, Highly similar to S08228 ribosomal | 2.0 |
| 40 | 105487 | AI697340  | Hs.135265 | Homo sapiens clone FLB8436 PRO2277 mRNA, | 2.0 |
|    | 126770 | AI292320  | Hs.81361  | heterogeneous nuclear ribonucleoprotein  | 2.0 |
|    | 120592 | AA830664  | Hs.143974 | ESTs                                     | 2.0 |
|    | 100944 | L07518    | Hs.159593 | mucin 6, gastric                         | 2.0 |
|    | 101887 | AW967413  | Hs.83958  | transducin-like enhancer of split 4, hom | 2.0 |
| 45 | 125324 | R07785    |           | gb:yf15c06.r1 Soares fetal liver spleen  | 2.0 |
|    | 133906 | BE386038  | Hs.77492  | heterogeneous nuclear ribonucleoprotein  | 2.0 |
|    | 113408 | NM_005908 | Hs.115945 | mannosidase, beta A, lysosomal           | 2.0 |
|    | 115613 | AW136951  | Hs.173946 | hypothetical protein FLJ10486            | 2.0 |
|    | 107468 | AA740979  | Hs.91389  | ESTs                                     | 2.0 |
| 50 | 100554 | M95923    |           | gb:Human 12-lipoxygenase mRNA, partial c | 2.0 |
|    | 120476 | NM_014922 | Hs.104305 | death effector filament-forming Ced-4-li | 2.0 |
|    | 117160 | AA322302  | Hs.183302 | PCTAIRE protein kinase 2                 | 2.0 |
|    | 115582 | AW245047  | Hs.136164 | cutaneous T-cell lymphoma-associated tu  | 2.0 |
|    | 125536 | F08266    | Hs.77948  | ESTs, Weakly similar to ALU1_HUMAN ALU S | 2.0 |
| 55 | 100842 | U05597    |           | gb:Human anion exchanger 3 cardiac isofo | 2.0 |
|    | 133207 | AI561173  | Hs.67688  | ESTs                                     | 2.0 |
|    | 122053 | AI637498  | Hs.98745  | ESTs                                     | 2.0 |
|    | 121080 | AA617830  | Hs.28310  | ESTs                                     | 2.0 |
|    | 113316 | T70318    | Hs.268581 | ESTs                                     | 2.0 |
| 60 | 113137 | AW952129  | Hs.293225 | ESTs, Weakly similar to FLDED-1 [H.sapie | 1.9 |
|    | 100416 | AW505086  | Hs.196914 | minor histocompatibility antigen HA-1    | 1.9 |
|    | 133975 | C18356    | Hs.295944 | tissue factor pathway inhibitor 2        | 1.9 |
|    | 103872 | AI816078  | Hs.21756  | translation factor sui1 homolog          | 1.9 |
|    | 132439 | AK001942  | Hs.4863   | hypothetical protein DKFZp566A1524       | 1.9 |
| 65 | 126082 | H81188    | Hs.269571 | ESTs                                     | 1.9 |
|    | 124677 | R01073    |           | gb:ye84c03.s1 Soares fetal liver spleen  | 1.9 |
|    | 123385 | BE149685  | Hs.17767  | KIAA1554 protein                         | 1.9 |
|    | 103138 | X65965    |           | gb:H.sapiens SOD-2 gene for manganese su | 1.9 |
|    | 104867 | AA278898  | Hs.225979 | hypothetical protein similar to small G  | 1.9 |
| 70 | 128668 | AI754363  | Hs.103422 | Homo sapiens cDNA FLJ14630 fis, clone NT | 1.9 |
|    | 125826 | M20681    | Hs.7594   | solute carrier family 2 (facilitated glu | 1.9 |
|    | 113701 | T97301    | Hs.18026  | ESTs                                     | 1.9 |
|    | 134447 | M58603    | Hs.83428  | nuclear factor of kappa light polypeptid | 1.9 |
|    | 128895 | AW467000  | Hs.106985 | ESTs                                     | 1.9 |
| 75 | 112719 | AI200957  | Hs.19301  | Homo sapiens, Similar to Nedd-4-like ubi | 1.9 |
|    | 102552 | NM_005426 | Hs.44585  | tumor protein p53-binding protein, 2     | 1.9 |
|    | 131186 | Z70200    | Hs.246112 | KIAA0788 protein                         | 1.9 |
|    | 133347 | BE257758  | Hs.71475  | acid cluster protein 33                  | 1.9 |
|    | 133388 | AW245631  | Hs.182447 | heterogeneous nuclear ribonucleoprotein  | 1.9 |
| 80 | 112266 | AI652534  | Hs.25934  | ESTs, Weakly similar to HSHU11 histone H | 1.9 |
|    | 100336 | N76101    | Hs.8127   | KIAA0144 gene product                    | 1.9 |
|    | 113479 | AI023133  | Hs.10739  | ESTs                                     | 1.9 |
|    | 135231 | BE613615  | Hs.74280  | hypothetical protein FLJ22237            | 1.9 |
|    | 123783 | AA610112  |           | gb:af19g05.s1 Soares_total_fetus_Nb2HF8_ | 1.9 |
|    | 113016 | NM_014007 | Hs.127649 | KIAA0414 protein                         | 1.9 |
|    | 132761 | AI815537  | Hs.323502 | nuclear RNA export factor 1              | 1.9 |
|    | 128536 | AW955065  | Hs.101150 | Homo sapiens, clone IMAGE:4054156, mRNA, | 1.9 |

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|    | 126663 | AW518478  | Hs.181297 | ESTs                                     | 1.9 |
|    | 103973 | AA305729  | Hs.18272  | amino acid transporter system A1         | 1.9 |
|    | 106742 | AW591428  | Hs.27556  | hypothetical protein FLJ22405            | 1.9 |
| 5  | 129793 | AW207000  | Hs.126857 | Homo sapiens cDNA FLJ12936 fis, clone NT | 1.9 |
|    | 105888 | AW970672  | Hs.9247   | protein kinase, AMP-activated, alpha 1 c | 1.9 |
|    | 101892 | AI825838  | Hs.75206  | protein phosphatase 3 (formerly 2B), cat | 1.9 |
|    | 125511 | AJ271379  | Hs.76194  | ribosomal protein S5                     | 1.9 |
|    | 126751 | AI378328  | Hs.77256  | enhancer of zeste (Drosophila) homolog 2 | 1.9 |
| 10 | 129111 | AL080155  | Hs.226372 | DKFZP434J154 protein                     | 1.9 |
|    | 128750 | T80270    | Hs.104798 | hypothetical protein LOC55565            | 1.9 |
|    | 133531 | BE276738  | Hs.74578  | DEAD/H (Asp-Glu-Ala-Asp/His) box polypep | 1.9 |
|    | 125704 | R55094    | Hs.26239  | Human DNA sequence from clone RP11-438B2 | 1.9 |
|    | 100157 | D14661    | Hs.119    | Wilms' tumour 1-associating protein      | 1.9 |
| 15 | 125845 | AK001440  | Hs.131840 | hypothetical protein FLJ10578            | 1.9 |
|    | 134582 | AW882645  | Hs.88044  | sprouty (Drosophila) homolog 1 (antagoni | 1.9 |
|    | 106565 | NM_014892 | Hs.227602 | KIAA1116 protein                         | 1.9 |
|    | 106706 | AB037810  | Hs.18760  | KIAA1389 protein                         | 1.9 |
|    | 125761 | R68351    |           | gb:yh99b03.r1 Soares placenta Nb2HP Homo | 1.9 |
| 20 | 116470 | AI272141  | Hs.83484  | SRY (sex determining region Y)-box 4     | 1.9 |
|    | 123264 | AI681270  | Hs.99824  | BCE-1 protein                            | 1.9 |
|    | 126096 | F08208    | Hs.283844 | similar to rat tricarboxylate carrier-II | 1.9 |
|    | 104995 | AK001690  | Hs.16390  | hypothetical protein FLJ10035            | 1.9 |
|    | 133424 | AA360994  | Hs.20281  | KIAA1700                                 | 1.9 |
| 25 | 132450 | AA100012  | Hs.48827  | hypothetical protein FLJ12085            | 1.9 |
|    | 131803 | U73737    | Hs.284289 | villig-associated protein VIT-1          | 1.9 |
|    | 116548 | D20433    |           | gb:HUMGS01407 Human promyelocyte Homo sa | 1.9 |
|    | 113815 | AA386192  | Hs.193482 | Homo sapiens cDNA FLJ11903 fis, clone HE | 1.9 |
|    | 100245 | AL039248  | Hs.3094   | KIAA0063 gene product                    | 1.9 |
| 30 | 113677 | Z70200    | Hs.246112 | KIAA0788 protein                         | 1.9 |
|    | 134470 | X54942    | Hs.83758  | CDC28 protein kinase 2                   | 1.9 |
|    | 134937 | AI251449  | Hs.171939 | ESTs                                     | 1.9 |
|    | 134506 | AW247364  | Hs.84285  | ubiquitin-conjugating enzyme E2I (homolo | 1.9 |
|    | 126469 | BE384361  | Hs.182885 | ESTs, Weakly similar to JC5024 UDP-galac | 1.9 |
| 35 | 115261 | AA938293  | Hs.60088  | hypothetical protein MGC11314            | 1.9 |
|    | 125198 | W69474    | Hs.323140 | ESTs                                     | 1.9 |
|    | 115317 | AA303799  | Hs.300141 | ribosomal protein L39                    | 1.9 |
|    | 112342 | AW410273  | Hs.92614  | longevity assurance (LAG1, S. cerevisiae | 1.9 |
|    | 117329 | AA524065  | Hs.93670  | Homo sapiens cDNA: FLJ22664 fis, clone H | 1.9 |
| 40 | 116353 | AB032966  | Hs.131728 | KIAA1140 protein                         | 1.9 |
|    | 114458 | AW445217  | Hs.103362 | ESTs                                     | 1.9 |
|    | 133903 | X63692    | Hs.77462  | DNA (cytosine-5)-methyltransferase 1     | 1.9 |
|    | 116083 | AA455706  | Hs.44581  | heat shock protein hsp70-related protein | 1.9 |
|    | 130037 | AI498631  | Hs.111334 | ferritin, light polypeptide              | 1.9 |
| 45 | 102273 | BE391815  | Hs.75981  | ubiquitin specific protease 14 (IRNA-gua | 1.9 |
|    | 120452 | AL022328  | Hs.104335 | hypothetical protein IMAGE3510317        | 1.9 |
|    | 116432 | BE271922  | Hs.71243  | ESTs, Weakly similar to zinc finger prot | 1.9 |
|    | 115916 | AI052731  | Hs.91910  | ESTs                                     | 1.9 |
|    | 120827 | AA382525  | Hs.132967 | Human EST clone 122887 mariner transpos  | 1.9 |
| 50 | 129602 | AI282193  | Hs.198298 | v-src avian sarcoma (Schmidt-Ruppin A-2) | 1.9 |
|    | 105693 | BE250951  | Hs.181368 | U5 snRNP-specific protein (220 kD), orth | 1.9 |
|    | 102316 | U34301    |           | gb:Human nonmuscle myosin heavy chain II | 1.9 |
|    | 131422 | AW607731  | Hs.26670  | Human PAC clone RP3-515N1 from 22q11.2-q | 1.9 |
|    | 128434 | AI190914  | Hs.143880 | ESTs                                     | 1.9 |
| 55 | 117086 | AA581602  | Hs.41840  | ESTs                                     | 1.9 |
|    | 121006 | AL048967  | Hs.172207 | non-POU-domain-containing, octamer-bindi | 1.9 |
|    | 120335 | AA404418  |           | gb:zw37e02.s1 Soares_total_fetus_Nb2HF8_ | 1.9 |
|    | 105905 | AA401533  | Hs.19440  | ESTs                                     | 1.9 |
| 60 | 125165 | W45350    |           | gb:zc81h08.s1 Pancreatic Islet Homo sapi | 1.9 |
|    | 109875 | H03260    | Hs.30385  | ESTs                                     | 1.9 |
|    | 109152 | AW380723  | Hs.73451  | ESTs, Weakly similar to S55024 nebulin,  | 1.9 |
|    | 126203 | AK001035  | Hs.130881 | B-cell CLL/lymphoma 11A (zinc finger pro | 1.9 |
|    | 122530 | AW959741  | Hs.40368  | adaptor-related protein complex 1, sigma | 1.9 |
|    | 124506 | BE273688  | Hs.182447 | heterogeneous nuclear ribonucleoprotein  | 1.9 |
| 65 | 130525 | AA361850  | Hs.322149 | Human clone 137308 mRNA, partial cds     | 1.9 |
|    | 127226 | AL036559  | Hs.3463   | ribosomal protein S23                    | 1.9 |
|    | 106465 | AA971576  | Hs.225951 | topoisomerase-related function protein 4 | 1.9 |
|    | 106970 | AA521368  | Hs.24252  | ESTs                                     | 1.9 |
|    | 134275 | AI878910  | Hs.3688   | cisplatin resistance-associated overexpr | 1.9 |
| 70 | 125825 | AA100230  |           | gb:zl81c01.s1 Stralagene colon (937204)  | 1.9 |
|    | 132443 | AW246148  | Hs.268371 | hypothetical protein FLJ20274            | 1.8 |
|    | 104631 | AA002064  | Hs.18920  | ESTs                                     | 1.8 |
|    | 111468 | H62647    | Hs.205481 | ESTs                                     | 1.8 |
|    | 114317 | AA524839  | Hs.469    | succinate dehydrogenase complex, subunit | 1.8 |
| 75 | 126158 | N55989    | Hs.16390  | hypothetical protein FLJ10035            | 1.8 |
|    | 113782 | AK001567  | Hs.311002 | Homo sapiens cDNA FLJ10705 fis, clone NT | 1.8 |
|    | 119229 | T03229    |           | gb:FB5C2 Fetal brain, Stralagene Homo sa | 1.8 |
|    | 105930 | AF016371  | Hs.9880   | peptidyl prolyl isomerase H (cyclophilin | 1.8 |
|    | 127245 | AA323958  |           | gb:EST26810 Cerebellum II Homo sapiens c | 1.8 |
| 80 | 100967 | BE011845  | Hs.251064 | high-mobility group (nonhistone chromoso | 1.8 |
|    | 105149 | BE089288  | Hs.8958   | Homo sapiens cDNA FLJ12024 fis, clone HE | 1.8 |
|    | 104542 | R29657    |           | gb:F1-1179D 22 week old human fetal live | 1.8 |
|    | 124236 | AF086006  |           | gb:Homo sapiens full length insert cDNA  | 1.8 |
|    | 127155 | AA284993  |           | gb:zl23e10.r1 Soares ovary tumor NbHOT H | 1.8 |

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|    | 126854 | AJ275986  | Hs.71414  | transcription factor (SMIF gene)          | 1.8 |
|    | 107021 | AK001342  | Hs.14570  | hypothetical protein FLJ22530             | 1.8 |
|    | 110023 | AW294701  | Hs.31040  | ESTs                                      | 1.8 |
| 5  | 114899 | AK000342  | Hs.77546  | Homo sapiens mRNA; cDNA DKFZp761M0223 (f  | 1.8 |
|    | 127315 | AF115622  |           | gb:Homo sapiens clone FLB4217 mRNA seque  | 1.8 |
|    | 110384 | H45282    | Hs.268798 | ESTs                                      | 1.8 |
|    | 132693 | BE244200  | Hs.55075  | KIAA0410 gene product                     | 1.8 |
|    | 127684 | AA688531  | Hs.32556  | KIAA0379 protein                          | 1.8 |
| 10 | 127297 | AW629485  | Hs.140720 | GSK-3 binding protein FRAT2               | 1.8 |
|    | 104249 | AF004231  | Hs.22405  | leukocyte immunoglobulin-like receptor,   | 1.8 |
|    | 112652 | BE269699  | Hs.235782 | solute carrier family 21 (organic anion   | 1.8 |
|    | 110312 | BE256986  | Hs.11896  | hypothetical protein FLJ12089             | 1.8 |
|    | 100417 | NM_014003 | Hs.78054  | pre-mRNA splicing factor similar to S. c  | 1.8 |
| 15 | 120532 | AA262354  | Hs.186648 | ESTs, Weakly similar to I38022 hypothe    | 1.8 |
|    | 127629 | AA293279  | Hs.29173  | hypothetical protein FLJ20515             | 1.8 |
|    | 100739 | M59287    | Hs.2083   | CDC-like kinase 1                         | 1.8 |
|    | 110636 | H72868    | Hs.19110  | ESTs                                      | 1.8 |
|    | 132957 | BE244044  | Hs.61469  | hypothetical protein                      | 1.8 |
| 20 | 115467 | AI366784  | Hs.48820  | TATA box binding protein (TBP)-associate  | 1.8 |
|    | 132161 | W31634    | Hs.180799 | hypothetical protein FLJ22561             | 1.8 |
|    | 129510 | AW968504  | Hs.123073 | CDC2-related protein kinase 7             | 1.8 |
|    | 126805 | F32658    | Hs.101359 | chromosome 6 open reading frame 32        | 1.8 |
|    | 129295 | U63127    | Hs.110121 | SEC7 homolog                              | 1.8 |
| 25 | 127823 | AW972893  | Hs.78869  | transcription elongation factor A (SII),  | 1.8 |
|    | 104590 | AW373062  | Hs.83623  | nuclear receptor subfamily 1, group I, m  | 1.8 |
|    | 111959 | R40978    | Hs.271498 | ESTs, Moderately similar to ALU1_HUMAN A  | 1.8 |
|    | 109303 | AA199857  | Hs.269291 | ESTs                                      | 1.8 |
|    | 112501 | AA972447  | Hs.288833 | Homo sapiens mRNA; cDNA DKFZp434K087 (fr  | 1.8 |
| 30 | 127303 | AA366951  |           | gb:EST77963 Pancreas tumor III Homo sapi  | 1.8 |
|    | 115982 | W92113    |           | gb:zh48e01.r1 Soares_fetal_liver_spleen_  | 1.8 |
|    | 123331 | AA497013  |           | gb:ae32g02.s1 Gessler Wilms tumor Homo s  | 1.8 |
|    | 111598 | R11505    | Hs.268912 | ESTs                                      | 1.8 |
|    | 121643 | AA640987  | Hs.193767 | ESTs                                      | 1.8 |
| 35 | 105012 | AF098158  | Hs.9329   | chromosome 20 open reading frame 1        | 1.8 |
|    | 118761 | AW799109  | Hs.226755 | ESTs                                      | 1.8 |
|    | 128765 | AF073310  | Hs.143648 | insulin receptor substrate 2              | 1.8 |
|    | 118103 | AA401733  | Hs.184134 | ESTs                                      | 1.8 |
|    | 134595 | NM_002401 | Hs.29282  | mitogen-activated protein kinase kinase   | 1.8 |
| 40 | 134212 | AA654353  | Hs.17719  | EBP50-PDZ interactor of 64 kD             | 1.8 |
|    | 128033 | AI248705  | Hs.149321 | ESTs                                      | 1.8 |
|    | 126972 | NM_016255 | Hs.95260  | Autosomal Highly Conserved Protein        | 1.8 |
|    | 111122 | N63753    | Hs.16492  | DKFZP564G2022 protein                     | 1.8 |
|    | 114798 | AA159181  | Hs.54900  | serologically defined colon cancer anti   | 1.8 |
| 45 | 106349 | AW954310  | Hs.127270 | KIAA1545 protein                          | 1.8 |
|    | 135358 | BE622827  | Hs.99486  | hypothetical protein FLJ13044             | 1.8 |
|    | 116223 | AF045458  | Hs.47061  | unc-51 (C. elegans)-like kinase 1         | 1.8 |
|    | 116654 | Z26324    | Hs.79204  | ESTs, Weakly similar to I38022 hypothe    | 1.8 |
|    | 124554 | N65961    |           | gb:za27d03.s1 Soares fetal liver spleen   | 1.8 |
| 50 | 120259 | AW014786  | Hs.192742 | hypothetical protein FLJ12785             | 1.8 |
|    | 123044 | AK001035  | Hs.130881 | B-cell CLL/lymphoma 11A (zinc finger pro  | 1.8 |
|    | 125261 | W90351    | Hs.110134 | ESTs, Highly similar to CREB-binding pro  | 1.8 |
|    | 135026 | N92165    | Hs.93231  | ESTs                                      | 1.8 |
|    | 129951 | AL110282  | Hs.268024 | Homo sapiens, clone IMAGE:3873720, mRNA   | 1.8 |
| 55 | 125768 | AI557486  | Hs.119122 | ribosomal protein L13a                    | 1.8 |
|    | 114122 | R46128    | Hs.12751  | ESTs                                      | 1.8 |
|    | 133047 | AA310600  | Hs.63657  | peptide:N-glycanase similar to yeast PNG  | 1.8 |
|    | 133589 | L37368    | Hs.75104  | RNA-binding protein S1, serine-rich doma  | 1.8 |
|    | 130872 | U61084    | Hs.226307 | phorbollin (similar to apolipoprotein B m | 1.8 |
| 60 | 133498 | BE299587  | Hs.85301  | calcium binding protein P22               | 1.8 |
|    | 131144 | AA305255  | Hs.23528  | HSPC038 protein                           | 1.8 |
|    | 104261 | AW248364  | Hs.5409   | RNA polymerase I subunit                  | 1.8 |
|    | 115507 | AI083668  | Hs.50601  | hypothetical protein MGC10986             | 1.8 |
|    | 109073 | T05003    | Hs.10056  | hypothetical protein FLJ14621             | 1.8 |
| 65 | 115363 | AA214618  | Hs.152759 | activator of S phase kinase               | 1.8 |
|    | 112657 | AW844878  | Hs.19769  | hypothetical protein MGC4174              | 1.8 |
|    | 102960 | AI904738  | Hs.76053  | DEAD/H (Asp-Glu-Ala-Asp/His) box polypep  | 1.8 |
|    | 125549 | R20215    |           | gb:yg18b09.r1 Soares infant brain 1NIB H  | 1.8 |
|    | 133797 | AL133921  | Hs.76272  | retinoblastoma-binding protein 2          | 1.8 |
| 70 | 125048 | AW440068  | Hs.59425  | hypothetical protein FLJ23323             | 1.8 |
|    | 103403 | X95406    |           | gb:H.sapiens cyclin E gene.               | 1.8 |
|    | 123546 | AA608817  | Hs.112597 | EST                                       | 1.8 |
|    | 124694 | R06108    |           | gb:ye94h05.s1 Soares fetal liver spleen   | 1.8 |
|    | 102406 | U43177    |           | (NONE)                                    | 1.8 |
| 75 | 130695 | T97205    | Hs.17998  | ESTs, Weakly similar to 2109260A B cell   | 1.8 |
|    | 123951 | AB012922  | Hs.173043 | metastasis-associated 1-like 1            | 1.8 |
|    | 118533 | N71861    | Hs.49413  | ESTs                                      | 1.8 |
|    | 123197 | AA489250  |           | gb:aa57h12.s1 NCI_CGAP_GCB1 Homo sapiens  | 1.8 |
| 80 | 125656 | AW515428  | Hs.78687  | neutral sphingomyelinase (N-SMase) activ  | 1.8 |
|    | 100154 | H60720    | Hs.81892  | KIAA0101 gene product                     | 1.8 |
|    | 106876 | N52821    | Hs.269412 | ESTs, Moderately similar to ALU7_HUMAN A  | 1.8 |
|    | 128339 | AL121087  | Hs.296406 | KIAA0685 gene product                     | 1.8 |
|    | 105939 | AL137728  | Hs.12258  | Homo sapiens mRNA; cDNA DKFZp434B0920 (f  | 1.8 |
|    | 102495 | NM_005762 | Hs.79356  | Lysosomal-associated multispanning membr  | 1.8 |

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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
| 5  | 100221 | D28383    |           | gb:Human mRNA for ATP synthase B chain,  | 1.8 |
|    | 101741 | NM_003199 | Hs.326198 | transcription factor 4                   | 1.8 |
|    | 101701 | NM_002436 | Hs.1861   | membrane protein, palmitoylated 1 (55kD) | 1.8 |
|    | 107119 | AI375499  | Hs.27379  | ESTs                                     | 1.8 |
|    | 134362 | U47742    | Hs.82210  | zinc finger protein 220                  | 1.8 |
| 10 | 127964 | F06298    |           | gb:HSC13F081 normalized infant brain cDN | 1.8 |
|    | 101437 | M20681    | Hs.7594   | solute carrier family 2 (facilitated glu | 1.8 |
|    | 106204 | AA188734  | Hs.21479  | ubiquitin 1                              | 1.8 |
|    | 112716 | AW590680  | Hs.110802 | von Willebrand factor                    | 1.8 |
|    | 109779 | AB029396  | Hs.3353   | beta-1,3-glucuronyltransferase 1 (glucur | 1.8 |
| 15 | 111369 | AA535740  | Hs.170263 | tumor protein p53-binding protein, 1     | 1.8 |
|    | 135204 | AF067515  | Hs.183418 | cell division cycle 2-like 1 (PITSLRE pr | 1.8 |
|    | 105788 | AB009698  | Hs.23965  | solute carrier family 22 (organic anion  | 1.8 |
|    | 110997 | AW862823  | Hs.168052 | KIAA0421 protein                         | 1.8 |
|    | 111620 | R14853    | Hs.307478 | EST, Weakly similar to I39058 hypotheti  | 1.8 |
| 20 | 115618 | H11695    | Hs.322901 | disrupter of silencing 10                | 1.8 |
|    | 115904 | AI167560  | Hs.61297  | ESTs                                     | 1.8 |
|    | 107510 | BE613332  | Hs.132055 | ESTs, Weakly similar to GNMSLL retroviru | 1.8 |
|    | 116435 | AA186761  | Hs.334812 | hypothetical protein DKFZp586K0717       | 1.8 |
|    | 112399 | R60920    | Hs.296770 | KIAA1719 protein                         | 1.8 |
| 25 | 127426 | AA854756  | Hs.124076 | ESTs                                     | 1.8 |
|    | 125175 | W52355    | Hs.303030 | EST                                      | 1.8 |
|    | 132972 | AA034365  | Hs.288924 | Homo sapiens cDNA FLJ11392 fis, clone HE | 1.8 |
|    | 125982 | R93091    |           | gb:yr30e11.r1 Soares fetal liver spleen  | 1.8 |
|    | 115620 | AA399997  | Hs.211610 | CUG triplet repeat, RNA-binding protein  | 1.8 |
| 30 | 128115 | AI435590  | Hs.130168 | ESTs                                     | 1.8 |
|    | 106880 | AI493206  | Hs.32425  | ESTs                                     | 1.7 |
|    | 101199 | L22075    | Hs.1666   | guanine nucleotide binding protein (G pr | 1.7 |
|    | 104159 | BE386983  | Hs.283685 | hypothetical protein FLJ20396            | 1.7 |
|    | 101368 | M13058    | Hs.73952  | proline-rich protein HaellI subfamily 2  | 1.7 |
| 35 | 103646 | AW248439  | Hs.2340   | junction plakoglobin                     | 1.7 |
|    | 130717 | AA334274  | Hs.18368  | DKFZP564B0769 protein                    | 1.7 |
|    | 124981 | N25485    | Hs.330310 | maternal G10 transcript                  | 1.7 |
|    | 124770 | AA984414  | Hs.120429 | ESTs                                     | 1.7 |
|    | 126926 | AA179472  | Hs.832    | ESTs, Highly similar to A41029 integrin  | 1.7 |
| 40 | 101636 | BE392781  | Hs.89474  | ADP-ribosylation factor 6                | 1.7 |
|    | 123553 | AI494291  | Hs.111977 | ESTs                                     | 1.7 |
|    | 127172 | AA292208  | Hs.251278 | KIAA1201 protein                         | 1.7 |
|    | 130621 | AW513087  | Hs.16803  | LUC7 (S. cerevisiae)-like                | 1.7 |
|    | 116925 | H73110    | Hs.260603 | ESTs, Moderately similar to A47582 B-ca  | 1.7 |
| 45 | 108845 | AW362901  | Hs.68864  | ESTs, Weakly similar to phosphatidylseri | 1.7 |
|    | 128092 | AA904617  | Hs.166229 | ESTs                                     | 1.7 |
|    | 128193 | AJ224442  | Hs.155020 | putative methyltransferase               | 1.7 |
|    | 113965 | AI268666  | Hs.19631  | ESTs, Weakly similar to I38022 hypotheti | 1.7 |
|    | 106620 | D52562    | Hs.296317 | KIAA1789 protein                         | 1.7 |
| 50 | 102926 | W28363    | Hs.239752 | nuclear receptor subfamily 2, group F, m | 1.7 |
|    | 114964 | BE085271  | Hs.8834   | ring finger protein 3                    | 1.7 |
|    | 101800 | NM_006433 | Hs.105806 | granulysin                               | 1.7 |
|    | 130094 | NM_001471 | Hs.167017 | gamma-aminobutyric acid (GABA) B recepto | 1.7 |
|    | 120112 | AA180240  | Hs.6083   | Homo sapiens cDNA: FLJ21028 fis, clone C | 1.7 |
| 55 | 109978 | H09356    | Hs.22528  | ESTs                                     | 1.7 |
|    | 121252 | AA393907  | Hs.97179  | ESTs                                     | 1.7 |
|    | 127768 | AW085002  | Hs.156187 | ESTs                                     | 1.7 |
|    | 125445 | AI452722  | Hs.7709   | WW domain binding protein 1              | 1.7 |
|    | 100052 |           |           |  | 1.7 |
| 60 | 119863 | AA081218  | Hs.58608  | Homo sapiens cDNA FLJ14206 fis, clone NT | 1.7 |
|    | 134333 | AW888411  | Hs.81915  | leukemia-associated phosphoprotein p18 ( | 1.7 |
|    | 123541 | AW976511  | Hs.112592 | ESTs                                     | 1.7 |
|    | 134191 | W26632    | Hs.7979   | KIAA0736 gene product                    | 1.7 |
|    | 103305 | X82279    |           | gb:H.sapiens Fas, Apo-1 gene (promoter a | 1.7 |
| 65 | 112411 | R43090    | Hs.271510 | ESTs, Moderately similar to ALU1_HUMAN A | 1.7 |
|    | 100598 | AL121734  | Hs.146409 | cell division cycle 42 (GTP-binding prot | 1.7 |
|    | 113610 | T93279    |           | gb:ye25f01.s1 Stratagene lung (937210) H | 1.7 |
|    | 105593 | AA279341  | Hs.174151 | aldehyde oxidase 1                       | 1.7 |
|    | 125317 | Z99348    | Hs.112461 | ESTs, Weakly similar to I38022 hypotheti | 1.7 |
| 70 | 125956 | AK000214  | Hs.129014 | hypothetical protein FLJ20207            | 1.7 |
|    | 105105 | R61532    | Hs.87016  | hypothetical protein FLJ22938            | 1.7 |
|    | 132791 | AB029551  | Hs.7910   | RING1 and YY1 binding protein            | 1.7 |
|    | 116996 | H83935    | Hs.40535  | ESTs                                     | 1.7 |
|    | 133335 | BE251012  | Hs.263812 | nuclear distribution gene C (A.nidulans) | 1.7 |
| 75 | 120959 | BE247692  | Hs.102469 | putative nuclear protein                 | 1.7 |
|    | 105621 | AL040058  | Hs.6375   | uncharacterized hypothalamus protein HT0 | 1.7 |
|    | 106181 | AI803651  | Hs.191608 | ESTs                                     | 1.7 |
|    | 125661 | AA491830  | Hs.25689  | ESTs                                     | 1.7 |
|    | 127585 | AA604144  | Hs.190632 | ESTs                                     | 1.7 |
| 80 | 112035 | AI955289  | Hs.300759 | ribosomal protein L36                    | 1.7 |
|    | 102870 | M64437    | Hs.234799 | breakpoint cluster region                | 1.7 |
|    | 108039 | AA280319  | Hs.288840 | PRO1575 protein                          | 1.7 |
|    | 125898 | AK001823  | Hs.92287  | Homo sapiens mRNA; cDNA DKFZp564C2478 (f | 1.7 |
|    | 114740 | N70103    |           | gb:za53e10.s1 Soares fetal liver spleen  | 1.7 |
|    | 120304 | AA192469  | Hs.271838 | ESTs                                     | 1.7 |
|    | 103433 | X98001    | Hs.78948  | Rab geranylgeranyltransferase, beta subu | 1.7 |
|    | 116180 | AA463902  | Hs.13522  | ESTs, Weakly similar to I38022 hypothet  | 1.7 |

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|----|--------|-----------|-----------|--|-----|
|    | 105269 | AF174499  | Hs.6764   | histone deacetylase 6                    | 1.7 |
|    | 125431 | AW851639  | Hs.75584  | polymyositis/scleroderma autoantigen 2 ( | 1.7 |
|    | 133579 | X75346    | Hs.75074  | mitogen-activated protein kinase-activat | 1.7 |
| 5  | 105355 | AL031447  | Hs.26938  | Homo sapiens, clone IMAGE:4053044, mRNA, | 1.7 |
|    | 129601 | AB032964  | Hs.115726 | KIAA1138 protein                         | 1.7 |
|    | 113739 | AA365599  | Hs.173904 | ESTs                                     | 1.7 |
|    | 100840 | U04816    | Hs.183418 | cell division cycle 2-like 1 (PITSLRE pr | 1.7 |
|    | 122878 | AA847744  | Hs.99640  | ESTs                                     | 1.7 |
| 10 | 119495 | BE144608  | Hs.55533  | ESTs                                     | 1.7 |
|    | 125669 | R51308    | Hs.333256 | ESTs, Weakly similar to ALU8_HUMAN ALU   | 1.7 |
|    | 109891 | H04757    | Hs.323176 | ESTs                                     | 1.7 |
|    | 126884 | U49436    | Hs.286236 | KIAA1856 protein                         | 1.7 |
|    | 132977 | AA093322  | Hs.301404 | RNA binding motif protein 3              | 1.7 |
| 15 | 101396 | BE267931  | Hs.78996  | proliferating cell nuclear antigen       | 1.7 |
|    | 104730 | AW139789  | Hs.16370  | Homo sapiens cDNA FLJ11652 fis, clone HE | 1.7 |
|    | 102205 | BE242291  | Hs.197540 | hypoxia-inducible factor 1, alpha subuni | 1.7 |
|    | 112945 | AW138458  | Hs.20787  | Homo sapiens cDNA: FLJ21686 fis, clone C | 1.7 |
|    | 129902 | AA076278  | Hs.13277  | hypothetical protein FLJ22054            | 1.7 |
| 20 | 107157 | AW853745  | Hs.286035 | hypothetical protein FLJ22586            | 1.7 |
|    | 133229 | AL137480  | Hs.6834   | KIAA1014 protein                         | 1.7 |
|    | 129912 | AF155096  | Hs.107213 | hypothetical protein FLJ20585            | 1.7 |
|    | 119811 | AW137640  | Hs.231444 | Homo sapiens, Similar to hypothetical pr | 1.7 |
|    | 126233 | N77584    | Hs.68644  | Homo sapiens microsomal signal peptidase | 1.7 |
| 25 | 133134 | AF198620  | Hs.65648  | RNA binding motif protein 8A             | 1.7 |
|    | 115278 | AK002163  | Hs.301724 | hypothetical protein FLJ11301            | 1.7 |
|    | 133817 | AW578716  | Hs.7644   | H1 histone family, member 2              | 1.7 |
|    | 130753 | AA205223  | Hs.189    | phosphodiesterase 4C, cAMP-specific (du  | 1.7 |
|    | 107463 | AW952022  | Hs.315164 | hypothetical protein similar to actin re | 1.7 |
| 30 | 121009 | NM_001533 | Hs.2730   | heterogeneous nuclear ribonucleoprotein  | 1.7 |
|    | 125546 | H09950    |           | gb:ym01d12.r1 Soares infant brain 1N1B H | 1.7 |
|    | 129991 | R28386    | Hs.179925 | ESTs, Weakly similar to ALU8_HUMAN ALU   | 1.7 |
|    | 119015 | N95490    | Hs.29700  | hypothetical protein FLJ20094            | 1.7 |
|    | 100058 |           |           |  | 1.7 |
| 35 | 116655 | AF271732  | Hs.68090  | bridging integrator-3                    | 1.7 |
|    | 119898 | R93325    | Hs.58690  | ESTs                                     | 1.7 |
|    | 105021 | H07960    | Hs.306044 | CGI-05 protein                           | 1.7 |
|    | 102098 | N25485    | Hs.330310 | maternal G10 transcript                  | 1.7 |
|    | 126730 | AA442429  |           | gb:zv70g02.r1 Soares_t0tal_fetus_Nb2HF8_ | 1.7 |
| 40 | 113427 | T85105    | Hs.15471  | ESTs                                     | 1.7 |
|    | 122317 | T85253    | Hs.290874 | ESTs, Weakly similar to ALU8_HUMAN ALU S | 1.7 |
|    | 130503 | BE208491  | Hs.295112 | KIAA0618 gene product                    | 1.7 |
|    | 117348 | N24157    |           | gb:yx96b12.s1 Soares melanocyte 2NbHM Ho | 1.7 |
|    | 127033 | AF169301  | Hs.9098   | sulfate transporter 1                    | 1.7 |
| 45 | 126554 | AW972147  | Hs.101395 | hypothetical protein MGC11352            | 1.7 |
|    | 124733 | R20547    | Hs.100830 | ESTs                                     | 1.7 |
|    | 106310 | R98185    | Hs.17240  | ESTs                                     | 1.7 |
|    | 122638 | AL137476  | Hs.123609 | Homo sapiens mRNA; cDNA DKFZp434I0623 (f | 1.7 |
|    | 101075 | L03532    | Hs.79024  | heterogeneous nuclear ribonucleoprotein  | 1.7 |
| 50 | 126659 | T16245    |           | gb:NIB1005R Normalized infant brain, Ben | 1.7 |
|    | 127717 | F12209    | Hs.173380 | CK2 interacting protein 1; HQ0024c prote | 1.7 |
|    | 105441 | N28522    | Hs.8935   | quinolinate phosphoribosyltransferase (n | 1.7 |
|    | 104188 | AA478423  | Hs.300870 | Homo sapiens mRNA; cDNA DKFZp547M072 (fr | 1.7 |
|    | 134750 | L29073    | Hs.1139   | cold shock domain protein A              | 1.7 |
| 55 | 106826 | BE253927  | Hs.24983  | hypothetical protein from EUROMAGE 2021  | 1.7 |
|    | 113511 | T89578    | Hs.189740 | ESTs                                     | 1.7 |
|    | 111070 | NM_006201 | Hs.171834 | PCTAIRE protein kinase 1                 | 1.7 |
|    | 129091 | AA056483  | Hs.301463 | Human Chromosome 16 BAC clone CIT987SK-A | 1.7 |
|    | 129710 | AJ277841  | Hs.120963 | ELG protein                              | 1.7 |
| 60 | 132833 | U78525    | Hs.57783  | eukaryotic translation initiation factor | 1.7 |
|    | 125775 | AW514585  | Hs.29205  | alpha integrin binding protein 63        | 1.7 |
|    | 113675 | T81034    | Hs.14841  | ESTs                                     | 1.7 |
|    | 100487 | AU076640  | Hs.15243  | nucleolar protein 1 (120kD)              | 1.7 |
|    | 119302 | T25725    |           | gb:ESTDIR152 CD34+DIRECTIONAL Homo sapie | 1.7 |
| 65 | 128245 | AA993101  | Hs.170486 | ESTs                                     | 1.7 |
|    | 130322 | NM_014247 | Hs.154545 | PDZ domain containing guanine nucleotide | 1.7 |
|    | 135363 | AW589601  | Hs.119    | Wilms' tumour 1-associating protein      | 1.7 |
|    | 125181 | R40815    | Hs.12396  | ESTs, Weakly similar to 2004399A chromos | 1.7 |
|    | 123247 | BE271016  | Hs.169850 | ESTs, Weakly similar to T21554 hypotheti | 1.7 |
| 70 | 127206 | AW816490  | Hs.337508 | ESTs                                     | 1.7 |
|    | 121880 | AW946155  | Hs.7750   | hypothetical protein AL133206            | 1.7 |
|    | 125797 | H03117    | Hs.111497 | similar to mouse neuronal protein 15.6   | 1.7 |
|    | 114601 | AA075566  |           | gb:zm88f06.s1 Stratagene ovarian cancer  | 1.7 |
|    | 126278 | AA417302  | Hs.63042  | DKFZp564J157 protein                     | 1.7 |
| 75 | 120964 | AA398085  | Hs.142390 | ESTs                                     | 1.7 |
|    | 133634 | AL035071  | Hs.234279 | microtubule-associated protein, RP/EB fa | 1.7 |
|    | 107025 | AA825623  | Hs.21255  | ESTs, Weakly similar to I38022 hypotheti | 1.7 |
|    | 105638 | AA493453  | Hs.247817 | H2B histone family, member A             | 1.7 |
|    | 135398 | M16029    | Hs.287270 | ret proto-oncogene (multiple endocrine   | 1.7 |
| 80 | 115794 | AA424900  | Hs.112227 | membrane-associated nucleic acid binding | 1.7 |
|    | 102083 | T35901    | Hs.75117  | interleukin enhancer binding factor 2, 4 | 1.7 |
|    | 100188 | AW247090  | Hs.57101  | minichromosome maintenance deficient (S, | 1.7 |
|    | 130868 | AB037855  | Hs.171917 | hypothetical protein FLJ11085            | 1.7 |
|    | 110493 | AI247707  | Hs.36915  | ESTs                                     | 1.7 |

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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
| 5  | 115041 | AA252457  | Hs.86543  | ESTs, Moderately similar to T00255 hypot | 1.7 |
|    | 128764 | AW024282  | Hs.104938 | hypothetical protein MGC15906            | 1.7 |
|    | 134065 | X78992    | Hs.78909  | butyrate response factor 2 (EGF-response | 1.7 |
|    | 101082 | BE616731  | Hs.80645  | interferon regulatory factor 1           | 1.7 |
|    | 130945 | U20582    | Hs.2149   | actin like protein                       | 1.7 |
|    | 106974 | AI817130  | Hs.9195   | Homo sapiens cDNA FLJ13698 fis, clone PL | 1.7 |
|    | 126752 | AI073373  | Hs.326923 | EST, Weakly similar to I38022 hypothetic | 1.7 |
|    | 133327 | AL390127  | Hs.7104   | Kruppel-like factor 13                   | 1.7 |
| 10 | 127005 | T81309    | Hs.251664 | insulin-like growth factor 2 (somatomedi | 1.7 |
|    | 105615 | AA281959  | Hs.5210   | glia maturation factor, gamma            | 1.7 |
|    | 116295 | AA742596  | Hs.91216  | ESTs, Weakly similar to 2004399A chromos | 1.7 |
|    | 111587 | AI125867  | Hs.20734  | ESTs                                     | 1.7 |
|    | 104570 | AW978870  | Hs.131828 | ESTs                                     | 1.7 |
| 15 | 134752 | BE246762  | Hs.89499  | arachidonate 5-lipoxygenase              | 1.7 |
|    | 130430 | W27893    | Hs.150580 | putative translation initiation factor   | 1.7 |
|    | 119244 | AW407564  | Hs.275865 | ribosomal protein S18                    | 1.7 |
|    | 131152 | NM_004380 | Hs.23598  | CREB binding protein (Rubinstein-Taybi s | 1.7 |
|    | 133419 | BE242676  | Hs.73172  | growth factor independent 1              | 1.7 |
| 20 | 106542 | AA339541  | Hs.24956  | hypothetical protein FLJ22056            | 1.7 |
|    | 116482 | AW207000  | Hs.126857 | Homo sapiens cDNA FLJ12936 fis, clone NT | 1.7 |
|    | 132555 | AW500131  | Hs.171763 | CD22 antigen                             | 1.7 |
|    | 125840 | AB028986  | Hs.12064  | ubiquitin specific protease 22           | 1.7 |
|    | 115416 | AA283893  | Hs.337079 | ESTs                                     | 1.7 |
| 25 | 120041 | AA830882  | Hs.59368  | ESTs                                     | 1.7 |
|    | 126295 | AI281459  | Hs.270114 | ESTs                                     | 1.7 |
|    | 122528 | AA449804  | Hs.292154 | stromal cell protein                     | 1.7 |

Table 2B:

|    |             |                                       |
|----|-------------|---------------------------------------|
| 30 | Pkey:       | Unique Eos probeset identifier number |
|    | CAT number: | Gene cluster number                   |
|    | Accession:  | Genbank accession numbers             |

|    |        |                  |  |
|----|--------|------------------|--|
| 35 | Pkey   | CAT number       | Accession  |
|    | 108451 | 13766_27         | AA079195 AA084955 AA126308 AA084956  |
|    | 124236 | 46919_1          | AF086006 H64722 H65212 H66282  |
|    | 115982 | 173_2            | W92113 AA702794 BE044316 W91984 AA679375 T94184 AA679335 BE503126 AW502118 BE467367 AA584550 AW139964 R93353   |
|    |        |                  | AW088477 AI887846 AW502624 W81697 W81696 AA447817 AA447667 F13631 AW268271 AA055366 AW629027 AA677404 AA831618 |
|    |        |                  | AI124782 AA889402 AA765804 AA765530 AA055698 AA594019 AI267368 AA456946 R93354 AF264624 AW568618 AA601493      |
| 40 | 116665 | 1394292_1        | F04405 BE171310  |
|    | 125165 | 1852047_1        | W45350 W45406  |
|    | 125324 | 1692163_1        | R07785 T85948 T86972   |
|    | 126053 | 1601238_1        | H64450 H64464  |
|    | 125499 | 1562851_1        | H10543 R11878  |
| 45 | 126127 | 1205826_1        | N95428 W24040 AW751366 H81987  |
|    | 125546 | 356478_1         | H09950 R18413 AA570553 AW973425  |
|    | 125549 | 1702179_1        | R20215 R18767  |
|    | 125761 | 1744008_1        | R68351 R68364  |
|    | 127155 | 200358_1         | AA284993 AA478122 AA477923   |
| 50 | 125957 | 1583542_1        | H41694 H45213  |
|    | 125982 | 1766315_1        | R98091 W92898  |
|    | 127245 | 226662_1         | AA323958 AA370268  |
|    | 127248 | 227560_1         | AA364195 AA325029 AW962050   |
|    | 127262 | 231725_1         | AA828125 AA834883 AA330555   |
| 55 | 126659 | 1541209_1        | T16245 R19694 F13545 H10299 T65048 T65279 H18006   |
|    | 127303 | 258778_1         | AA366951 AA470999 AA469425   |
|    | 127315 | 37938_1          | AF116622 AI114507 AA640834 AA377999  |
|    | 126730 | 297653_1         | AA442429 T19477  |
|    | 103898 | 187213_3         | AA248884   |
| 60 | 126872 | 142696_1         | AW450979 AA136653 AA136656 AW419381 AA984358 AA492073 BE168945 AA809054 AW238038 BE011212 BE011359 BE011367    |
|    |        |                  | BE011368 BE011362 BE011215 BE011365 BE011363   |
|    | 112540 | 1605263_1        | R69751 R70467 H69771 H80879 H80878   |
|    | 127705 | 966283_2         | AJ003322 AJ003324  |
|    | 121335 | 279548_1         | AA404418 AI217248  |
| 65 | 120734 | 208882_1         | AA299948 AA299949  |
|    | 114620 | 32062_8          | AA642974 AA084223  |
|    | 122652 | 25401_30         | AA454641   |
|    | 123636 | genbank_AA609263 | AA609263   |
|    | 100842 | tigr_HT4398      | U05597   |
| 70 | 116548 | genbank_D20433   | D20433   |
|    | 123783 | genbank_AA610112 | AA610112   |
|    | 125032 | genbank_T74884   | T74884   |
|    | 123808 | genbank_AA620552 | AA620552   |
|    | 102316 | entrez_U34301    | U34301   |
| 75 | 102406 | entrez_U43177    | U43177   |
|    | 134076 | 40321_1          | AF086215 W02702 AA284268 W25655  |
|    | 104542 |                  | R29657   |
|    | 113119 | genbank_T47910   | T47910   |
|    | 104799 | genbank_AA029703 | AA029703   |
| 80 | 127964 | 135151_1         | F06298 R18057  |
|    | 120809 | genbank_AA346495 | AA346495   |
|    | 113610 | genbank_T93279   | T93279   |
|    | 113947 | genbank_W84768   |  |
|    | 101045 | entrez_J05614    |  |



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|        |                  |  |
|--------|------------------|--|
| 129969 | genbank_N57818   |  |
| 117031 | genbank_H88353   |  |
| 101447 | entrez_M21305    |  |
| 124540 | genbank_N63232   |  |
| 124554 | genbank_N65961   |  |
| 117348 | genbank_N24157   |  |
| 117357 | genbank_N24829   |  |
| 124677 | genbank_R01073   |  |
| 124694 | genbank_R06108   |  |
| 103138 | entrez_X65965    |  |
| 103305 | entrez_X82279    |  |
| 103392 | entrez_X94563    |  |
| 103403 | entrez_X95406    |  |
| 119229 | genbank_T03229   |  |
| 119302 | genbank_T25725   |  |
| 126825 | 430458_1         | AA100230 AA100274  |
| 105225 | genbank_AA211777 |  |
| 121292 | genbank_AA401807 |  |
| 112853 | genbank_T02843   | T02843   |
| 121387 | genbank_AA405854 |  |
| 114601 | genbank_AA075566 |  |
| 100221 | entrez_D28383    | D28383   |
| 123197 | genbank_AA489250 | AA489250   |
| 114740 | 379876_1         | N70103 N70020 AW383189 AI207469 W00935 W00906 AA551569 AI343637 AA135199 |
| 123331 | genbank_AA497013 |  |
| 107794 | genbank_AA019255 |  |
| 100554 | tigr_HT2241      | M95923   |
| 123423 | genbank_AA598484 |  |
| 123474 | genbank_AA599209 |  |
| 109061 | genbank_AA160896 |  |

TABLE 3A: About 1346 Genes Up-regulated in Acute Lymphocytic Leukemia (ALL) Compared to Normal Adult Hematopoietic Tissues

Table 3A lists about 1346 genes up-regulated in acute lymphocytic leukemia (ALL) compared to normal adult hematopoietic tissues. These were selected from 35403 probesets on the Affymetrix/Eos Hu01 GeneChip array such that the ratio of "average" leukemia to "average" normal adult hematopoietic tissues was greater than or equal to 3.0. The "average" leukemia level was set to the 85<sup>th</sup> percentile amongst various ALL samples. The "average" normal adult hematopoietic tissue level was set to the 75<sup>th</sup> percentile amongst various non-malignant hematopoietic tissues. In order to remove gene-specific background levels of non-specific hybridization, the 10<sup>th</sup> percentile value amongst the tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 R1: Ratio of leukemia to hematopoietic tissues

| Pkey   | ExAccn    | UnigenelD | Unigene Title                                     | R1    |
|--------|-----------|-----------|---|-------|
| 129498 | AA449789  | Hs.75511  | connective tissue growth factor                   | 57.88 |
| 100458 | S74019    | Hs.247979 | pre-B lymphocyte gene 1                           | 49.45 |
| 133774 | X54079    | Hs.76067  | heat shock 27kD protein 1                         | 48.42 |
| 102564 | U59423    | Hs.79067  | MAD (mothers against decapentaplegic, Drosophila) | 41.49 |
| 130650 | AB040951  | Hs.284208 | DKFZP434N161 protein                              | 35.88 |
| 132922 | AF249745  | Hs.6066   | Rho guanine nucleotide exchange factor            | 35.74 |
| 112254 | AA852097  | Hs.25829  | ras-related protein                               | 33.28 |
| 106706 | AB037810  | Hs.18760  | KIAA1389 protein                                  | 32.39 |
| 101050 | AU077324  | Hs.1832   | neuropeptide Y                                    | 30.68 |
| 102455 | U48705    | Hs.75562  | discoidin domain receptor family, member          | 26.81 |
| 101838 | BE243845  | Hs.75511  | connective tissue growth factor                   | 25.46 |
| 113374 | T79925    | Hs.269165 | ESTs, Weakly similar to ALU1_HUMAN ALU S          | 24.69 |
| 134125 | NM_014781 | Hs.50421  | KIAA0203 gene product                             | 24.63 |
| 106943 | AW888222  | Hs.9973   | lensin  | 23.14 |
| 130069 | AJ754813  | Hs.146428 | collagen, type V, alpha 1                         | 23.06 |
| 119073 | BE245360  | Hs.279477 | ESTs  | 22.53 |
| 130444 | M12125    | Hs.300772 | Iropomyosin 2 (beta)                              | 21.96 |
| 100420 | D86983    | Hs.118893 | Melanoma associated gene                          | 21.05 |
| 114324 | AF084481  | Hs.26077  | Wolfram syndrome 1 (wolframin)                    | 18.95 |
| 101400 | M15990    | Hs.194148 | v-src-1 Yamaguchi sarcoma viral oncogene          | 18.46 |
| 102759 | NM_005100 | Hs.788    | A kinase (PRKA) anchor protein (gravin)           | 17.88 |
| 100693 | BE245294  | Hs.180789 | S164 protein                                      | 16.75 |
| 131689 | AB012124  | Hs.30696  | transcription factor-like 5 (basic helix          | 16.60 |
| 106410 | AB037787  | Hs.25229  | neuroigin 2                                       | 16.51 |
| 101304 | AA001021  | Hs.5685   | thyroid hormone receptor: interactor 8            | 15.60 |
| 131524 | AB040927  | Hs.301804 | KIAA1494 protein                                  | 15.01 |
| 107794 | AA019255  |           | gb:ze56e10.s1 Soares reti N2b4HR Homo             | 14.78 |
| 129213 | AF146494  | Hs.109525 | ESTs, Weakly similar to IRLX2_HUMAN IRLX2         | 14.76 |
| 116068 | AA328041  | Hs.194329 | hypothetical protein FLJ21174                     | 14.24 |
| 134416 | X68264    | Hs.211579 | melanoma cell adhesion molecule                   | 14.06 |
| 134545 | AI902899  | Hs.85155  | butyrate response factor 1 (EGF-response          | 14.03 |
| 114009 | AI248544  | Hs.103000 | KIAA0831 protein                                  | 13.93 |
| 115110 | AK001671  | Hs.11387  | KIAA1453 protein                                  | 13.75 |
| 130107 | AF112977  | Hs.172887 | phylloerythrin-CoA hydroxylase (Refsum disease    | 13.60 |
| 133558 | X66945    | Hs.748    | fibroblast growth factor receptor 1 (fms          | 13.60 |
| 100871 | T85231    | Hs.179661 | tubulin, beta 5                                   | 13.50 |
| 101462 | AL035668  | Hs.73853  | bone morphogenetic protein 2                      | 13.48 |
| 120809 | AA346495  |           | gb:EST52657 Fetal heart II Homo sapiens           | 13.33 |

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|    |        |           |           |  |       |
|----|--------|-----------|-----------|--|-------|
| 5  | 123340 | AA504264  | Hs.182937 | peptidylprolyl isomerase A (cyclophilin  | 13.25 |
|    | 103460 | AI021993  | Hs.14331  | S100 calcium-binding protein A13         | 13.25 |
|    | 102460 | U48959    | Hs.211582 | myosin, light polypeptide kiso           | 13.14 |
|    | 100168 | H73444    | Hs.394    | adrenomedullin                           | 13.09 |
|    | 115844 | AI373062  | Hs.332938 | hypothetical protein MGC5370             | 13.00 |
| 10 | 130103 | Y13492    | Hs.149098 | smoothelin                               | 12.92 |
|    | 102407 | AW602154  | Hs.82143  | E74-like factor 2 (ets domain transcript | 12.03 |
|    | 113632 | T94907    | Hs.188572 | ESTs                                     | 11.85 |
|    | 118951 | NM_000448 | Hs.73958  | recombination activating gene 1          | 11.73 |
|    | 100305 | NM_004941 | Hs.171872 | DEAD/H (Asp-Glu-Ala-Asp/His) box polypep | 11.63 |
| 15 | 109737 | AA055415  | Hs.13233  | ESTs, Moderately similar to A47582 B-cel | 11.55 |
|    | 122577 | AA829725  | Hs.334437 | hypothetical protein MGC4248             | 11.49 |
|    | 115147 | AA745781  | Hs.38399  | hypothetical protein MGC2454             | 11.40 |
|    | 132303 | BE177330  | Hs.325093 | Homo sapiens cD: FLJ21210 fis, clone C   | 11.37 |
|    | 103176 | AL021154  | Hs.76884  | inhibitor of D binding 3, dominant neg   | 11.17 |
| 20 | 108358 | M81933    | Hs.1634   | cell division cycle 25A                  | 11.15 |
|    | 104584 | AA704538  | Hs.193777 | ESTs                                     | 11.12 |
|    | 106777 | AF037261  | Hs.33787  | vinexin beta (SH3-containing adaptor mol | 11.08 |
|    | 121054 | AW976570  | Hs.97387  | ESTs                                     | 10.90 |
|    | 119400 | T92767    |           | gb:ye27d06.s1 Stratagene lung (937210) H | 10.83 |
| 25 | 126610 | AI911353  | Hs.191391 | ESTs                                     | 10.83 |
|    | 134555 | U34879    | Hs.85279  | hydroxysteroid (17-beta) dehydrogese 1   | 10.80 |
|    | 131555 | T47364    | Hs.278613 | interferon, alpha-inducible protein 27   | 10.79 |
|    | 130979 | NM_012445 | Hs.169833 | single-stranded-D-binding protein        | 10.70 |
|    | 113783 | AL359588  | Hs.7041   | hypothetical protein DKFZp7626226        | 10.65 |
| 30 | 123503 | AW9765051 | Hs.293156 | ESTs, Weakly similar to I78885 serine/th | 10.60 |
|    | 117031 | H88353    |           | gb:yw21a02.s1 Morton Fetal Cochlea Homo  | 10.45 |
|    | 100752 | T81309    | Hs.251664 | insulin-like growth factor 2 (somatomedi | 10.44 |
|    | 102618 | AL037672  | Hs.81071  | extracellular matrix protein 1           | 10.36 |
|    | 113089 | T40707    | Hs.270862 | ESTs                                     | 10.33 |
| 35 | 132089 | W22007    | Hs.39122  | hypothetical protein MGC15737            | 10.29 |
|    | 101663 | NM_003528 | Hs.2178   | H2B histone family, member Q             | 10.23 |
|    | 104876 | AI933128  | Hs.25220  | like-glycosyltransferase                 | 10.23 |
|    | 105370 | AF039843  | Hs.18676  | sprouty (Drosophila) homolog 2           | 10.18 |
|    | 129406 | AB018255  | Hs.111138 | KIAA0712 gene product                    | 10.18 |
| 40 | 115354 | AA281636  | Hs.334827 | ESTs                                     | 10.13 |
|    | 123077 | AA485229  | Hs.105649 | ESTs                                     | 10.05 |
|    | 131273 | AW206008  | Hs.283378 | Homo sapiens cD: FLJ21778 fis, clone H   | 9.95  |
|    | 126177 | AW752782  | Hs.129750 | hypothetical protein FLJ10546            | 9.83  |
|    | 133699 | BE501689  | Hs.75617  | collagen, type IV, alpha 2               | 9.80  |
| 45 | 110855 | AB007928  | Hs.28169  | KIAA0459 protein                         | 9.65  |
|    | 111826 | R35975    |           | gb:yh91b07.s1 Soares placenta Nb2HP Homo | 9.58  |
|    | 126947 | Z40778    | Hs.191837 | ESTs                                     | 9.50  |
|    | 116674 | AI768015  | Hs.92127  | ESTs                                     | 9.48  |
|    | 129087 | AI348027  | Hs.108557 | hypothetical protein PP1057              | 9.46  |
| 50 | 114837 | BE244930  | Hs.166895 | ESTs                                     | 9.45  |
|    | 120009 | AI080491  | Hs.93270  | ESTs, Moderately similar to S65657 alpha | 9.45  |
|    | 112483 | AW969785  | Hs.285885 | Homo sapiens cD FLJ11321 fis, clone PL   | 9.40  |
|    | 103487 | AA743603  | Hs.172108 | nucleoporin 88kD                         | 9.30  |
|    | 105675 | AL390083  | Hs.271277 | hypothetical protein from EUROIMAGE 3636 | 9.28  |
| 55 | 129158 | NM_004413 | Hs.109    | dipeptidase 1 (rel)                      | 9.23  |
|    | 114394 | T34462    | Hs.103291 | neuritin                                 | 9.17  |
|    | 133331 | Y14487    | Hs.738    | ribosomal protein L14                    | 9.11  |
|    | 114787 | AA156509  | Hs.231892 | ESTs, Weakly similar to S65657 alpha-1C- | 9.10  |
|    | 125502 | AW977181  | Hs.194718 | zinc finger protein 265                  | 9.03  |
| 60 | 132325 | N37065    | Hs.44856  | hypothetical protein FLJ12116            | 9.01  |
|    | 127968 | AA830201  | Hs.124347 | ESTs                                     | 9.00  |
|    | 114605 | AL157423  | Hs.306478 | Homo sapiens mR: cD DKFZp76100511 (f     | 8.93  |
|    | 114875 | AA235609  | Hs.236443 | Homo sapiens mR: cD DKFZp564N1063 (f     | 8.93  |
|    | 129898 | AI672731  | Hs.13256  | ESTs                                     | 8.89  |
| 65 | 106263 | W21493    | Hs.28329  | hypothetical protein FLJ14005            | 8.89  |
|    | 117130 | AA748850  | Hs.125830 | bladder cancer overexpressed protein     | 8.88  |
|    | 105553 | AA256756  | Hs.31178  | ESTs                                     | 8.85  |
|    | 103657 | Z73677    |           | gb:H.sapiens gene encoding plakophilin 1 | 8.83  |
|    | 105831 | AA329449  | Hs.247302 | twisted gastrulation                     | 8.82  |
| 70 | 106375 | AW872878  | Hs.289072 | hypothetical protein FLJ22175            | 8.80  |
|    | 114518 | AW163267  | Hs.106469 | suppressor of var1 (S.cerevisiae) 3-like | 8.75  |
|    | 123433 | AW450922  | Hs.112478 | ESTs                                     | 8.67  |
|    | 134558 | NM_001773 | Hs.85289  | CD34 antigen                             | 8.67  |
|    | 115893 | AI652127  | Hs.48419  | ESTs                                     | 8.67  |
| 75 | 128621 | AA032197  | Hs.102558 | Homo sapiens, clone MGC:5352, mR, comp   | 8.60  |
|    | 122798 | AW366286  | Hs.145696 | splicing factor (CC1.3)                  | 8.58  |
|    | 112554 | R71489    | Hs.29196  | EST                                      | 8.55  |
|    | 129969 | N57818    |           | gb:yv59d07.s1 Soares fetal liver spleen  | 8.53  |
|    | 131558 | AA453208  | Hs.28726  | RAB9, member RAS oncogene family         | 8.45  |
| 80 | 134027 | Z97630    | Hs.226117 | H1 histone family, member 0              | 8.45  |
|    | 134138 | AB023169  | Hs.7935   | KIAA0952 protein                         | 8.43  |
|    | 120030 | AI076355  | Hs.58694  | ESTs                                     | 8.43  |
|    | 101005 | NM_005239 | Hs.85146  | v-els avian erythroblastosis virus E26 o | 8.33  |
|    | 115423 | AI499516  | Hs.89303  | ESTs                                     | 8.33  |
|    | 104946 | AW242407  | Hs.73848  | carcinoembryonic antigen-related cell ad | 8.30  |
|    | 131965 | W79283    | Hs.35962  | ESTs                                     | 8.30  |
|    | 126426 | AA125984  |           | gb:zn27h06.r1 Stratagene neuroepithelium | 8.28  |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
| 5  | 108886 | AW248434  | Hs.91521  | hypothetical protein                     | 8.26 |
|    | 107985 | T40064    | Hs.71968  | Homo sapiens mR; cD DKFZp564F053 (fr     | 8.25 |
|    | 114239 | AL137667  | Hs.267445 | Homo sapiens mR; cD DKFZp434B231 (fr     | 8.23 |
|    | 124281 | AI333756  | Hs.111801 | arsele resistance protein ARS2           | 8.23 |
|    | 117099 | H93699    |           | gb:yu16a11.s1 Soares fetal liver spleen  | 8.20 |
| 10 | 119432 | AL120247  | Hs.40109  | KIAA0872 protein                         | 8.15 |
|    | 115967 | AI745379  | Hs.42911  | ESTs                                     | 8.15 |
|    | 132355 | D87942    | Hs.46328  | fucosyltransferase 2 (secretor status in | 8.13 |
|    | 108339 | AW151340  | Hs.51615  | ESTs, Weakly similar to ALU7_HUMAN ALU S | 8.10 |
|    | 131694 | NM_000246 | Hs.3076   | MHC class II transactivator              | 8.05 |
| 15 | 104897 | N33937    | Hs.10336  | ESTs                                     | 8.03 |
|    | 120266 | AI807264  | Hs.205442 | ESTs, Weakly similar to T34036 hypotheti | 8.03 |
|    | 130404 | AI572727  | Hs.76753  | endoglin (Osler-Rendu-Weber syndrome 1)  | 8.00 |
|    | 115729 | AA417812  | Hs.38775  | ESTs                                     | 8.00 |
|    | 127216 | AI798703  | Hs.143702 | ESTs, Weakly similar to S70029 probable  | 7.95 |
| 20 | 131693 | AW953776  | Hs.110796 | SAR1 protein                             | 7.93 |
|    | 113107 | AI821027  | Hs.8429   | ESTs                                     | 7.90 |
|    | 122282 | BE246331  | Hs.98401  | Homo sapiens mR full length insert cDN   | 7.90 |
|    | 111040 | AI435502  | Hs.14931  | ESTs                                     | 7.90 |
|    | 127987 | AI022103  | Hs.124511 | ESTs                                     | 7.90 |
| 25 | 125317 | Z99348    | Hs.112461 | ESTs, Weakly similar to I38022 hypotheti | 7.88 |
|    | 105242 | AI564857  | Hs.27888  | ESTs, Weakly similar to serine/threonine | 7.75 |
|    | 100421 | D86985    | Hs.79276  | KIAA0232 gene product                    | 7.71 |
|    | 114359 | NM_016929 | Hs.283021 | chloride intracellular channel 5         | 7.70 |
|    | 119772 | AJ250839  | Hs.58241  | gene for serine/threonine protein kise   | 7.70 |
| 30 | 124040 | U23752    | Hs.32964  | SRY (sex determining region Y)-box 11    | 7.65 |
|    | 134361 | BE549343  | Hs.82208  | acyl-Coenzyme A dehydrogese, very long   | 7.57 |
|    | 105476 | AL117352  | Hs.120828 | Human D sequence from clone RP5-876B10   | 7.55 |
|    | 113289 | T66900    | Hs.188446 | ESTs                                     | 7.50 |
|    | 122707 | NM_002039 | Hs.239706 | GRB2-associated binding protein 1        | 7.50 |
| 35 | 130055 | AI568248  | Hs.145355 | v-abl Abelson murine leukemia viral onco | 7.49 |
|    | 108766 | AF145713  | Hs.51490  | schwannomin-interacting protein 1        | 7.45 |
|    | 107957 | Z36842    | Hs.57548  | ESTs                                     | 7.45 |
|    | 123116 | AW190412  | Hs.183738 | FERM, RhoGEF (ARHGEF) and pleckstrin dom | 7.38 |
|    | 123190 | AA489212  | Hs.105228 | EST                                      | 7.38 |
| 40 | 129574 | AA026815  | Hs.11463  | UMP-CMP kise                             | 7.38 |
|    | 115274 | C01566    | Hs.86671  | ESTs                                     | 7.35 |
|    | 102571 | U60115    | Hs.239069 | four and a half LIM domains 1            | 7.34 |
|    | 116845 | AA649530  |           | gb:ns44f05.s1 NCI_CGAP_Alv1 Homo sapiens | 7.33 |
|    | 134851 | AB011124  | Hs.90232  | KIAA0552 gene product                    | 7.33 |
| 45 | 101780 | M82882    | Hs.154365 | E74-like factor 1 (ets domain transcript | 7.28 |
|    | 125042 | T78906    | Hs.269432 | ESTs, Moderately similar to ALU1_HUMAN A | 7.28 |
|    | 118472 | AL157545  | Hs.42179  | bromodomain and PHD finger containing, 3 | 7.25 |
|    | 108700 | AA121518  | Hs.193540 | ESTs, Moderately similar to 2109260A B c | 7.23 |
|    | 109411 | R98881    | Hs.109655 | sex comb on midleg (Drosophila)-like 1   | 7.20 |
| 50 | 127692 | AI021912  | Hs.187983 | ESTs                                     | 7.18 |
|    | 128501 | AL133572  | Hs.199009 | protein containing CXXC domain 2         | 7.18 |
|    | 107727 | AA145707  | Hs.173091 | ubiquitin-like 3                         | 7.14 |
|    | 118089 | AI762507  | Hs.47878  | ESTs                                     | 7.12 |
|    | 106025 | AV653785  | Hs.173334 | ELL-RELATED R POLYMERASE II, ELONGATIO   | 7.10 |
| 55 | 122111 | AW593206  | Hs.98785  | Ksp37 protein                            | 7.08 |
|    | 119674 | W60379    | Hs.57773  | ESTs                                     | 7.05 |
|    | 126607 | W87425    | Hs.114688 | ESTs                                     | 7.05 |
|    | 121545 | AA412442  | Hs.98132  | ESTs                                     | 7.05 |
|    | 113287 | T66847    | Hs.194040 | ESTs, Weakly similar to I38022 hypotheti | 7.03 |
| 60 | 126672 | AA255592  | Hs.203631 | ESTs, Weakly similar to alternatively sp | 7.00 |
|    | 132087 | H14486    | Hs.3903   | Cdc42 effector protein 4; binder of Rho  | 6.97 |
|    | 118697 | N22706    | Hs.43234  | ESTs                                     | 6.97 |
|    | 100295 | M74782    | Hs.172689 | interleukin 3 receptor, alpha (low affin | 6.95 |
|    | 101188 | L20320    | Hs.184298 | cyclin-dependent kise 7 (homolog of Xa   | 6.95 |
| 65 | 121481 | AA411931  |           | gb:zu03g05.s1 Soares_testis_NHT Homo sap | 6.95 |
|    | 113003 | AW292315  | Hs.7215   | ESTs                                     | 6.93 |
|    | 101851 | BE260964  | Hs.82045  | midkine (neurite growth-promoting factor | 6.91 |
|    | 113529 | AI190741  | Hs.177415 | Finkel-Biskis-Reilly murine sarcoma viru | 6.90 |
|    | 132887 | AA195831  | Hs.273385 | guanine nucleotide binding protein (G pr | 6.90 |
| 70 | 113560 | T91015    | Hs.268626 | ESTs                                     | 6.85 |
|    | 123440 | AI733692  | Hs.112488 | ESTs                                     | 6.83 |
|    | 130390 | AA490770  | Hs.182382 | ESTs                                     | 6.83 |
|    | 133889 | U48959    | Hs.211582 | myosin, light polypeptide kise           | 6.83 |
|    | 113573 | R89379    | Hs.15990  | ESTs                                     | 6.80 |
| 75 | 112453 | R63899    | Hs.28455  | ESTs                                     | 6.78 |
|    | 125221 | AA236115  | Hs.120785 | ESTs                                     | 6.78 |
|    | 134081 | AL034349  | Hs.79005  | protein tyrosine phosphatase, receptor t | 6.77 |
|    | 127610 | AA960867  | Hs.150271 | ESTs, Highly similar to unmed protein    | 6.75 |
|    | 105486 | AW449258  | Hs.6187   | ESTs                                     | 6.75 |
| 80 | 107796 | AA058848  | Hs.60797  | ESTs                                     | 6.71 |
|    | 132754 | AI752244  | Hs.75309  | eukaryotic translation elongation factor | 6.71 |
|    | 105806 | AF206019  | Hs.110347 | REV1 (yeast homolog)-like                | 6.70 |
|    | 110837 | H03109    | Hs.108920 | HT018 protein                            | 6.65 |
|    | 117698 | N62293    | Hs.45107  | ESTs                                     | 6.65 |
|    | 128994 | AF205849  | Hs.107740 | Kruppel-like factor 2 (lung)             | 6.65 |
|    | 129131 | AB026436  | Hs.177534 | dual specificity phosphatase 10          | 6.65 |
|    | 108528 | AA650588  | Hs.325202 | ESTs, Highly similar to GBAS_HUMAN GUANI | 6.62 |

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|    |        |           |           |   |      |
|----|--------|-----------|-----------|---|------|
| 5  | 131009 | AF169802  | Hs.22142  | cytochrome b5 reductase b5R.2             | 6.51 |
|    | 129389 | NM_012445 | Hs.288126 | spondin 2, extracellular matrix protein   | 6.50 |
|    | 125278 | AI218439  | Hs.129998 | enhancer of polycomb 1                    | 6.59 |
|    | 124667 | W24320    | Hs.102941 | Homo sapiens cD: FLJ21531 fis, clone C    | 6.59 |
|    | 105640 | AA001021  | Hs.6685   | thyroid hormone receptor interactor 8     | 6.58 |
| 10 | 106474 | BE383668  | Hs.42484  | hypothetical protein FLJ10618             | 6.58 |
|    | 105808 | AI133161  | Hs.286131 | CGI-101 protein                           | 6.53 |
|    | 120087 | AF186780  | Hs.79219  | Rai/GDS-like gene; KIAA0959 protein       | 6.52 |
|    | 100514 | AU076887  | Hs.28491  | spermidine/spermine N1-acetyltransferase  | 6.50 |
|    | 108378 | AI368460  | Hs.74615  | platelet-derived growth factor receptor,  | 6.50 |
| 15 | 133350 | AI499220  | Hs.71573  | hypothetical protein FLJ10074             | 6.50 |
|    | 115673 | AA406341  | Hs.269908 | Homo sapiens cD FLJ11991 fis, clone HE    | 6.48 |
|    | 133410 | Y07847    | Hs.73088  | RAS-related on chromosome 22              | 6.48 |
|    | 131281 | AA251716  | Hs.25227  | ESTs                                      | 6.46 |
|    | 105510 | Z42047    | Hs.283978 | Homo sapiens PRO2751 mR, complete cds     | 6.45 |
| 20 | 128766 | AW160432  | Hs.296460 | craniofacial development protein 1        | 6.45 |
|    | 114530 | AA601038  | Hs.191797 | ESTs, Weakly similar to S65657 alpha-1C-  | 6.43 |
|    | 120120 | BE547267  | Hs.69791  | hypothetical protein MGC13183             | 6.40 |
|    | 120593 | AA748355  | Hs.193522 | ESTs                                      | 6.40 |
|    | 125832 | AA628600  | Hs.117587 | ESTs                                      | 6.38 |
| 25 | 129637 | NM_004608 | Hs.1179   | TATA box binding protein (TBP)-associate  | 6.38 |
|    | 115302 | AL109719  | Hs.47578  | ESTs                                      | 6.33 |
|    | 126137 | AA312594  | Hs.99115  | hypothetical protein FLJ20689             | 6.30 |
|    | 114465 | BE621056  | Hs.131731 | hypothetical protein FLJ11099             | 6.29 |
|    | 125582 | AI494372  | Hs.98968  | Hypothetical protein FLJ23058             | 6.29 |
| 30 | 127380 | AF070554  | Hs.15535  | Homo sapiens clone 24582 mR sequence      | 6.26 |
|    | 106956 | R06428    | Hs.226351 | ESTs                                      | 6.25 |
|    | 105952 | AW880358  | Hs.339808 | hypothetical protein FLJ10120             | 6.25 |
|    | 109416 | BE268388  | Hs.86945  | ESTs, Weakly similar to A46010 X-linked   | 6.23 |
|    | 111116 | AK002039  | Hs.26243  | Homo sapiens cD FLJ11177 fis, clone PL    | 6.23 |
| 35 | 127282 | AA347158  | Hs.185780 | ESTs                                      | 6.23 |
|    | 113074 | AK001335  | Hs.31137  | protein tyrosine phosphatase, receptor t  | 6.21 |
|    | 101664 | AA436989  | Hs.121017 | H2A histone family, member A              | 6.20 |
|    | 103317 | XB3441    | Hs.166091 | ligase IV, D, ATP-dependent               | 6.20 |
|    | 133894 | AW021236  | Hs.180433 | rTS beta protein                          | 6.19 |
| 40 | 109260 | AW978515  | Hs.131915 | KIAA0863 protein                          | 6.18 |
|    | 112772 | AI922283  | Hs.35437  | ESTs, Moderately similar to I38026 MLN 6  | 6.18 |
|    | 132050 | AI267615  | Hs.38022  | ESTs                                      | 6.18 |
|    | 113009 | T23699    | Hs.7246   | ESTs                                      | 6.17 |
|    | 118835 | AA535246  | Hs.50852  | ESTs                                      | 6.16 |
| 45 | 125626 | AI038654  | Hs.180789 | S164 protein                              | 6.15 |
|    | 117086 | AA581602  | Hs.41840  | ESTs                                      | 6.14 |
|    | 101960 | AL036287  | Hs.194662 | calponin 3, acidic                        | 6.13 |
|    | 104488 | N56191    | Hs.106511 | protocadherin 17                          | 6.13 |
|    | 127695 | AA714731  | Hs.291457 | ESTs, Weakly similar to heterogeneous ri  | 6.13 |
| 50 | 127894 | AL121053  | Hs.5534   | Homo sapiens cD FLJ12961 fis, clone NT    | 6.13 |
|    | 113595 | T92056    | Hs.290240 | ESTs, Moderately similar to ALU2_HUMAN A  | 6.10 |
|    | 120784 | AW752101  | Hs.16580  | hypothetical protein FLJ11025             | 6.10 |
|    | 115004 | AA329340  | Hs.4867   | mannosyl (alpha-1,3-)-glycoprotein: beta- | 6.08 |
|    | 129740 | BE165866  | Hs.83623  | nuclear receptor subfamily 1, group 1, m  | 6.05 |
| 55 | 117483 | N72185    | Hs.44189  | ESTs                                      | 6.04 |
|    | 103815 | BE245294  | Hs.180789 | S164 protein                              | 6.03 |
|    | 122040 | AA847758  | Hs.111030 | ESTs                                      | 6.03 |
|    | 109638 | AW977747  | Hs.119120 | E3 ubiquitin ligase SMURF1                | 6.02 |
|    | 112727 | T91029    | Hs.15069  | ESTs                                      | 6.01 |
| 60 | 120273 | AA176688  | Hs.269284 | ESTs                                      | 6.00 |
|    | 122127 | AW207175  | Hs.106771 | ESTs                                      | 6.00 |
|    | 126046 | AA804957  | Hs.119840 | ESTs                                      | 5.99 |
|    | 119774 | AB032977  | Hs.6298   | KIAA1151 protein                          | 5.98 |
|    | 106265 | AA412176  | Hs.236463 | Homo sapiens mR; cD DKFZp586i0521 (f      | 5.98 |
| 65 | 111987 | NM_015310 | Hs.5763   | KIAA0942 protein                          | 5.98 |
|    | 123619 | AA602964  |           | gb:nc097c02.s1 NCI_CGAP_Pr2 Homo sapiens  | 5.96 |
|    | 128122 | AI267491  | Hs.160593 | ESTs                                      | 5.95 |
|    | 128473 | T78277    | Hs.100293 | O-linked N-acetylglucosamine (Glc) tr     | 5.95 |
|    | 102283 | AW161552  | Hs.83381  | guanine nucleotide binding protein 11     | 5.94 |
| 70 | 122468 | AA448172  | Hs.137687 | ESTs, Highly similar to K6B1_HUMAN RIBOS  | 5.93 |
|    | 101801 | M86407    | Hs.1216   | actinin, alpha 3                          | 5.93 |
|    | 107059 | BE614410  | Hs.23044  | RAD51 (S. cerevisiae) homolog (E coli Re  | 5.92 |
|    | 108908 | AA136669  | Hs.10848  | KIAA0187 gene product                     | 5.90 |
|    | 121470 | AA558958  | Hs.324751 | ESTs                                      | 5.90 |
| 75 | 131938 | AF176085  | Hs.34956  | neural polypyrimidine tract binding prot  | 5.89 |
|    | 109613 | H47315    | Hs.27519  | ESTs                                      | 5.89 |
|    | 109384 | AA219172  | Hs.86849  | ESTs                                      | 5.88 |
|    | 118559 | N68456    | Hs.49519  | ESTs                                      | 5.88 |
|    | 102010 | U02687    | Hs.385    | fms-related tyrosine kase 3               | 5.86 |
| 80 | 105921 | AA421973  | Hs.169119 | ESTs, Weakly similar to T25731 hypotheti  | 5.85 |
|    | 124298 | H91679    |           | gb:yy04a07.s1 Soares fetal liver spleen   | 5.85 |
|    | 120827 | AA382525  | Hs.132967 | Human EST clone 122887 mariner transpos   | 5.84 |
|    | 103331 | AI825463  | Hs.147996 | protein kase, X-linked                    | 5.82 |
|    | 135052 | AL136653  | Hs.93675  | decidual protein induced by progesterone  | 5.80 |
|    | 115219 | AA262776  | Hs.269314 | Homo sapiens cD FLJ14123 fis, clone MA    | 5.78 |
|    | 121899 | R55341    | Hs.50421  | KIAA0203 gene product                     | 5.78 |
|    | 135217 | AA453880  | Hs.9658   | hypothetical protein FLJ11790             | 5.77 |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 123973 | C14805    |           | gb:C14805 Clontech human aorta polyA+ mR | 5.77 |
|    | 112605 | R79374    | Hs.29852  | ESTs                                     | 5.76 |
|    | 110151 | H18835    | Hs.31608  | hypothetical protein FLJ20041            | 5.75 |
| 5  | 129889 | AA810932  | Hs.131899 | ESTs, Weakly similar to T00370 hypotheti | 5.75 |
|    | 102638 | U67319    | Hs.9216   | caspase 7, apoptosis-related cysteine pr | 5.73 |
|    | 121501 | AA470687  | Hs.104772 | ESTs                                     | 5.73 |
|    | 124921 | R93082    | Hs.332635 | ESTs                                     | 5.70 |
|    | 109850 | AI150548  | Hs.23155  | ESTs                                     | 5.70 |
| 10 | 120594 | AW136478  | Hs.5094   | ring finger protein 10                   | 5.70 |
|    | 126433 | AA325606  |           | gb:EST28707 Cerebellum II Homo sapiens c | 5.70 |
|    | 100455 | AW888941  | Hs.75789  | N-myc downstream regulated               | 5.69 |
|    | 106565 | NM_014892 | Hs.227602 | KIAA1116 protein                         | 5.68 |
|    | 120912 | AA376690  | Hs.187650 | ESTs                                     | 5.68 |
| 15 | 127209 | AA305023  | Hs.81964  | SEC24 (S. cerevisiae) related gene famil | 5.68 |
|    | 107606 | AF207989  | Hs.330425 | Homo sapiens, Similar to G protein-coupl | 5.67 |
|    | 106597 | AI091277  | Hs.302634 | frizzled (Drosophila) homolog 8          | 5.66 |
|    | 102126 | AW950870  | Hs.78961  | protein phosphatase 1, regulatory (inhib | 5.65 |
|    | 100064 |           |           | AFFX control - TrpX-3                    | 5.63 |
| 20 | 108758 | AA127395  | Hs.222414 | ESTs                                     | 5.63 |
|    | 101392 | NM_002507 | Hs.1827   | nerve growth factor receptor (TNFR super | 5.61 |
|    | 102211 | BE314524  | Hs.78776  | putative transmembrane protein           | 5.60 |
|    | 107427 | W26975    | Hs.46736  | hypothetical protein FLJ23476            | 5.60 |
|    | 135175 | M91463    | Hs.95958  | solute carrier family 2 (facilitated glu | 5.60 |
| 25 | 111764 | AI420368  | Hs.290259 | ESTs, Weakly similar to I38022 hypotheti | 5.58 |
|    | 119405 | T93865    | Hs.91085  | ESTs                                     | 5.58 |
|    | 126464 | AI990046  | Hs.54780  | transcription termination factor, R po   | 5.58 |
|    | 133865 | AB011155  | Hs.170290 | discs, large (Drosophila) homolog 5      | 5.58 |
|    | 123255 | AA830335  | Hs.105273 | ESTs                                     | 5.57 |
|    | 122861 | AA335721  | Hs.119394 | ESTs                                     | 5.56 |
| 30 | 112046 | AA383343  | Hs.22116  | CDC14 (cell division cycle 14, S. cerevi | 5.55 |
|    | 132906 | BE613337  | Hs.234896 | geminin                                  | 5.55 |
|    | 109001 | AI055548  | Hs.72116  | hypothetical protein FLJ20992 similar to | 5.55 |
|    | 115816 | BE042915  | Hs.287588 | Homo sapiens cD FLJ13675 fis, clone PL   | 5.55 |
| 35 | 128401 | R01865    | Hs.268586 | ESTs                                     | 5.53 |
|    | 129296 | AI051967  | Hs.110122 | ESTs                                     | 5.53 |
|    | 120314 | T10013    | Hs.221040 | HBS1 (S. cerevisiae)-like                | 5.51 |
|    | 132815 | AI815189  | Hs.57475  | sex comb on midleg homolog 1             | 5.50 |
|    | 113983 | W87415    | Hs.55296  | HLA-B associated transcript-1            | 5.50 |
| 40 | 105002 | AA224244  | Hs.182704 | ESTs, Moderately similar to altretivel   | 5.49 |
|    | 132025 | AA011117  | Hs.3745   | milk fat globule-EGF factor 8 protein    | 5.49 |
|    | 110732 | AW070838  | Hs.174174 | KIAA0601 protein                         | 5.48 |
|    | 112891 | T03927    | Hs.293147 | ESTs, Moderately similar to A46010 X-lin | 5.48 |
|    | 126758 | AI559444  | Hs.293960 | ESTs                                     | 5.48 |
| 45 | 129426 | AF077953  | Hs.111323 | Protein inhibitor of activated STAT X    | 5.47 |
|    | 103217 | NM_001841 | Hs.73037  | cannabinoid receptor 2 (macrophage)      | 5.46 |
|    | 132261 | U80743    | Hs.306094 | trinucleotide repeat containing 12       | 5.45 |
|    | 105586 | AA865118  | Hs.191538 | ESTs                                     | 5.43 |
|    | 109454 | AA232255  | Hs.295232 | ESTs, Moderately similar to A46010 X-lin | 5.43 |
| 50 | 113063 | W15573    | Hs.5027   | ESTs, Weakly similar to A47582 B-cell gr | 5.43 |
|    | 134092 | AA218558  | Hs.7905   | sorting nexin 9                          | 5.41 |
|    | 119316 | AI114630  | Hs.208334 | Homo sapiens cD: FLJ21874 fis, clone H   | 5.38 |
|    | 108019 | AI017773  | Hs.249159 | adrenergic, alpha-2A-, receptor          | 5.38 |
|    | 109421 | AW604652  | Hs.332442 | ESTs                                     | 5.38 |
| 55 | 111929 | AF027208  | Hs.112360 | prominin (mouse)-like 1                  | 5.38 |
|    | 119718 | W69216    | Hs.92848  | ESTs                                     | 5.38 |
|    | 106154 | BE540255  | Hs.6994   | Homo sapiens cD: FLJ22044 fis, clone H   | 5.35 |
|    | 108544 | W39433    | Hs.23971  | hypothetical protein DKFZp547N043        | 5.35 |
|    | 119580 | AL079310  | Hs.92260  | high-mobility group protein 2-like 1     | 5.35 |
| 60 | 126777 | AL157491  | Hs.145211 | Homo sapiens mR; cD DKFZp434K1111 (f     | 5.35 |
|    | 112944 | H18063    | Hs.13254  | ESTs                                     | 5.34 |
|    | 103149 | NM_006201 | Hs.171834 | PCTAIRE protein kisse 1                  | 5.34 |
|    | 132437 | AA152106  | Hs.4859   | cyclin L anti-6a                         | 5.33 |
|    | 103860 | AW976877  | Hs.38057  | ESTs                                     | 5.33 |
| 65 | 104865 | T79340    | Hs.22575  | B-cell CLL/lymphoma 6, member B (zinc fi | 5.33 |
|    | 129914 | NM_012421 | Hs.13321  | rearranged L-myc fusion sequence         | 5.33 |
|    | 130309 | AF067904  | Hs.15423  | hypothetical protein HDCMC04P            | 5.31 |
|    | 116312 | BE379794  | Hs.65403  | hypothetical protein                     | 5.30 |
|    | 124191 | T96509    | Hs.248549 | ESTs, Moderately similar to S65657 alpha | 5.28 |
| 70 | 125583 | AA195667  | Hs.86022  | ESTs                                     | 5.28 |
|    | 130591 | N59646    | Hs.169745 | crumbs (Drosophila) homolog 1            | 5.28 |
|    | 116355 | AA789133  | Hs.88650  | ESTs                                     | 5.26 |
|    | 115553 | AJ275986  | Hs.71414  | transcription factor (SMIF gene)         | 5.26 |
|    | 122802 | AI687303  | Hs.285529 | G protein-coupled receptor 49            | 5.25 |
| 75 | 128495 | NM_005904 | Hs.100602 | MAD (mothers against decapentaplegic, Dr | 5.24 |
|    | 117667 | U59305    | Hs.44708  | Ser-Thr protein kinase related to the my | 5.23 |
|    | 127890 | AA249334  | Hs.293902 | ESTs, Weakly similar to ISHUS protein d  | 5.22 |
|    | 134843 | AA428520  | Hs.90051  | progesterone binding protein             | 5.21 |
|    | 120968 | AA528283  | Hs.292737 | ESTs                                     | 5.21 |
| 80 | 102076 | BE299197  | Hs.179665 | cyclin-dependent kinase inhibitor 1A (p2 | 5.20 |
|    | 100934 | J03019    | Hs.99913  | adrenergic, beta-1-, receptor            | 5.20 |
|    | 112667 | BE538516  | Hs.15423  | hypothetical protein HDCMC04P            | 5.20 |
|    | 119304 | AW249266  | Hs.98493  | X-ray repair complementing defective rep | 5.20 |
|    | 131868 | AW408296  | Hs.33532  | zinc finger protein 151 (pHZ-67)         | 5.20 |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
| 5  | 105914 | AW245680  | Hs.9701   | growth arrest and D-damage-inducible,    | 5.18 |
|    | 102258 | NM_001546 | Hs.34853  | inhibitor of D binding 4, dominant neg   | 5.18 |
|    | 103850 | AA187101  | Hs.213194 | hypothetical protein MGC10895            | 5.18 |
|    | 112516 | T83909    |           | gb:yd67f10.r1 Soares fetal liver spleen  | 5.18 |
|    | 133640 | AW246428  | Hs.75355  | ubiquitin-conjugating enzyme E2N (homolo | 5.18 |
| 10 | 135180 | D90070    | Hs.96     | phorbol-12-myristate-13-acetate-induced  | 5.18 |
|    | 135309 | AI564123  | Hs.42500  | ADP-ribosylation factor-like 5           | 5.18 |
|    | 134801 | S76825    | Hs.89695  | insulin receptor                         | 5.17 |
|    | 133362 | AK001519  | Hs.7194   | CGI-74 protein                           | 5.17 |
|    | 135206 | AB024703  | Hs.96334  | ring finger protein 11                   | 5.15 |
| 15 | 111480 | R06453    | Hs.19706  | ESTs                                     | 5.15 |
|    | 118466 | N66741    |           | gb:yz33g08.s1 Morton Fetal Cochlea Homo  | 5.15 |
|    | 125757 | AI274906  | Hs.166835 | ESTs, Highly similar to 1814460A p53-ass | 5.15 |
|    | 127140 | AI273507  | Hs.303966 | ESTs                                     | 5.15 |
|    | 109223 | AW000714  | Hs.65818  | ESTs                                     | 5.14 |
| 20 | 103656 | Z73497    | Hs.247802 | Human D sequence from clone U240C2 on    | 5.14 |
|    | 133388 | AW245631  | Hs.182447 | heterogeneous nuclear ribonucleoprotein  | 5.12 |
|    | 100511 | M76676    | Hs.116840 | ESTs                                     | 5.10 |
|    | 101941 | S77583    |           | gb:HERVK10/HUMMTV reverse transcriptase  | 5.10 |
|    | 109937 | AI084066  | Hs.20072  | myosin regulatory light chain interactin | 5.10 |
| 25 | 122996 | AI436216  | Hs.191715 | ESTs, Weakly similar to ZN91_HUMAN ZINC  | 5.10 |
|    | 128242 | AA992626  | Hs.269755 | ESTs, Moderately similar to ALU5_HUMAN A | 5.10 |
|    | 112374 | NM_016323 | Hs.26663  | cyclin-E binding protein 1               | 5.10 |
|    | 124506 | BE273688  | Hs.182447 | heterogeneous nuclear ribonucleoprotein  | 5.10 |
|    | 104216 | AB002313  | Hs.3989   | plexin B2                                | 5.09 |
| 30 | 135051 | AI272141  | Hs.83484  | SRY (sex determining region Y)-box 4     | 5.08 |
|    | 131629 | Z45794    | Hs.238809 | ESTs                                     | 5.08 |
|    | 111722 | R23924    | Hs.23596  | EST                                      | 5.07 |
|    | 107034 | AF257770  | Hs.20930  | poly(rC)-binding protein 4               | 5.06 |
|    | 110243 | H26683    |           | gb:y14g03.s1 Soares breast 2NbHBst Homo  | 5.05 |
| 35 | 125837 | AW968123  | Hs.333513 | small inducible cytokine subfamily E, me | 5.05 |
|    | 130300 | X58288    | Hs.154151 | protein tyrosine phosphatase, receptor t | 5.05 |
|    | 103967 | AI120051  | Hs.144700 | ephrin-B1                                | 5.04 |
|    | 112678 | AI184466  | Hs.33665  | ESTs                                     | 5.03 |
|    | 124963 | F06600    | Hs.101375 | Homo sapiens mR; cD DKFZp434H205 (fr     | 5.03 |
| 40 | 131379 | AK001123  | Hs.26176  | hypothetical protein FLJ10261            | 5.03 |
|    | 109451 | N32264    | Hs.44330  | ESTs                                     | 5.02 |
|    | 101396 | BE267931  | Hs.78996  | proliferating cell nuclear antigen       | 5.02 |
|    | 131038 | W87778    | Hs.169388 | hypothetical protein DKFZp761H2024       | 5.01 |
|    | 101208 | L25081    | Hs.179735 | ras homolog gene family, member C        | 5.01 |
| 45 | 104973 | NM_015310 | Hs.6763   | KIAA0942 protein                         | 4.99 |
|    | 103141 | X66113    | Hs.75584  | polymyositis/scleroderma autoantigen 2 ( | 4.98 |
|    | 111260 | AB033035  | Hs.51965  | KIAA1209 protein                         | 4.98 |
|    | 128142 | T67162    | Hs.135127 | ESTs, Weakly similar to unmed protein    | 4.98 |
|    | 113857 | AW243158  | Hs.5297   | DKFZP564A2416 protein                    | 4.96 |
| 50 | 105292 | AF128542  | Hs.166846 | polymerase (D directed), epsilon         | 4.96 |
|    | 114341 | AF270491  | Hs.28249  | hepatocellular carcinoma-associated anti | 4.95 |
|    | 100615 | W32474    | Hs.301746 | RAP2A, member of RAS oncogene family     | 4.95 |
|    | 103208 | AW411340  | Hs.31314  | retinoblastoma-binding protein 7         | 4.95 |
|    | 121121 | AA399371  | Hs.189095 | similar to SALL1 (sal (Drosophila)-like  | 4.95 |
| 55 | 125321 | T86652    | Hs.178294 | ESTs                                     | 4.95 |
|    | 101145 | L13210    | Hs.79339  | lectin, galactoside-binding, soluble, 3  | 4.95 |
|    | 100551 | M73980    | Hs.129053 | Homo sapiens NOTCH 1 (N1) mR, complete   | 4.93 |
|    | 126182 | AA721331  | Hs.293771 | ESTs                                     | 4.93 |
|    | 127925 | AA805151  | Hs.3628   | mitogen-activated protein kinase         | 4.93 |
| 60 | 133969 | AA569112  | Hs.78     | GA-binding protein transcription factor, | 4.93 |
|    | 120873 | AA358015  |           | gb:EST66864 Fetal lung III Homo sapiens  | 4.92 |
|    | 125219 | AI804331  | Hs.99423  | ATP-dependent R helicase                 | 4.91 |
|    | 102790 | BE245277  | Hs.154196 | E4F transcription factor 1               | 4.90 |
|    | 129486 | NM_005754 | Hs.220689 | Ras-GTPase-activating protein SH3-domain | 4.90 |
| 65 | 130381 | L47345    | Hs.155202 | transcription elongating factor B (SII)  | 4.89 |
|    | 132389 | AA310393  | Hs.190044 | ESTs                                     | 4.88 |
|    | 100250 | D38491    | Hs.322478 | KIAA0117 protein                         | 4.88 |
|    | 109585 | N59650    | Hs.27252  | ESTs                                     | 4.88 |
|    | 111803 | R11529    | Hs.20634  | EST                                      | 4.88 |
| 70 | 120514 | AA258335  |           | gb:zr59b02.s1 Soares_NhHMPu_S1 Homo sapi | 4.88 |
|    | 130314 | NM_014674 | Hs.154332 | KIAA0212 gene product                    | 4.86 |
|    | 108958 | AF142482  | Hs.203846 | TEA domain family member 3               | 4.86 |
|    | 126603 | W86610    | Hs.185736 | ESTs                                     | 4.85 |
|    | 100406 | AI962060  | Hs.118397 | AE-binding protein 1                     | 4.85 |
| 75 | 116238 | AV660717  | Hs.47144  | DKFZP586N0819 protein                    | 4.84 |
|    | 105288 | N99673    | Hs.3585   | ESTs, Weakly similar to AF126743 1 DJ    | 4.83 |
|    | 118753 | AA346206  | Hs.50471  | ESTs, Weakly similar to T14267 Xin prote | 4.82 |
|    | 113070 | AB032977  | Hs.6298   | KIAA1151 protein                         | 4.81 |
|    | 107908 | AF087999  | Hs.42826  | ESTs                                     | 4.80 |
| 80 | 119678 | AI658666  | Hs.6106   | R binding motif protein 4                | 4.80 |
|    | 100415 | D86970    | Hs.75822  | TGFB1-induced anti-apoptotic factor 1    | 4.79 |
|    | 126360 | F12374    |           | gb:HSC39B101 normalized infant brain cDN | 4.78 |
|    | 133101 | AK000299  | Hs.180952 | dyctin 4 (p62)                           | 4.78 |
|    | 103507 | AJ000512  | Hs.296323 | serum/glucocorticoid regulated kinase    | 4.78 |
|    | 107666 | AA010611  | Hs.60418  | EST                                      | 4.78 |
|    | 108030 | AI378523  | Hs.62011  | ESTs                                     | 4.78 |
|    | 131479 | D86181    | Hs.273    | galactosylceramidase (Krabbe disease)    | 4.78 |

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|----|--------|-----------|-----------|---|------|
|    | 133140 | AF180681  | Hs.6582   | Rho guanine exchange factor (GEF) 12      | 4.78 |
|    | 134654 | AK001741  | Hs.8739   | hypothetical protein FLJ10879             | 4.78 |
|    | 106288 | AB037742  | Hs.24336  | KIAA1321 protein                          | 4.76 |
| 5  | 101524 | NM_000448 | Hs.73958  | recombination activating gene 1           | 4.75 |
|    | 113095 | AA828380  | Hs.126733 | ESTs                                      | 4.75 |
|    | 114924 | AI338053  | Hs.87329  | HSPC072 protein                           | 4.75 |
|    | 127543 | AK000787  | Hs.157392 | Homo sapiens cD FLJ20780 fis, clone CO    | 4.75 |
|    | 115886 | AW082629  | Hs.52081  | KIAA0867 protein                          | 4.75 |
| 10 | 101382 | AU076772  | Hs.1279   | complement component 1, r subcomponent    | 4.74 |
|    | 126509 | R47400    | Hs.23850  | ESTs                                      | 4.74 |
|    | 127930 | AA809672  | Hs.123304 | ESTs                                      | 4.73 |
|    | 127824 | AI911516  | Hs.127811 | ESTs                                      | 4.73 |
|    | 110049 | H12449    | Hs.31159  | EST, Weakly similar to ALUB_HUMAN !!!! A  | 4.73 |
| 15 | 127115 | H77859    | Hs.65450  | reticulin 4                               | 4.73 |
|    | 104727 | N81203    | Hs.20047  | zinc finger protein, subfamily 2A (FYVE   | 4.72 |
|    | 127532 | AJ003429  |           | gb:AJ003429 Selected chromosome 21 cD     | 4.71 |
|    | 127304 | AI741577  | Hs.99962  | proteoglycan 2, bone marrow (tural kil    | 4.70 |
|    | 105409 | AW505076  | Hs.301855 | DiGeorge syndrome critical region gene 8  | 4.70 |
| 20 | 114969 | AW162998  | Hs.24684  | KIAA1376 protein                          | 4.70 |
|    | 115125 | AA193588  | Hs.85888  | ESTs                                      | 4.70 |
|    | 118348 | AW408586  | Hs.91052  | ESTs, Moderately similar to ALU5_HUMAN A  | 4.70 |
|    | 123130 | AA487200  |           | gb:ab19f02.s1 Stratagene lung (937210) H  | 4.70 |
|    | 130881 | AA809875  | Hs.25933  | ESTs                                      | 4.70 |
| 25 | 132074 | AA478486  | Hs.3652   | KIAA0368 protein                          | 4.70 |
|    | 106897 | AF039023  | Hs.167496 | RAN binding protein 6                     | 4.69 |
|    | 131121 | AA120865  | Hs.23136  | ESTs                                      | 4.69 |
|    | 116046 | BE395293  | Hs.94491  | hypothetical protein FLJ20297             | 4.68 |
|    | 112868 | AW388359  | Hs.10667  | ESTs                                      | 4.68 |
| 30 | 116877 | AA708958  | Hs.168732 | ESTs                                      | 4.68 |
|    | 131241 | BE501914  | Hs.24654  | Homo sapiens cD FLJ11640 fis, clone HE    | 4.68 |
|    | 132027 | AF151020  | Hs.181444 | hypothetical protein                      | 4.68 |
|    | 133323 | BE336654  | Hs.70937  | H3 histone family, member A               | 4.68 |
|    | 114269 | AA176769  | Hs.23450  | mitochondrial ribosomal protein S25       | 4.67 |
| 35 | 122713 | AI089443  | Hs.99436  | ESTs                                      | 4.67 |
|    | 133571 | BE515037  | Hs.177556 | melanoma antigen, family D, 1             | 4.66 |
|    | 134453 | AI272141  | Hs.83484  | SRY (sex determining region Y)-box 4      | 4.66 |
|    | 115510 | BE299339  | Hs.72249  | three-PDZ containing protein similar to   | 4.66 |
|    | 115322 | L08895    | Hs.78995  | MADS box transcription enhancer factor 2  | 4.66 |
| 40 | 129315 | NM_014563 | Hs.174038 | spondyloepiphyseal dysplasia, late        | 4.65 |
|    | 104674 | AI935962  | Hs.26289  | ESTs                                      | 4.65 |
|    | 106276 | AA625947  | Hs.25750  | ESTs                                      | 4.65 |
|    | 108216 | AA524743  | Hs.44883  | ESTs                                      | 4.65 |
|    | 120376 | AA227469  |           | gb:zr18a07.s1 Stratagene NT2 neuro pr     | 4.65 |
| 45 | 121743 | AA397636  |           | gb:zt79e09.r1 Soares_testis_NHT Homo sap  | 4.65 |
|    | 128011 | AI347067  | Hs.124636 | ESTs                                      | 4.65 |
|    | 123454 | AA888510  | Hs.112496 | ESTs                                      | 4.64 |
|    | 103409 | NM_004454 | Hs.43697  | ets variant gene 5 (ets-related molecule  | 4.64 |
|    | 120484 | AA253170  | Hs.96473  | EST                                       | 4.63 |
| 50 | 127046 | AA321948  | Hs.293968 | ESTs                                      | 4.63 |
|    | 133184 | AA001021  | Hs.6685   | thyroid hormone receptor interactor 8     | 4.63 |
|    | 123184 | BE247767  | Hs.18166  | KIAA0870 protein                          | 4.62 |
|    | 106627 | AK000706  | Hs.15125  | hypothetical protein FLJ20699             | 4.61 |
|    | 115475 | AB033085  | Hs.40193  | hypothetical protein KIAA1259             | 4.61 |
| 55 | 119468 | AI911535  | Hs.6657   | hypothetical protein bK1048E9.5           | 4.59 |
|    | 133662 | BE409053  | Hs.299629 | peroxisomal long-chain acyl-coA thioeste  | 4.58 |
|    | 113941 | AA531016  | Hs.22399  | hypothetical protein FLJ14824             | 4.58 |
|    | 131590 | R46277    | Hs.250638 | Homo sapiens mR full length insert cDN    | 4.58 |
|    | 128795 | AA531287  | Hs.105805 | ESTs                                      | 4.58 |
| 60 | 116480 | C14098    | Hs.169476 | glyceraldehyde-3-phosphate dehydrogese    | 4.58 |
|    | 111713 | C75253    | Hs.220950 | ESTs                                      | 4.58 |
|    | 113721 | AF143885  | Hs.18190  | EST                                       | 4.57 |
|    | 111657 | R07364    | Hs.268667 | ESTs, Weakly similar to ALU1_HUMAN ALU S  | 4.56 |
|    | 102009 | BE245149  | Hs.82643  | protein tyrosine kase 9                   | 4.55 |
| 65 | 135242 | AI583187  | Hs.9700   | cyclin E1                                 | 4.55 |
|    | 127560 | BE548749  | Hs.148016 | ESTs                                      | 4.55 |
|    | 109785 | AB011131  | Hs.12376  | piccolo (presynaptic cytomatrix protein)  | 4.53 |
|    | 109700 | F09609    |           | gb:HSC33H092 normalized infant brain cDN  | 4.53 |
|    | 124882 | AI698652  | Hs.101539 | ESTs                                      | 4.53 |
| 70 | 131765 | AW381270  | Hs.194110 | hypothetical protein PRO2730              | 4.53 |
|    | 115684 | NM_006577 | Hs.284204 | ESTs, Highly similar to beta-1,3-N-acety  | 4.52 |
|    | 102034 | AI903474  | Hs.230    | fibromodulin                              | 4.52 |
|    | 109776 | R43665    | Hs.12257  | ESTs                                      | 4.50 |
|    | 111650 | R16722    | Hs.124246 | ESTs                                      | 4.50 |
| 75 | 132993 | AB023154  | Hs.62264  | KIAA0937 protein                          | 4.49 |
|    | 129017 | AA115333  | Hs.107968 | ESTs                                      | 4.49 |
|    | 132902 | AI936442  | Hs.59838  | hypothetical protein FLJ10806             | 4.48 |
|    | 114814 | AB006622  | Hs.182536 | KIAA0284 protein                          | 4.48 |
|    | 120839 | AA348913  |           | gb:EST55442 Infant adrel gland II Homo    | 4.48 |
| 80 | 101434 | AV650066  | Hs.1430   | coagulation factor XI (plasma thrombopla  | 4.48 |
|    | 102018 | U03398    | Hs.1524   | tumor necrosis factor (ligand) superfamit | 4.48 |
|    | 104619 | AA001635  | Hs.287414 | transcriptioal intermediary factor 1 ga   | 4.48 |
|    | 106719 | AA931198  | Hs.238928 | HT002 protein; hypertension-related calc  | 4.48 |
|    | 126020 | H79863    | Hs.114243 | ESTs                                      | 4.48 |

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| 5  | 119899 | AI057404  | Hs.58698  | ESTs                                     | 4.47 |
|    | 115682 | AW245047  | Hs.136164 | cutaneous T-cell lymphoma-associated tum | 4.46 |
|    | 125695 | W22529    | Hs.30942  | ephrin-B2                                | 4.46 |
|    | 105715 | BE621800  | Hs.29444  | putative small membrane protein NID67    | 4.45 |
|    | 117169 | R87866    | Hs.95120  | ESTs, Weakly similar to HZHU hemoglobin  | 4.45 |
| 10 | 102757 | AW955454  | Hs.30942  | ephrin-B2                                | 4.45 |
|    | 120637 | AA811804  |           | gb:cb39a05.s1 NCL_CGAP_GCB1 Homo sapiens | 4.45 |
|    | 131579 | N62922    | Hs.29088  | ESTs                                     | 4.45 |
|    | 135287 | U82670    | Hs.9786   | zinc finger protein 275                  | 4.45 |
|    | 112540 | R69751    |           | gb:yl40a10.s1 Soares placenta Nb2HP Homo | 4.45 |
| 15 | 125724 | AL360190  | Hs.295978 | Homo sapiens mR full length insert cDN   | 4.44 |
|    | 115498 | AA291070  |           | gb:zs46a08.s1 NCL_CGAP_GCB1 Homo sapiens | 4.43 |
|    | 102263 | U29171    | Hs.75852  | casein kise 1, delta                     | 4.43 |
|    | 124312 | H94647    | Hs.102329 | ESTs                                     | 4.43 |
|    | 112366 | AF035318  | Hs.12533  | Homo sapiens clone 23705 mR sequence     | 4.43 |
| 20 | 115955 | AF263613  | Hs.44198  | intracellular membrane-associated calciu | 4.43 |
|    | 103562 | NM_002702 | Hs.2815   | POU domain, class 6, transcription facto | 4.42 |
|    | 100169 | AL037228  | Hs.82043  | D123 gene product                        | 4.40 |
|    | 108928 | AA143802  | Hs.71781  | ESTs                                     | 4.40 |
|    | 125908 | AF265555  | Hs.250646 | baculoviral IAP repeat-containing 6      | 4.40 |
| 25 | 126996 | BE161065  | Hs.167531 | methylcrotonoyl-Coenzyme A carboxylase 2 | 4.40 |
|    | 129512 | T88845    | Hs.112200 | ESTs, Weakly similar to ALU7_HUMAN ALU S | 4.40 |
|    | 134570 | U68615    | Hs.172280 | SWI/SNF related, matrix associated, acti | 4.40 |
|    | 135073 | W559566   | Hs.94030  | Homo sapiens mR; cD DKFZp586E1624 (f     | 4.40 |
|    | 105011 | BE091926  | Hs.16244  | mitotic spindle coiled-coil related prot | 4.40 |
| 30 | 128793 | AB011125  | Hs.105749 | KIAA0553 protein                         | 4.40 |
|    | 107292 | BE166479  | Hs.4789   | Homo sapiens serologically defined breas | 4.38 |
|    | 126144 | H84455    | Hs.40639  | ESTs                                     | 4.38 |
|    | 130783 | X07282    | Hs.171495 | retinoic acid receptor, beta             | 4.38 |
|    | 135192 | U83993    | Hs.321709 | purinergic receptor P2X, ligand-gated io | 4.38 |
| 35 | 100284 | D43767    | Hs.66742  | small inducible cytokine subfamily A (Cy | 4.37 |
|    | 117269 | N21621    | Hs.91142  | KH-type splicing regulatory protein (FUS | 4.36 |
|    | 104261 | AW248364  | Hs.5409   | R polymerase I subunit                   | 4.35 |
|    | 108609 | BE409857  | Hs.69499  | hypothetical protein                     | 4.35 |
|    | 126319 | D81689    |           | gb:HUM184E05B Human fetal brain (TFujiwa | 4.35 |
| 40 | 127445 | AA906286  | Hs.193942 | ESTs                                     | 4.35 |
|    | 130772 | BE270640  | Hs.19192  | cyclin-dependent kise 2                  | 4.35 |
|    | 134625 | AA977638  | Hs.184389 | ESTs                                     | 4.35 |
|    | 135397 | L14922    | Hs.166563 | replication factor C (activator 1) 1 (14 | 4.35 |
|    | 128070 | AA886944  | Hs.303908 | ESTs                                     | 4.35 |
| 45 | 135046 | AI494054  | Hs.93589  | hypothetical protein DKFZp564B1162       | 4.33 |
|    | 101881 | NM_004957 | Hs.754    | folylpolyglutamate synthase              | 4.33 |
|    | 129638 | AB007863  | Hs.185140 | KIAA0403 protein                         | 4.33 |
|    | 130974 | NM_003528 | Hs.2178   | H2B histone family, member Q             | 4.33 |
|    | 107763 | AA018220  | Hs.106730 | chromosome 22 open reading frame 3       | 4.32 |
| 50 | 129618 | T71092    | Hs.172572 | hypothetical protein FLJ20093            | 4.31 |
|    | 129407 | AL137597  | Hs.11114  | hypothetical protein dJ1181N3.1          | 4.30 |
|    | 110846 | BE277343  | Hs.297875 | endoplasmic reticulum chaperone SIL1, ho | 4.30 |
|    | 111433 | R01452    | Hs.40193  | hypothetical protein KIAA1259            | 4.30 |
|    | 114860 | AL157545  | Hs.42179  | bromodomain and PHD finger containing, 3 | 4.30 |
| 55 | 115853 | AW978561  | Hs.191548 | ESTs                                     | 4.30 |
|    | 116165 | AI184751  | Hs.75874  | pregnancy-associated plasma protein A    | 4.30 |
|    | 126911 | AA428049  | Hs.1501   | syndecan 2 (heparan sulfate proteoglycan | 4.30 |
|    | 131230 | NM_005865 | Hs.274407 | protease, serine, 16 (thymus)            | 4.30 |
|    | 100349 | D64110    | Hs.77311  | BTG family, member 3                     | 4.29 |
| 60 | 100175 | BE258769  | Hs.32500  | acetyl-Coenzyme A acyltransferase 2 (mil | 4.29 |
|    | 105335 | AW291165  | Hs.25447  | ESTs                                     | 4.29 |
|    | 122507 | BE567620  | Hs.99210  | ESTs                                     | 4.28 |
|    | 105397 | AA814807  | Hs.7395   | hypothetical protein FLJ23182            | 4.28 |
|    | 133674 | AW851121  | Hs.75497  | Homo sapiens cD: FLJ22139 fis, clone H   | 4.28 |
| 65 | 102826 | NM_007274 | Hs.8679   | cytosolic acyl coenzyme A thioester hydr | 4.28 |
|    | 103272 | NM_006680 | Hs.2838   | malic enzyme 3, DP(+)-dependent, mitoc   | 4.28 |
|    | 111887 | R38635    | Hs.12328  | KIAA1005 protein                         | 4.28 |
|    | 120336 | N85785    | Hs.181165 | eukaryotic translation elongation factor | 4.28 |
|    | 133736 | D49958    | Hs.75819  | glycoprotein M6A                         | 4.28 |
| 70 | 130356 | AF127577  | Hs.155017 | nuclear receptor interacting protein 1   | 4.27 |
|    | 119030 | AW054922  | Hs.53478  | Homo sapiens cD FLJ12366 fis, clone MA   | 4.27 |
|    | 106758 | AB014564  | Hs.22616  | KIAA0654 protein                         | 4.25 |
|    | 109709 | F09749    | Hs.187405 | ESTs                                     | 4.25 |
|    | 110463 | H52931    | Hs.165067 | ESTs                                     | 4.25 |
| 75 | 124472 | N52517    | Hs.102670 | EST                                      | 4.25 |
|    | 109770 | R40322    | Hs.248420 | ESTs, Moderately similar to A47582 B cel | 4.24 |
|    | 131487 | F13036    | Hs.27373  | Homo sapiens mR; cD DKFZp564O1763 (f     | 4.23 |
|    | 107216 | D51069    | Hs.211579 | melanoma cell adhesion molecule          | 4.23 |
|    | 123562 | AA177038  | Hs.190065 | ESTs                                     | 4.23 |
| 80 | 125986 | W02410    | Hs.205555 | ESTs                                     | 4.23 |
|    | 126221 | N20514    | Hs.172965 | ESTs                                     | 4.23 |
|    | 127092 | T26985    |           | gb:NIBT065H01R Infant brain, LLNL array  | 4.23 |
|    | 132349 | AW975654  | Hs.181286 | serine protease inhibitor, Kazal type 1  | 4.23 |
|    | 118946 | N92834    |           | gb:zb67f03.s1 Soares_fetal_lung_NbHL19W  | 4.22 |
|    | 101531 | AI199711  | Hs.576    | fucosidase, alpha-L- 1, tissue           | 4.21 |
|    | 105322 | T87179    | Hs.16346  | ESTs, Weakly similar to S57447 HPBRIL-7  | 4.21 |
|    | 104219 | AB002323  | Hs.7720   | dynein, cytoplasmic, heavy polypeptide 1 | 4.20 |



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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
| 5  | 102825 | BE262386  | Hs.7137   | clones 23667 and 23775 zinc finger prote | 4.20 |
|    | 103571 | AI675749  | Hs.211608 | nucleoporin 153kD                        | 4.20 |
|    | 106942 | AA995351  | Hs.31314  | retinoblastoma-binding protein 7         | 4.20 |
|    | 112685 | R87650    | Hs.33439  | ESTs, Weakly similar to ALU1_HUMAN ALU S | 4.20 |
|    | 123107 | AA225048  | Hs.104207 | ESTs                                     | 4.20 |
| 10 | 132659 | Z75190    | Hs.54481  | low density lipoprotein receptor-related | 4.20 |
|    | 130084 | AI929377  | Hs.173724 | creatine kinase, brain                   | 4.19 |
|    | 114553 | BE219860  | Hs.22505  | hypothetical protein FLJ10159            | 4.18 |
|    | 129528 | U38945    | Hs.1174   | cyclin-dependent kinase inhibitor 2A (me | 4.18 |
|    | 102266 | U29725    | Hs.3080   | mitogen-activated protein kinase 7       | 4.18 |
| 15 | 110637 | AI241470  | Hs.268982 | ESTs                                     | 4.18 |
|    | 127520 | T51239    |           | gb:yt20d12.s1 Stratagene fetal spleen (9 | 4.18 |
|    | 130322 | NM_014247 | Hs.154545 | PDZ domain containing guanine nucleotide | 4.17 |
|    | 104768 | D82319    | Hs.11056  | RALBP1 protein                           | 4.17 |
|    | 123360 | AA532718  | Hs.178604 | ESTs                                     | 4.17 |
| 20 | 133110 | AA808177  | Hs.65228  | ESTs                                     | 4.16 |
|    | 130923 | H96115    | Hs.21293  | UDP-N-acetylglucosamine pyrophosphorylas | 4.16 |
|    | 109878 | BE620775  | Hs.4866   | Homo sapiens cD FLJ14387 fis, clone HE   | 4.16 |
|    | 119265 | BE539706  | Hs.285363 | ESTs                                     | 4.16 |
|    | 124214 | H58608    | Hs.151323 | ESTs                                     | 4.15 |
| 25 | 106193 | AA057478  | Hs.23272  | ESTs                                     | 4.15 |
|    | 105169 | BE245294  | Hs.180789 | S164 protein                             | 4.15 |
|    | 132304 | AA610002  | Hs.44296  | hypothetical protein FLJ22324            | 4.15 |
|    | 131600 | NM_004377 | Hs.29331  | camitine palmitoyltransferase I, muscle  | 4.14 |
|    | 131365 | M93415    | Hs.26014  | activin A receptor, type II              | 4.14 |
| 30 | 121993 | AW297880  | Hs.98661  | ESTs                                     | 4.14 |
|    | 110779 | AI391472  | Hs.12561  | ESTs, Highly similar to C212_HUMAN 28.3  | 4.13 |
|    | 126383 | AB032977  | Hs.6298   | KIAA1151 protein                         | 4.13 |
|    | 104446 | AF084555  | Hs.7351   | cyclic AMP phosphoprotein, 19 kD         | 4.13 |
|    | 131475 | AA992841  | Hs.27263  | KIAA1458 protein                         | 4.13 |
| 35 | 128933 | NM_002050 | Hs.334695 | GATA-binding protein 2                   | 4.12 |
|    | 113141 | AI493276  | Hs.9187   | ESTs                                     | 4.11 |
|    | 134833 | L20965    | Hs.89901  | phosphodiesterase 4A, cAMP-specific (dun | 4.11 |
|    | 106461 | AI630759  | Hs.17481  | Homo sapiens clone 24606 mR sequence     | 4.10 |
|    | 128056 | AI990131  | Hs.276973 | potassium large conductance calcium-acti | 4.10 |
| 40 | 114757 | AW970579  | Hs.291031 | ESTs                                     | 4.10 |
|    | 134653 | AI765883  | Hs.87385  | ESTs                                     | 4.09 |
|    | 100472 | D90084    | Hs.1023   | pyruvate dehydrogenase (lipoamide) alpha | 4.08 |
|    | 103102 | X61177    | Hs.69876  | interleukin 5 receptor, alpha            | 4.08 |
|    | 106779 | BE276013  | Hs.172364 | Homo sapiens mR for FLJ00086 protein,    | 4.08 |
| 45 | 133615 | M62843    | Hs.75236  | ELAV (embryonic lethal, abnormal vision, | 4.08 |
|    | 130178 | U20982    | Hs.1516   | insulin-like growth factor-binding prote | 4.07 |
|    | 124659 | AI680737  | Hs.289068 | Homo sapiens cD FLJ11918 fis, clone HE   | 4.07 |
|    | 127861 | AW295020  | Hs.198529 | ESTs                                     | 4.07 |
|    | 112129 | AB037715  | Hs.183639 | hypothetical protein FLJ10210            | 4.07 |
| 50 | 100918 | AK001335  | Hs.31137  | protein tyrosine phosphatase, receptor t | 4.06 |
|    | 124677 | R01073    |           | gb:ye84c03.s1 Soares fetal liver spleen  | 4.05 |
|    | 102722 | F13271    | Hs.79981  | Human clone 23560 mR sequence            | 4.05 |
|    | 111117 | AB037721  | Hs.173871 | KIAA1300 protein                         | 4.05 |
|    | 122506 | AA449120  | Hs.99209  | ESTs                                     | 4.05 |
| 55 | 126392 | AI356294  | Hs.3280   | caspase 6, apoptosis-related cysteine pr | 4.05 |
|    | 130760 | AW379130  | Hs.18953  | phosphodiesterase 9A                     | 4.05 |
|    | 104220 | AB002324  | Hs.301094 | KIAA0326 protein                         | 4.05 |
|    | 112774 | R95770    | Hs.35455  | ESTs                                     | 4.04 |
|    | 111128 | AW505364  | Hs.19074  | LATS (large tumor suppressor, Drosophila | 4.04 |
| 60 | 113146 | BE151985  | Hs.5722   | hypothetical protein FLJ23316            | 4.04 |
|    | 124940 | AF068846  | Hs.103804 | heterogeneous nuclear ribonucleoprotein  | 4.03 |
|    | 105498 | H68279    | Hs.24937  | transformer-2 alpha (htra-2 alpha)       | 4.03 |
|    | 112631 | R82040    |           | gb:yl06b06.s1 Soares placenta Nb2HP Homo | 4.03 |
|    | 118244 | N62516    | Hs.48556  | ESTs                                     | 4.03 |
| 65 | 118720 | N73515    |           | gb:za49d07.s1 Soares fetal liver spleen  | 4.03 |
|    | 129232 | R98881    | Hs.109655 | sex comb on midleg (Drosophila)-like 1   | 4.03 |
|    | 134192 | H01345    | Hs.24139  | Homo sapiens cD: FLJ21317 fis, clone L   | 4.03 |
|    | 131893 | BE336886  | Hs.3416   | adipose differentiation-related protein  | 4.02 |
|    | 116793 | T77781    |           | gb:yd20a11.s1 Soares fetal liver spleen  | 4.02 |
| 70 | 125674 | AL036166  | Hs.323378 | coated vesicle membrane protein          | 4.01 |
|    | 116640 | X89984    | Hs.211563 | B-cell CLL/lymphoma 7A                   | 4.01 |
|    | 105057 | AA134233  | Hs.336942 | Homo sapiens cD: FLJ21488 fis, clone C   | 4.00 |
|    | 105158 | AW976357  | Hs.234545 | hypothetical protein NUF2R               | 4.00 |
|    | 116245 | AB033107  | Hs.42796  | KIAA1281 protein                         | 4.00 |
| 75 | 119946 | AA932283  | Hs.58925  | ESTs                                     | 4.00 |
|    | 121975 | AA740679  | Hs.98631  | ESTs                                     | 4.00 |
|    | 132037 | AA352702  | Hs.332541 | Homo sapiens, Similar to RIKEN cD 2700   | 4.00 |
|    | 133669 | NM_006925 | Hs.166975 | splicing factor, arginine/serine-rich 5  | 4.00 |
|    | 109468 | NM_015310 | Hs.6763   | KIAA0942 protein                         | 3.99 |
| 80 | 106829 | AW959933  | Hs.27099  | hypothetical protein FLJ23293 similar to | 3.99 |
|    | 134682 | AW882645  | Hs.88044  | sprouty (Drosophila) homolog 1 (antagoni | 3.98 |
|    | 105966 | AA142984  | Hs.5344   | adaptor-related protein complex 1, gamma | 3.98 |
|    | 100448 | AF234887  | Hs.57652  | cadherin, EGF LAG seven-pass G-type rece | 3.98 |
|    | 102589 | AU076728  | Hs.8867   | cysteine-rich, angiogenic inducer, 61    | 3.98 |
|    | 104146 | AW880614  | Hs.146381 | R binding motif protein, X chromosome    | 3.98 |
|    | 111465 | AI968256  | Hs.15470  | putative ring zinc finger protein NY-REN | 3.98 |
|    | 126499 | AK001779  | Hs.110445 | CGI-97 protein                           | 3.98 |

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|    | 134388 | AW405434  | Hs.82575  | small nuclear ribonucleoprotein polypept  | 3.98 |
|    | 105564 | BE616634  | Hs.288042 | hypothetical protein FLJ14299             | 3.97 |
|    | 115206 | AW183695  | Hs.186572 | ESTs                                      | 3.96 |
| 5  | 103853 | AF272390  | Hs.111782 | myosin 5C                                 | 3.96 |
|    | 110542 | H58373    | Hs.332938 | hypothetical protein MGC5370              | 3.96 |
|    | 106797 | AI768801  | Hs.169943 | Homo sapiens cD FLJ13569 fls, clone PL    | 3.96 |
|    | 130589 | AL110226  | Hs.16441  | DKFZP434H204 protein                      | 3.95 |
|    | 122788 | AI828638  | Hs.99514  | hypothetical protein FLJ20574             | 3.95 |
| 10 | 104518 | H20816    | Hs.112423 | Homo sapiens mR; cD DKFZp586i1420 (f      | 3.95 |
|    | 130640 | NM_004753 | Hs.17144  | short-chain dehydrogenase/reductase 1     | 3.95 |
|    | 110847 | N30169    | Hs.279807 | ESTs, Weakly similar to 2004399A chromos  | 3.95 |
|    | 116156 | AA461045  | Hs.50701  | ESTs                                      | 3.95 |
|    | 122096 | AA431162  | Hs.98690  | ESTs                                      | 3.95 |
|    | 122160 | AI769281  | Hs.97439  | ESTs                                      | 3.95 |
| 15 | 123930 | AA740878  | Hs.112982 | ESTs                                      | 3.95 |
|    | 126280 | Z19417    |           | gb:HSB26B122 STRATAGENE Human skeletal m  | 3.95 |
|    | 126547 | U47732    | Hs.84072  | transmembrane 4 superfamily member 3      | 3.95 |
|    | 134757 | AA913267  | Hs.211576 | IL2-inducible T-cell kise                 | 3.95 |
| 20 | 117296 | AL133427  | Hs.42506  | Homo sapiens mR full length insert cDN    | 3.95 |
|    | 112261 | AL050297  | Hs.300861 | ESTs, Highly similar to T08701 hypotheti  | 3.95 |
|    | 112268 | W39609    | Hs.22003  | solute carrier family 6 (neurotransmitte  | 3.94 |
|    | 131844 | AI419294  | Hs.324342 | ESTs                                      | 3.94 |
|    | 101607 | X60111    | Hs.1244   | CD9 antigen (p24)                         | 3.94 |
| 25 | 121613 | AA416879  | Hs.193195 | ESTs, Weakly similar to 2109260A B cell   | 3.93 |
|    | 115815 | AW905328  | Hs.180842 | ribosomal protein L13                     | 3.93 |
|    | 125684 | AW589427  | Hs.158849 | Homo sapiens cD: FLJ21663 fls, clone C    | 3.93 |
|    | 126783 | AA083531  |           | gb:zn09d10.s1 Stratagene hNT neuron (937  | 3.93 |
|    | 129201 | H18359    | Hs.109390 | ESTs                                      | 3.93 |
| 30 | 128954 | AA346839  | Hs.209100 | DKFZP434C171 protein                      | 3.92 |
|    | 122939 | AA477141  |           | gb:zu37g06.s1 Soares ovary tumor NbHOT H  | 3.92 |
|    | 130348 | AB032957  | Hs.210850 | KIAA1131 protein                          | 3.92 |
|    | 125847 | AW161885  | Hs.249034 | ESTs                                      | 3.91 |
|    | 120452 | AL022328  | Hs.104335 | hypothetical protein IMAGE3510317         | 3.91 |
| 35 | 123143 | AA487595  |           | gb:aa95e02.s1 Stratagene fetal reli 93    | 3.91 |
|    | 105729 | H46612    | Hs.293815 | Homo sapiens HSPC285 mR, partial cds      | 3.91 |
|    | 106605 | AW772298  | Hs.21103  | Homo sapiens mR; cD DKFZp564B076 (fr      | 3.90 |
|    | 126714 | AF114491  | Hs.137354 | egf-like module containing, mucin-like,   | 3.90 |
|    | 121611 | M31669    | Hs.1735   | inhibin, beta B (activin AB beta polypep  | 3.90 |
| 40 | 120468 | AW967675  | Hs.96487  | ESTs, Highly similar to S08228 ribosomal  | 3.90 |
|    | 101356 | AW878229  | Hs.80642  | sig1 transducer and activator of trans    | 3.89 |
|    | 133668 | L77964    | Hs.271980 | mitogen-activated protein kise 6          | 3.89 |
|    | 109114 | BE622787  | Hs.84045  | hypothetical protein FLJ20288             | 3.88 |
|    | 115134 | AW968073  | Hs.194331 | ESTs, Highly similar to A55713 inositol   | 3.88 |
| 45 | 107850 | AA022910  | Hs.295446 | ESTs, Moderately similar to 810024C cyto  | 3.88 |
|    | 130907 | AA322866  | Hs.21107  | neuroligin                                | 3.88 |
|    | 101879 | AA176374  | Hs.243086 | nuclear autoantigenic sperm protein (his  | 3.88 |
|    | 104267 | AF043244  | Hs.278439 | nucleolar protein 3 (apoptosis repressor  | 3.88 |
|    | 112232 | BE253927  | Hs.24983  | hypothetical protein from EUROIMAGE 2021  | 3.88 |
| 50 | 113248 | T63857    |           | gb:yc16e01.s1 Stratagene lung (937210) H  | 3.88 |
|    | 114044 | BE327427  | Hs.79953  | ESTs                                      | 3.88 |
|    | 115414 | AA662240  | Hs.283099 | AF15q14 protein                           | 3.88 |
|    | 129598 | N30436    | Hs.11556  | Homo sapiens cD FLJ12566 fls, clone NT    | 3.88 |
|    | 102134 | AL036967  | Hs.2324   | protamine 2                               | 3.87 |
| 55 | 106310 | R98185    | Hs.17240  | ESTs                                      | 3.87 |
|    | 116470 | AI272141  | Hs.83484  | SRY (sex determining region Y)-box 4      | 3.86 |
|    | 110947 | AW298410  | Hs.21475  | ESTs                                      | 3.85 |
|    | 115839 | BE300266  | Hs.28935  | transducin-like enhancer of split 1, hom  | 3.85 |
|    | 103534 | AW970872  | Hs.9247   | protein kise, AMP-activated, alpha 1 c    | 3.85 |
| 60 | 105209 | AB023197  | Hs.227743 | KIAA0980 protein                          | 3.85 |
|    | 108749 | AA127017  | Hs.71052  | ESTs                                      | 3.85 |
|    | 110565 | AI884970  | Hs.4983   | ESTs                                      | 3.85 |
|    | 110799 | AI089660  | Hs.323401 | dpy-30-like protein                       | 3.85 |
|    | 117068 | H91257    | Hs.41391  | EST                                       | 3.85 |
| 65 | 130956 | NM_001135 | Hs.2159   | aggrecaen 1 (chondroitin sulfate proteogl | 3.85 |
|    | 102273 | BE391815  | Hs.75981  | ubiquitin specific protease 14 (U9-gua    | 3.85 |
|    | 112960 | AL110209  | Hs.6770   | LCAT-like lysophospholipase               | 3.84 |
|    | 114414 | AW152166  | Hs.182113 | ESTs                                      | 3.84 |
|    | 109665 | AA249439  | Hs.27027  | hypothetical protein DKFZp762H1311        | 3.84 |
| 70 | 106208 | AK001674  | Hs.22630  | cofactor required for Sp1 transcriptio    | 3.84 |
|    | 122311 | NM_014913 | Hs.131915 | KIAA0863 protein                          | 3.84 |
|    | 124271 | AW293223  | Hs.8928   | hypothetical protein FLJ20291             | 3.83 |
|    | 106650 | AL049951  | Hs.22370  | Homo sapiens mR; cD DKFZp564O0122 (f      | 3.83 |
|    | 112167 | N95591    | Hs.25587  | ESTs, Weakly similar to T00329 hypotheti  | 3.83 |
| 75 | 122354 | AL157579  | Hs.153610 | KIAA0751 gene product                     | 3.83 |
|    | 111462 | R05296    |           | gb:ye91e08.s1 Soares fetal liver spleen   | 3.81 |
|    | 128109 | AW269421  | Hs.128093 | ESTs                                      | 3.81 |
|    | 127003 | AW816515  | Hs.173540 | ATPase, Class V, type 10D                 | 3.81 |
|    | 109210 | AA669722  | Hs.272137 | ESTs                                      | 3.81 |
| 80 | 132543 | BE568452  | Hs.5101   | protein regulator of cytokinesis 1        | 3.80 |
|    | 106827 | AA457456  | Hs.11408  | hypothetical protein FLJ20435             | 3.80 |
|    | 124232 | H63391    | Hs.339677 | ESTs, Weakly similar to T38022 hypotheti  | 3.80 |
|    | 126039 | AL137523  | Hs.181102 | p30 DBC protein                           | 3.80 |
|    | 128022 | AW195569  | Hs.125906 | ESTs                                      | 3.80 |

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| 5  | 132005 | AA149707  | Hs.173091 | ubiquitin-like 3                         | 3.79 |
|    | 131392 | AA235153  | Hs.26320  | TRABID protein                           | 3.79 |
|    | 131775 | AB014548  | Hs.31921  | KIAA0648 protein                         | 3.79 |
|    | 126257 | N99638    |           | gb:za39g11.r1 Soares fetal liver spleen  | 3.79 |
|    | 121950 | AA429515  |           | gb:zw75c05.s1 Soares testis_NHT Homo sap | 3.79 |
| 10 | 116067 | AA454827  | Hs.293637 | ESTs                                     | 3.78 |
|    | 104658 | AA360954  | Hs.27268  | Homo sapiens cD: FLJ21933 fis, clone H   | 3.78 |
|    | 104493 | AW960427  | Hs.79059  | transforming growth factor, beta recepto | 3.77 |
|    | 100163 | W44671    | Hs.124    | gene predicted from cD with a complete   | 3.77 |
|    | 116223 | AF045458  | Hs.47061  | unc-51 (C. elegans)-like kise 1          | 3.77 |
| 15 | 120586 | AL031778  | Hs.797    | nuclear transcription factor Y, alpha    | 3.76 |
|    | 128764 | AW024282  | Hs.104938 | hypothetical protein MGC15906            | 3.75 |
|    | 111574 | AI024145  | Hs.188526 | ESTs                                     | 3.75 |
|    | 117396 | W20128    | Hs.296039 | ESTs                                     | 3.75 |
|    | 119052 | R10889    |           | gb:yf38d02.s1 Soares fetal liver spleen  | 3.75 |
| 20 | 121806 | AA424313  | Hs.98402  | ESTs                                     | 3.75 |
|    | 122410 | AA446854  | Hs.271004 | ESTs, Weakly similar to I38022 hypotheti | 3.75 |
|    | 126638 | AA649257  | Hs.188602 | ESTs                                     | 3.75 |
|    | 127879 | AA783098  | Hs.189079 | ESTs                                     | 3.75 |
|    | 121095 | AA320134  | Hs.196029 | Homo sapiens mR for KIAA1657 protein,    | 3.75 |
| 25 | 103430 | BE564090  | Hs.20716  | translocase of inner mitochondrial membr | 3.74 |
|    | 101230 | AW504300  | Hs.295605 | mannosidase, alpha, class 2A, member 2   | 3.74 |
|    | 100200 | H94688    | Hs.173737 | ras-related C3 botulinum toxin substrate | 3.73 |
|    | 106913 | AI219346  | Hs.86178  | M-phase phosphoprotein 9                 | 3.73 |
|    | 110975 | H17012    | Hs.14633  | ESTs                                     | 3.73 |
| 30 | 117314 | N32498    | Hs.42829  | ESTs                                     | 3.73 |
|    | 118737 | AA199686  |           | gb:zq75g09.r1 Stratagene hNT neuron (937 | 3.73 |
|    | 124169 | BE079334  | Hs.271630 | ESTs                                     | 3.73 |
|    | 124580 | N68420    | Hs.107992 | ESTs                                     | 3.73 |
|    | 125747 | NM_002684 | Hs.865    | RAP1A, member of RAS oncogene family     | 3.73 |
| 35 | 124879 | R73588    | Hs.101533 | ESTs                                     | 3.72 |
|    | 128527 | AA504583  | Hs.101047 | transcription factor 3 (E2A immunoglobul | 3.72 |
|    | 103644 | M13305    | Hs.247787 | opsin 1 (cone pigments), long-wave-sens  | 3.72 |
|    | 106044 | N90344    | Hs.149436 | kinesin family member 5B                 | 3.71 |
|    | 127867 | C18530    |           | gb:C18530 Human placenta cD (TFujiwara   | 3.71 |
| 40 | 133828 | T28472    | Hs.7655   | U2 small nuclear ribonucleoprotein auxil | 3.71 |
|    | 107387 | D86983    | Hs.118993 | Melanoma associated gene                 | 3.71 |
|    | 104160 | AA455706  | Hs.44581  | heat shock protein hsp70-related protein | 3.71 |
|    | 106098 | BE278344  | Hs.7970   | DKFZP434B027 protein                     | 3.70 |
|    | 133691 | M85289    | Hs.211573 | heparan sulfate proteoglycan 2 (perlecan | 3.70 |
| 45 | 120717 | AA904681  | Hs.154434 | ESTs, Weakly similar to unknown [H.sapie | 3.70 |
|    | 119263 | T15977    |           | gb:I82328 Infant brain, Bento Soares Hom | 3.70 |
|    | 102305 | AL043202  | Hs.90073  | chromosome segregation 1 (yeast homolog) | 3.70 |
|    | 106566 | BE298210  |           | gb:501118016F1 NIH_MGC_17 Homo sapiens c | 3.70 |
|    | 110708 | N33878    | Hs.306117 | KIAA0306 protein                         | 3.70 |
| 50 | 114357 | R41677    | Hs.6107   | Homo sapiens cD FLJ14839 fis, clone OV   | 3.70 |
|    | 115285 | AW972872  | Hs.293736 | ESTs                                     | 3.70 |
|    | 123034 | AL359571  | Hs.44054  | ninein (GSK3B interacting protein)       | 3.70 |
|    | 126396 | T06298    | Hs.153326 | EST                                      | 3.70 |
|    | 132597 | Y11192    | Hs.5299   | aldehyde dehydrogenase 5 family, member  | 3.70 |
| 55 | 105823 | AI559444  | Hs.293960 | ESTs                                     | 3.70 |
|    | 102644 | T59816    | Hs.173311 | C18B11 homolog (44.9kD)                  | 3.70 |
|    | 133513 | AF136407  | Hs.7446   | chromosome 6 open reading frame 5        | 3.70 |
|    | 116450 | AI654450  | Hs.47274  | Homo sapiens mR; cD DKFZp564B176 (fr     | 3.69 |
|    | 104596 | AF067804  | Hs.15423  | hypothetical protein HDCMC04P            | 3.69 |
| 60 | 133579 | X75346    | Hs.75074  | mitogen-activated protein kinase-activat | 3.68 |
|    | 124556 | N29317    | Hs.236463 | Homo sapiens mR; cD DKFZp586I0521 (f     | 3.68 |
|    | 120534 | AI635113  | Hs.270366 | ESTs, Weakly similar to I79885 serine/th | 3.68 |
|    | 103156 | BE259039  | Hs.129953 | Ewing sarcoma breakpoint region 1        | 3.68 |
|    | 134992 | AA464444  | Hs.5831   | tissue inhibitor of metalloproteinase 1  | 3.68 |
| 65 | 106730 | BE467313  | Hs.260707 | ESTs                                     | 3.68 |
|    | 120880 | AA360240  | Hs.97019  | EST                                      | 3.68 |
|    | 123731 | AA609839  |           | gb:ae62f01.s1 Stratagene lung carcinoma  | 3.68 |
|    | 126973 | W46653    | Hs.251928 | nuclear pore complex interacting protein | 3.67 |
|    | 103646 | AW248439  | Hs.2340   | junction plakoglobin                     | 3.67 |
| 70 | 116333 | AF155827  | Hs.203963 | hypothetical protein FLJ10339            | 3.67 |
|    | 120922 | AA481003  | Hs.97128  | ESTs                                     | 3.67 |
|    | 127407 | AW039514  | Hs.279681 | heterogeneous nuclear ribonucleoprotein  | 3.67 |
|    | 106578 | AA836381  | Hs.315111 | nuclear receptor co-repressor/HDAC3 comp | 3.67 |
|    | 123000 | AI584156  | Hs.105640 | Homo sapiens, clone IMAGE:4139775, mR,   | 3.67 |
| 75 | 101464 | AA852431  | Hs.51299  | DH dehydrogenase (ubiquinone) flavopro   | 3.67 |
|    | 101397 | M26380    | Hs.180878 | lipoprotein lipase                       | 3.67 |
|    | 131135 | NM_016569 | Hs.267182 | TBX3-Iso protein                         | 3.66 |
|    | 106112 | AL117518  | Hs.3686   | KIAA0978 protein                         | 3.66 |
|    | 123974 | NM_015678 | Hs.3821   | neurobeachin                             | 3.66 |
| 80 | 127742 | AW283496  | Hs.180138 | ESTs                                     | 3.66 |
|    | 112908 | BE281000  | Hs.3530   | TLS-associated serine-arginine protein 2 | 3.66 |
|    | 131802 | AL137406  | Hs.296356 | Homo sapiens mR; cD DKFZp434M162 (fr     | 3.65 |
|    | 135162 | AI187925  | Hs.95667  | F-box protein 30                         | 3.65 |
|    | 124984 | BE313210  | Hs.223241 | eukaryotic translation elongation factor | 3.65 |
|    | 118844 | AL035364  | Hs.50891  | hypothetical protein                     | 3.65 |
|    | 125429 | AI023654  | Hs.114191 | ESTs                                     | 3.65 |
|    | 125596 | R25698    |           | gb:yg44h11.r2 Soares infant brain 1NIB H | 3.65 |

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| 5  | 125792 | AA496205  | Hs.193700 | Homo sapiens mR; cD DKFZp586I0324 (f     | 3.65 |
|    | 126965 | AK70523   | Hs.139336 | ATP-binding cassette, sub-family C (CFTR | 3.65 |
|    | 130776 | AF167706  | Hs.19280  | cysteine-rich motor neuron 1             | 3.65 |
|    | 131949 | AK000010  | Hs.258798 | hypothetical protein FLJ20003            | 3.65 |
|    | 116612 | C14904    | Hs.45184  | Homo sapiens cD FLJ12284 fis, clone MA   | 3.65 |
| 10 | 123749 | AA609949  | Hs.112790 | EST                                      | 3.65 |
|    | 134203 | AA161219  | Hs.799    | diphtheria toxin receptor (heparin-bindi | 3.64 |
|    | 133605 | AL038165  | Hs.75187  | translocase of outer mitochondrial membr | 3.64 |
|    | 109235 | AI381800  | Hs.300684 | calcitonin gene-related peptide-receptor | 3.64 |
|    | 125447 | AI582222  | Hs.128686 | ESTs                                     | 3.63 |
| 15 | 122942 | AI277829  | Hs.111862 | KIAA0590 gene product                    | 3.63 |
|    | 122748 | AA458822  | Hs.193815 | ESTs                                     | 3.63 |
|    | 103840 | AW575861  | Hs.47367  | KIAA1785 protein                         | 3.63 |
|    | 105333 | AA234831  | Hs.246112 | KIAA0788 protein                         | 3.63 |
|    | 108807 | AI652236  | Hs.49376  | hypothetical protein FLJ20644            | 3.63 |
| 20 | 114699 | AA127386  |           | gb:zn90d09.r1 Stratagene lung carcinoma  | 3.63 |
|    | 126040 | Z28444    | Hs.24119  | Homo sapiens mR; cD DKFZp586G2222 (f     | 3.63 |
|    | 131028 | AI879165  | Hs.2227   | CCAAT/enhancer binding protein (C/EBP),  | 3.63 |
|    | 131710 | NM_015368 | Hs.30985  | pannexin 1                               | 3.63 |
|    | 100164 | AW372032  | Hs.173714 | MORF-related gene X                      | 3.62 |
| 25 | 120837 | BE149656  | Hs.306621 | Homo sapiens cD FLJ11963 fis, clone HE   | 3.62 |
|    | 131089 | Z42645    | Hs.22870  | Homo sapiens mR full length insert cDN   | 3.62 |
|    | 126428 | AA412436  | Hs.301985 | ESTs                                     | 3.62 |
|    | 129148 | AW501216  | Hs.108945 | KIAA0515 protein                         | 3.61 |
|    | 102337 | AI814663  | Hs.170133 | forkhead box O1A (rhabdomyosarcoma)      | 3.61 |
| 30 | 104520 | AI702384  | Hs.76925  | hypothetical protein FLJ14981            | 3.60 |
|    | 112954 | AA928953  | Hs.6655   | Homo sapiens EST from clone 206499, full | 3.60 |
|    | 125197 | AF086270  | Hs.278554 | heterochromatin-like protein 1           | 3.60 |
|    | 128124 | AI125748  | Hs.130194 | ESTs                                     | 3.60 |
|    | 129553 | AW015763  | Hs.113065 | ESTs                                     | 3.60 |
| 35 | 123998 | AA203429  | Hs.79474  | tyrosine 3-monooxygenase/tryptophan 5-mo | 3.60 |
|    | 128835 | AK001731  | Hs.106390 | Homo sapiens mR; cD DKFZp586H0924 (f     | 3.59 |
|    | 129226 | BE222494  | Hs.180919 | inhibitor of D binding 2, dominant neg   | 3.59 |
|    | 135131 | AI582743  | Hs.94953  | Homo sapiens, Similar to complement comp | 3.59 |
|    | 128955 | AA775076  | Hs.185807 | Homo sapiens, Similar to PRO0478 protein | 3.58 |
| 40 | 100225 | D28539    | Hs.167185 | glutamate receptor, metabotropic 5       | 3.58 |
|    | 101572 | AA437199  | Hs.656    | cell division cycle 25C                  | 3.58 |
|    | 102277 | U31099    | Hs.158326 | prostaglandin D2 receptor (DP)           | 3.58 |
|    | 103667 | Z80788    | Hs.247815 | H4 histone family, member L              | 3.58 |
|    | 112373 | AW963357  | Hs.7847   | ESTs                                     | 3.58 |
| 45 | 119284 | AL041224  | Hs.65379  | ESTs                                     | 3.58 |
|    | 125422 | AA903229  | Hs.153717 | ESTs                                     | 3.58 |
|    | 126381 | M76665    | Hs.275215 | hydroxysteroid (11-beta) dehydrogenase 1 | 3.58 |
|    | 129168 | AI132988  | Hs.109052 | chromosome 14 open reading frame 2       | 3.58 |
|    | 123133 | AA487264  | Hs.154974 | Homo sapiens mR; cD DKFZp667N064 (fr     | 3.57 |
| 50 | 128789 | AW368576  | Hs.139851 | caveolin 2                               | 3.57 |
|    | 104172 | AA476418  |           | gb:zx02a12.s1 Soares_total_fetus_Nb2HF8_ | 3.57 |
|    | 134263 | AW973443  | Hs.8086   | R (guanine-7-) methyltransferase         | 3.57 |
|    | 101759 | M80244    | Hs.184601 | solute carrier family 7 (cationic amino  | 3.57 |
|    | 104942 | NM_016348 | Hs.10235  | chromosome 5 open reading frame 4        | 3.56 |
| 55 | 123443 | BE244537  | Hs.167382 | triuretic peptide receptor A/guanylate   | 3.56 |
|    | 110707 | AI239832  | Hs.15617  | ESTs, Weakly similar to ALU4_HUMAN ALU S | 3.55 |
|    | 106787 | AI492261  | Hs.32450  | ESTs                                     | 3.55 |
|    | 112940 | AK001757  | Hs.281348 | hypothetical protein FLJ10895            | 3.55 |
|    | 115301 | T11832    | Hs.127797 | Homo sapiens cD FLJ11381 fis, clone HE   | 3.55 |
| 60 | 125978 | N66843    | Hs.35608  | ESTs                                     | 3.55 |
|    | 128002 | AI985897  | Hs.125293 | ESTs                                     | 3.55 |
|    | 119847 | H81136    | Hs.334604 | Homo sapiens mR for KIAA1870 protein,    | 3.55 |
|    | 134595 | NM_002401 | Hs.29282  | mitogen-activated protein kinase kinase  | 3.55 |
|    | 121309 | AA293834  | Hs.97312  | ESTs                                     | 3.54 |
| 65 | 122679 | AA811286  | Hs.192837 | ESTs, Weakly similar to ALU5_HUMAN ALU S | 3.54 |
|    | 106061 | AA565356  | Hs.13250  | ESTs                                     | 3.54 |
|    | 127207 | AA377165  | Hs.44833  | ESTs                                     | 3.54 |
|    | 129563 | AF119664  | Hs.27299  | transcriptional regulator protein        | 3.54 |
|    | 105951 | R48700    | Hs.20733  | Homo sapiens cD: FLJ22356 fis, clone H   | 3.53 |
| 70 | 115643 | AA404276  | Hs.123253 | hypothetical protein FLJ22009            | 3.53 |
|    | 130473 | U11690    | Hs.1572   | faciogenital dysplasia (Aarskog-Scott sy | 3.53 |
|    | 104246 | AF016032  | Hs.201377 | lysosomal                                | 3.53 |
|    | 120562 | BE244580  | Hs.302267 | hypothetical protein FLJ10330            | 3.53 |
|    | 101211 | AA355357  | Hs.283429 | SMC (mouse) homolog, X chromosome        | 3.53 |
| 75 | 100774 | J05581    | Hs.89603  | mucin 1, transmembrane                   | 3.53 |
|    | 108407 | AA075519  |           | gb:zm87h09.s1 Stratagene ovarian cancer  | 3.53 |
|    | 113538 | AI554947  | Hs.15167  | ESTs, Weakly similar to S37482 finger pr | 3.53 |
|    | 113976 | AI799751  | Hs.5635   | ESTs                                     | 3.53 |
|    | 110731 | NM_014899 | Hs.188006 | KIAA0878 protein                         | 3.52 |
| 80 | 125945 | AK001440  | Hs.131840 | hypothetical protein FLJ10578            | 3.51 |
|    | 112945 | AW138458  | Hs.20787  | Homo sapiens cD: FLJ21686 fis, clone C   | 3.51 |
|    | 131696 | NM_012296 | Hs.30687  | GRB2-associated binding protein 2        | 3.51 |
|    | 125413 | AI887951  | Hs.74566  | dihydropyrimidine-like 3                 | 3.51 |
|    | 129360 | AJ000534  | Hs.110708 | sarcoglycan, epsilon                     | 3.50 |
|    | 128819 | R38007    | Hs.77578  | ubiquitin specific protease 9, X chromos | 3.50 |
|    | 101973 | U41514    | Hs.80120  | UDP-N-acetyl-alpha-D-galactosamine:polyp | 3.50 |
|    | 103616 | NM_002647 | Hs.32971  | phosphoinositide-3-kinase, class 3       | 3.50 |

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|    | 105535 | AI459519  | Hs.297681 | serine (or cysteine) protease inhibitor     | 3.50 |
|    | 118767 | AI038653  | Hs.50500  | ESTs  | 3.50 |
|    | 126634 | AW361109  | Hs.43627  | SRY (sex determining region Y)-box 22       | 3.50 |
| 5  | 130851 | R66282    | Hs.20247  | ESTs, Weakly similar to S65657 alpha-1C-    | 3.50 |
|    | 134353 | AL138201  | Hs.82120  | nuclear receptor subfamily 4, group A, m    | 3.50 |
|    | 111394 | AA412227  | Hs.16131  | hypothetical protein FLJ12876               | 3.50 |
|    | 102696 | BE540274  | Hs.239    | forkhead box M1                             | 3.49 |
|    | 113037 | R17268    | Hs.259873 | axol transport of synaptic vesicles         | 3.49 |
| 10 | 111028 | H59346    | Hs.30151  | ESTs, Weakly similar to I38022 hypothetical | 3.49 |
|    | 131688 | AI935413  | Hs.30692  | p21 (CDKN1A)-activated kinase 2             | 3.49 |
|    | 115613 | AW136951  | Hs.173946 | hypothetical protein FLJ10486               | 3.48 |
|    | 116975 | H81076    | Hs.269001 | ESTs  | 3.48 |
|    | 100210 | D26361    | Hs.3104   | KIAA0042 gene product                       | 3.48 |
|    | 110147 | H18700    | Hs.268799 | ESTs  | 3.48 |
| 15 | 115600 | AA081395  | Hs.42173  | Homo sapiens cD FLJ10366 fis, clone NT      | 3.48 |
|    | 119088 | R39261    | Hs.90790  | Homo sapiens cD: FLJ22930 fis, clone K      | 3.48 |
|    | 120347 | AA211068  | Hs.120247 | nuclear fragile X mental retardation pro    | 3.48 |
|    | 122702 | AI220089  | Hs.99439  | ESTs  | 3.48 |
|    | 125552 | H09701    | Hs.278366 | ESTs, Weakly similar to I38022 hypothetical | 3.48 |
| 20 | 126461 | AI381659  | Hs.267086 | ESTs  | 3.48 |
|    | 128572 | AA933022  | Hs.256583 | interleukin enhancer binding factor 3, 9    | 3.48 |
|    | 118397 | BE139479  | Hs.161492 | ESTs  | 3.47 |
|    | 127999 | AW978827  | Hs.69851  | nucleolar protein family A, member 1 (H/    | 3.47 |
| 25 | 132066 | AI929392  | Hs.181195 | DJ (Hsp40) homolog, subfamily B, membe      | 3.47 |
|    | 105893 | BE250951  | Hs.181368 | U5 snRNP-specific protein (220 kD), orth    | 3.47 |
|    | 128874 | H06245    | Hs.106801 | ESTs, Weakly similar to PC4259 ferritin     | 3.46 |
|    | 119984 | AA230228  | Hs.59197  | ESTs  | 3.46 |
|    | 104000 | AI146527  | Hs.80475  | polymerase (R) II (D directed) polyp        | 3.46 |
| 30 | 101488 | BE547216  | Hs.181128 | ELK1, member of ETS oncogene family         | 3.46 |
|    | 101045 | J05614    |           | gb:Human proliferating cell nuclear anti    | 3.46 |
|    | 120149 | AA227609  | Hs.94834  | ESTs  | 3.46 |
|    | 107025 | AA825523  | Hs.21255  | ESTs, Weakly similar to I38022 hypothetical | 3.45 |
|    | 101716 | AF050658  | Hs.2563   | tachykinin, precursor 1 (substance K, su    | 3.45 |
| 35 | 102899 | AI815559  | Hs.75730  | sigl recognition particle receptor (d       | 3.45 |
|    | 123075 | AW293133  | Hs.101340 | ESTs, Weakly similar to A42442 integrin     | 3.45 |
|    | 124695 | AA594979  | Hs.239307 | tyrosyl-IR synthetase                       | 3.45 |
|    | 127669 | N28989    | Hs.22891  | solute carrier family 7 (cationic amino     | 3.45 |
|    | 129793 | AW207000  | Hs.126857 | Homo sapiens cD FLJ12936 fis, clone NT      | 3.44 |
| 40 | 120095 | AA693774  | Hs.59601  | ESTs  | 3.44 |
|    | 110915 | BE092285  | Hs.29724  | hypothetical protein FLJ13187               | 3.43 |
|    | 130542 | U64675    | Hs.179825 | RAN binding protein 2-like 1                | 3.43 |
|    | 100488 | BE273749  | Hs.752    | FK506-binding protein 1A (12kD)             | 3.43 |
|    | 115027 | AA743331  | Hs.272572 | hemoglobin, alpha 2                         | 3.43 |
| 45 | 119298 | NM_001241 | Hs.155478 | cyclin T2                                   | 3.43 |
|    | 126486 | AI065133  | Hs.152316 | hypothetical protein PRO0571                | 3.43 |
|    | 130021 | M24470    | Hs.1435   | guanosine monophosphate reductase           | 3.43 |
|    | 127166 | AW954605  | Hs.263395 | sema domain, transmembrane domain (TM),     | 3.42 |
| 50 | 114988 | AA251089  |           | gb:zs0405.s1 NCL CGAP_GCB1 Homo sapiens     | 3.42 |
|    | 133817 | AW578716  | Hs.7644   | H1 histone family, member 2                 | 3.41 |
|    | 133562 | M60721    | Hs.74870  | H2.0 (Drosophila)-like homeo box 1          | 3.41 |
|    | 105610 | AA280072  | Hs.99872  | fetal Alzheimer antigen                     | 3.41 |
|    | 129007 | AK001521  | Hs.107882 | hypothetical protein FLJ10659               | 3.41 |
|    | 100662 | AI358680  | Hs.816    | SRY (sex determining region Y)-box 2        | 3.41 |
| 55 | 120159 | R60781    | Hs.92927  | putative 47 kDa protein                     | 3.41 |
|    | 134966 | AW402389  | Hs.920    | modulator recognition factor I              | 3.41 |
|    | 100369 | D79988    | Hs.115778 | KIAA0166 gene product                       | 3.41 |
|    | 104260 | AF008192  | Hs.194283 | putative GR6 protein                        | 3.40 |
|    | 100134 | AA305746  | Hs.49     | macrophage scavenger receptor 1             | 3.40 |
| 60 | 116015 | AA338648  | Hs.50334  | lesies development-related NYD-SP22         | 3.40 |
|    | 119251 | T15753    | Hs.65250  | EST   | 3.40 |
|    | 127176 | BE387162  | Hs.280858 | ESTs, Highly similar to A35661 D excis      | 3.40 |
|    | 123422 | AA596484  |           | gb:ae38f04.s1 Gessler Wilms tumor Homo s    | 3.39 |
|    | 123094 | AA761073  | Hs.146847 | TRAF family member-associated NFKB activ    | 3.39 |
| 65 | 105289 | AB020638  | Hs.103000 | KIAA0831 protein                            | 3.39 |
|    | 111219 | N68836    | Hs.19247  | ESTs, Moderately similar to ALUC_HUMAN!     | 3.38 |
|    | 127963 | AI299013  | Hs.87779  | Homo sapiens cD: FLJ23087 fis, clone L      | 3.38 |
|    | 109412 | BE543313  | Hs.209473 | hypothetical protein FLJ10520               | 3.38 |
|    | 118794 | AW517051  | Hs.118210 | ESTs  | 3.38 |
| 70 | 112040 | R43286    |           | gb:yg17e11.s1 Soares infant brain 1N1B H    | 3.38 |
|    | 111180 | AI799851  | Hs.283108 | hemoglobin, gamma G                         | 3.38 |
|    | 117329 | AA524065  | Hs.93670  | Homo sapiens cD: FLJ22664 fis, clone H      | 3.38 |
|    | 104371 | AI288696  | Hs.194081 | ESTs, Weakly similar to I38022 hypothetical | 3.38 |
|    | 109265 | AA195285  | Hs.85982  | ESTs  | 3.38 |
| 75 | 109557 | AW452405  | Hs.6427   | ESTs  | 3.38 |
|    | 120753 | AA312551  | Hs.230157 | ESTs  | 3.38 |
|    | 120570 | AA398118  | Hs.97579  | ESTs, Weakly similar to A46010 X-linked     | 3.38 |
|    | 127094 | F13215    | Hs.287849 | ESTs, Weakly similar to T22074 hypothetical | 3.38 |
|    | 127746 | AI239495  | Hs.120189 | ESTs  | 3.38 |
| 80 | 123553 | AI494291  | Hs.111977 | ESTs  | 3.37 |
|    | 130652 | M31669    | Hs.1735   | inhibin, beta B (activin AB beta polypep    | 3.37 |
|    | 135101 | U82275    | Hs.94498  | leukocyte immunoglobulin-like receptor,     | 3.37 |
|    | 121799 | AI885670  | Hs.124027 | SELENOPHOSPHATE SYNTHETASE; Human selen     | 3.37 |
|    | 112278 | Z41698    | Hs.26039  | Homo sapiens cD FLJ13937 fis, clone Y7      | 3.36 |

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|    | 113401 | AA610175  | Hs.179647 | Homo sapiens cD FLJ12195 fls, clone MA    | 3.36 |
|    | 102922 | AW975746  | Hs.188662 | KIAA1702 protein                          | 3.36 |
|    | 135026 | N92165    | Hs.93231  | ESTs                                      | 3.36 |
| 5  | 118210 | N49233    | Hs.46914  | ESTs, Weakly similar to A46010 X-linked   | 3.35 |
|    | 123476 | AA384564  | Hs.108829 | ESTs                                      | 3.35 |
|    | 111076 | N59129    | Hs.20851  | ESTs                                      | 3.35 |
|    | 111520 | AN985369  | Hs.301134 | ESTs                                      | 3.35 |
|    | 133383 | BE313555  | Hs.7252   | KIAA1224 protein                          | 3.35 |
| 10 | 103731 | AA070545  |           | gb:zm70c03.r1 Stralagene neuroepithelium  | 3.35 |
|    | 110828 | AK002114  | Hs.23495  | hypothetical protein FLJ11252             | 3.35 |
|    | 112520 | R68654    | Hs.30814  | ESTs                                      | 3.35 |
|    | 115725 | AW899053  | Hs.76917  | F-box only protein 8                      | 3.35 |
|    | 125867 | H13331    | Hs.123721 | ESTs                                      | 3.35 |
| 15 | 127719 | AI242163  | Hs.22670  | chromodomain helicase D binding protei    | 3.35 |
|    | 129863 | BE379765  | Hs.129872 | sperm associated antigen 9                | 3.35 |
|    | 130816 | M61877    | Hs.1985   | spectrin, alpha, erythrocytic 1 (ellipto  | 3.35 |
|    | 130888 | AL044315  | Hs.173094 | Homo sapiens mR for KIAA1750 protein,     | 3.35 |
|    | 133377 | AJ131245  | Hs.7239   | SEC24 (S. cerevisiae) related gene famil  | 3.35 |
| 20 | 118986 | AF148713  | Hs.125830 | bladder cancer overexpressed protein      | 3.35 |
|    | 101723 | U34304    |           | gb:Human nonmuscle myosin heavy chain II  | 3.34 |
|    | 134693 | N70361    | Hs.8854   | Human transcription unit PVT gene, exons  | 3.34 |
|    | 102856 | M26150    | Hs.248177 | H3 histone family, member L               | 3.34 |
|    | 105593 | AA279341  | Hs.174151 | aldehyde oxidase 1                        | 3.34 |
| 25 | 134748 | L34059    | Hs.89484  | cadherin 4, type 1, R-cadherin (retil)    | 3.34 |
|    | 109149 | AA831179  | Hs.40065  | hypothetical protein MGC4825              | 3.33 |
|    | 115026 | AA251972  | Hs.188718 | ESTs                                      | 3.33 |
|    | 103546 | Z14244    | Hs.75752  | cytochrome c oxidase subunit VIIb         | 3.33 |
|    | 111189 | N67603    | Hs.272130 | ESTs, Weakly similar to S65824 reverse t  | 3.33 |
| 30 | 127076 | AI422951  | Hs.146162 | ESTs                                      | 3.33 |
|    | 124949 | AI903210  | Hs.336780 | tubulin, beta polypeptide                 | 3.33 |
|    | 111012 | AI077389  | Hs.269818 | ESTs, Weakly similar to Z195_HUMAN ZINC   | 3.33 |
|    | 113412 | AW628660  | Hs.44131  | KIAA0974 protein                          | 3.33 |
|    | 116351 | AL133623  | Hs.82501  | similar to mouse Xm1 / Dhml protein       | 3.33 |
| 35 | 121633 | AA417011  | Hs.98175  | EST                                       | 3.33 |
|    | 124591 | N69243    | Hs.192974 | hypothetical protein FLJ12735             | 3.33 |
|    | 130225 | AB021179  | Hs.15299  | HMBA-inducible                            | 3.33 |
|    | 131945 | NM_002916 | Hs.35120  | replication factor C (activator 1) 4 (37  | 3.33 |
|    | 132581 | AK000631  | Hs.52256  | hypothetical protein FLJ20624             | 3.33 |
| 40 | 105726 | NM_012068 | Hs.9754   | activating transcription factor 5         | 3.32 |
|    | 101867 | M96132    |           | gb:Human MHC class II HLA-DR-beta-1*0901  | 3.32 |
|    | 105004 | BE616023  | Hs.25298  | KIAA1813 protein                          | 3.32 |
|    | 100288 | AL039103  | Hs.153834 | pumilio (Drosophila) homolog 1            | 3.32 |
|    | 118349 | N63786    | Hs.94149  | ESTs, Weakly similar to ALU1_HUMAN ALU S  | 3.32 |
| 45 | 103352 | H09366    | Hs.78353  | uracil-D glycosylase                      | 3.30 |
|    | 107436 | W27720    | Hs.12450  | protocadherin 9                           | 3.30 |
|    | 109062 | AA160941  |           | gb:zq40d12.s1 Stralagene hNT neuron (937  | 3.30 |
|    | 110379 | AI300505  | Hs.33130  | Homo sapiens cD: FLJ23486 fls, clone L    | 3.30 |
|    | 111221 | AB037782  | Hs.15119  | KIAA1361 protein                          | 3.30 |
| 50 | 117903 | AA768283  | Hs.47111  | ESTs                                      | 3.30 |
|    | 123265 | AA491209  |           | gb:aa47a08.s1 NCJ_CGAP_GCB1 Homo sapiens  | 3.30 |
|    | 128226 | AI284940  | Hs.289082 | GM2 ganglioside activator protein         | 3.30 |
|    | 111945 | R40663    | Hs.124944 | ESTs                                      | 3.30 |
|    | 126214 | AW748336  | Hs.169052 | KIAA0421 protein                          | 3.30 |
| 55 | 121073 | H46199    | Hs.112184 | DKFZP586J0619 protein                     | 3.30 |
|    | 102083 | T35901    | Hs.75117  | interleukin enhancer binding factor 2, 4  | 3.30 |
|    | 100992 | NM_007289 | Hs.1298   | membrane metallo-endopeptidase (neutral   | 3.30 |
|    | 134021 | L13720    | Hs.78501  | growth arrest-specific 6                  | 3.30 |
|    | 126452 | R26867    |           | .gb:yh52e01.s1 Soares placenta Nb2HP Homo | 3.29 |
| 60 | 117195 | AI798425  | Hs.42710  | ESTs                                      | 3.29 |
|    | 127663 | AK000452  | Hs.10340  | hypothetical protein FLJ20445             | 3.29 |
|    | 113677 | Z70200    | Hs.246112 | KIAA0788 protein                          | 3.28 |
|    | 132398 | AA876616  | Hs.16979  | ESTs, Weakly similar to A43932 mucin 2 p  | 3.28 |
|    | 109533 | AL043979  | Hs.259729 | KIAA0596 protein                          | 3.28 |
| 65 | 102915 | X07820    | Hs.2258   | matrix metalloproteinase 10 (stromelysin  | 3.28 |
|    | 104348 | H05405    | Hs.19221  | hypothetical protein DKFZp566G1424        | 3.28 |
|    | 113047 | AI571940  | Hs.7549   | ESTs                                      | 3.28 |
|    | 113203 | AA743663  | Hs.10305  | ESTs                                      | 3.28 |
|    | 114503 | AL040600  | Hs.188083 | ESTs                                      | 3.28 |
| 70 | 122100 | AA431220  | Hs.41086  | pleckstrin homology domain-containing, f  | 3.28 |
|    | 123073 | AA485061  | Hs.105652 | ESTs                                      | 3.28 |
|    | 130253 | AI073570  | Hs.167473 | phosphoglucomutase 5                      | 3.28 |
|    | 130365 | W56119    | Hs.155103 | eukaryotic translation initiation factor  | 3.28 |
|    | 130762 | D84371    | Hs.1898   | paraoxase 1                               | 3.28 |
| 75 | 132360 | AW893660  | Hs.46440  | solute carrier family 21 (organic anion   | 3.28 |
|    | 110763 | AI928445  | Hs.92254  | syptolagmin-like 2                        | 3.27 |
|    | 103437 | AV655598  | Hs.184211 | peptidase (mitochondrial processing) bet  | 3.27 |
|    | 114840 | AA447591  | Hs.87359  | ESTs, Highly similar to RB18_HUMAN RAS-R  | 3.27 |
|    | 106888 | AA020964  | Hs.24734  | oxysterol binding protein                 | 3.27 |
| 80 | 129896 | BE295568  | Hs.13225  | UDP-Gal:betaGlc beta 1,4- galactosyl      | 3.26 |
|    | 113459 | T80206    | Hs.14716  | ESTs                                      | 3.26 |
|    | 134332 | D86962    | Hs.81875  | growth factor receptor-bound protein: 10  | 3.26 |
|    | 117048 | H89732    | Hs.230113 | EST                                       | 3.26 |
|    | 109249 | AA194730  | Hs.268189 | hypothetical protein FLJ20436             | 3.25 |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
| 5  | 134653 | W73428    | Hs.8750   | uncharacterized bone marrow protein BM04 | 3.26 |
|    | 114440 | AL046511  | Hs.106525 | hypothetical protein FLJ12567            | 3.25 |
|    | 102196 | BE266830  | Hs.75238  | chromatin assembly factor 1, subunit B ( | 3.25 |
|    | 109581 | R45584    | Hs.23025  | ESTs, Weakly similar to ALU5_HUMAN ALU S | 3.25 |
|    | 120814 | AW867796  | Hs.96860  | ESTs, Weakly similar to I38022 hypotheti | 3.25 |
| 10 | 122391 | AA446316  | Hs.191622 | ESTs                                     | 3.25 |
|    | 122553 | AA451884  | Hs.190121 | ESTs                                     | 3.25 |
|    | 124755 | R38087    | Hs.267690 | KIAA1228 protein                         | 3.25 |
|    | 130943 | U20760    | Hs.272429 | calcium-sensing receptor (hypocalciuric  | 3.25 |
|    | 115185 | BE299677  | Hs.105461 | hypothetical protein FLJ20357            | 3.25 |
| 15 | 114297 | AA149707  | Hs.173091 | ubiquitin-like 3                         | 3.25 |
|    | 106657 | AW854339  | Hs.33476  | hypothetical protein FLJ11937            | 3.25 |
|    | 124320 | H95749    | Hs.102342 | EST                                      | 3.25 |
|    | 124087 | H08773    | Hs.288590 | Homo sapiens cD FLJ11454 fis, clone HE   | 3.24 |
|    | 110705 | AB007902  | Hs.32168  | KIAA0442 protein                         | 3.24 |
| 20 | 106508 | AI205785  | Hs.30348  | ESTs                                     | 3.24 |
|    | 112538 | AA908813  |           | gb:cg77h06.s1 NCL_CGAP_Ov8 Homo sapiens  | 3.24 |
|    | 100130 | NM_000304 | Hs.103724 | peripheral myelin protein 22             | 3.24 |
|    | 106017 | AA477956  | Hs.26268  | ESTs                                     | 3.24 |
|    | 113921 | AW976530  | Hs.28355  | hypothetical protein FLJ22402            | 3.23 |
| 25 | 121520 | AA412163  | Hs.164785 | ESTs                                     | 3.23 |
|    | 129255 | AI961727  | Hs.109804 | H1 histone family, member X              | 3.23 |
|    | 125069 | H81306    | Hs.194485 | ESTs                                     | 3.23 |
|    | 119863 | AA081218  | Hs.58608  | Homo sapiens cD FLJ14206 fis, clone NT   | 3.23 |
|    | 111271 | N70934    |           | gb:za33f06.s1 Soares fetal liver spleen  | 3.23 |
| 30 | 102971 | X16609    | Hs.183805 | ankyrin 1, erythrocytic                  | 3.23 |
|    | 103937 | AA934063  | Hs.13836  | ESTs, Weakly similar to I38022 hypotheti | 3.23 |
|    | 121770 | NM_015902 | Hs.278428 | progesterin induced protein              | 3.23 |
|    | 128972 | AA528140  | Hs.107515 | ESTs, Weakly similar to T00329 hypotheti | 3.23 |
|    | 132528 | T78736    | Hs.50758  | SMC4 (structural maintenance of chromoso | 3.23 |
| 35 | 134835 | L04569    | Hs.89925  | calcium channel, voltage-dependent, L ty | 3.23 |
|    | 103158 | BE242587  | Hs.118651 | hematopoietically expressed homeobox     | 3.22 |
|    | 118405 | AL117518  | Hs.3686   | KIAA0978 protein                         | 3.22 |
|    | 104631 | AA002064  | Hs.18920  | ESTs                                     | 3.22 |
|    | 114253 | BE149866  | Hs.14831  | Homo sapiens, Similar to zinc finger pro | 3.22 |
| 40 | 134607 | AI675881  | Hs.86538  | ESTs                                     | 3.22 |
|    | 135114 | AW340493  | Hs.175043 | ancient conserved domain protein 4       | 3.22 |
|    | 120191 | BE407106  | Hs.65907  | Homo sapiens, clone IMAGE:3959816, mR,   | 3.22 |
|    | 105029 | AI122691  | Hs.13268  | ESTs                                     | 3.21 |
|    | 128550 | AA418276  | Hs.170142 | ESTs                                     | 3.21 |
| 45 | 119873 | AI660149  | Hs.44965  | lysosomal                                | 3.21 |
|    | 130115 | T47294    | Hs.149923 | X-box binding protein 1                  | 3.21 |
|    | 133916 | AL039185  | Hs.77558  | thyroid hormone receptor interactor 7    | 3.21 |
|    | 120259 | AW014786  | Hs.192742 | hypothetical protein FLJ12785            | 3.21 |
|    | 110721 | H97678    | Hs.31319  | ESTs                                     | 3.21 |
| 50 | 130062 | AL049415  | Hs.278679 | a disintegrin and metalloprotease doma   | 3.21 |
|    | 100265 | D38521    | Hs.112396 | KIAA0077 protein                         | 3.20 |
|    | 100624 | AB001025  | Hs.9349   | ryanodine receptor 3                     | 3.20 |
|    | 122275 | AA437124  | Hs.187247 | ESTs                                     | 3.20 |
|    | 127099 | AA347668  |           | gb:EST54026 Fetal heart II Homo sapiens  | 3.20 |
| 55 | 134321 | BE538082  | Hs.8172   | ESTs, Moderately similar to A46010 X-in  | 3.20 |
|    | 132809 | AF036144  | Hs.5734   | meningioma expressed antigen 5 (hyaluron | 3.20 |
|    | 101125 | AJ250562  | Hs.82749  | transmembrane 4 superfamily member 2     | 3.20 |
|    | 128339 | AL121087  | Hs.296406 | KIAA0685 gene product                    | 3.19 |
|    | 117121 | H95044    | Hs.321386 | EST                                      | 3.19 |
| 60 | 124760 | AW408586  | Hs.91052  | ESTs, Moderately similar to ALU5_HUMAN A | 3.19 |
|    | 132232 | AI522273  | Hs.42640  | ESTs                                     | 3.19 |
|    | 125919 | W26713    | Hs.256972 | ESTs                                     | 3.19 |
|    | 123324 | AB018352  | Hs.105399 | KIAA0809 protein                         | 3.19 |
|    | 100157 | D14661    | Hs.119    | Wilms' tumour 1-associated protein       | 3.19 |
| 65 | 101447 | M21305    |           | gb:Human alpha satellite and satellite 3 | 3.19 |
|    | 124345 | NM_014487 | Hs.120766 | nucleolar cysteine-rich protein          | 3.18 |
|    | 122583 | NM_012447 | Hs.20132  | stromal antigen 3                        | 3.18 |
|    | 128961 | AL133014  | Hs.107387 | CGI-20 protein                           | 3.18 |
|    | 111321 | AI569766  | Hs.13205  | ESTs                                     | 3.18 |
| 70 | 134977 | AL044963  | Hs.306121 | leukocyte receptor cluster (LRC) encoded | 3.18 |
|    | 131535 | N22120    | Hs.75277  | hypothetical protein FLJ13910            | 3.18 |
|    | 109950 | H08200    | Hs.268770 | ESTs, Weakly similar to 2004399A chromos | 3.18 |
|    | 129875 | AA181018  | Hs.13056  | hypothetical protein FLJ13920            | 3.18 |
|    | 101654 | M60298    | Hs.733    | erythrocyte membrane protein band 4.2    | 3.18 |
| 75 | 104732 | AL079294  | Hs.29952  | Homo sapiens mR full length insert cDN   | 3.18 |
|    | 106867 | AB037744  | Hs.34892  | KIAA1323 protein                         | 3.18 |
|    | 108301 | AA069728  | Hs.184582 | ribosomal protein L24                    | 3.18 |
|    | 118042 | AI432389  | Hs.161465 | ESTs                                     | 3.18 |
|    | 120900 | AA830712  | Hs.291931 | ESTs                                     | 3.18 |
| 80 | 129312 | T97579    | Hs.110334 | ESTs, Weakly similar to I78885 serine/th | 3.18 |
|    | 116291 | AW410377  | Hs.41502  | hypothetical protein FLJ21276            | 3.17 |
|    | 110672 | AW612890  | Hs.191178 | ESTs                                     | 3.17 |
|    | 115665 | BE072425  | Hs.44579  | hypothetical protein FLJ20199            | 3.17 |
|    | 127581 | AK000680  | Hs.266175 | phosphoprotein associated with GEMs      | 3.17 |
|    | 129684 | AV658017  | Hs.184325 | CGI-76 protein                           | 3.16 |
|    | 108830 | AA131743  | Hs.193352 | ESTs                                     | 3.16 |
|    | 124443 | AI857519  | Hs.302031 | zinc finger protein, subfamily 1A, 4 (Eo | 3.16 |

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| 5  | 106290 | AW961393  | Hs.16364  | hypothetical protein FLJ10955            | 3.16 |
|    | 122787 | AI209093  | Hs.95512  | ESTs                                     | 3.16 |
|    | 133112 | T15465    | Hs.162231 | thyrotropin-releasing hormone            | 3.16 |
|    | 116435 | AA186761  | Hs.334812 | hypothetical protein DKFZp586K0717       | 3.16 |
|    | 109121 | BE389387  | Hs.49767  | DH dehydrogase (ubiquinone) Fe-S pro     | 3.16 |
|    | 126721 | AW579621  | Hs.125359 | Thy-1 cell surface antigen               | 3.15 |
|    | 102526 | AA203429  | Hs.79474  | tyrosine 3-monooxygenase/tryptophan 5-mo | 3.15 |
|    | 100512 | D13317    | Hs.78915  | GA-binding protein transcription factor, | 3.15 |
| 10 | 105299 | AF098951  | Hs.194720 | ATP-binding cassette, sub-family G (WHIT | 3.15 |
|    | 117942 | AI984505  | Hs.161121 | ESTs                                     | 3.15 |
|    | 123049 | BE047580  | Hs.211869 | clckkopf (Xenopus laevis) homolog 2      | 3.15 |
|    | 128639 | AW582962  | Hs.102897 | CGI-47 protein                           | 3.15 |
|    | 130343 | AB040914  | Hs.278628 | KIAA1481 protein                         | 3.15 |
| 15 | 115706 | AB004849  | Hs.50748  | chromosome 21 open reading frame 18      | 3.15 |
|    | 120673 | AW968634  | Hs.105093 | ESTs                                     | 3.15 |
|    | 132116 | AW960474  | Hs.40289  | ESTs                                     | 3.15 |
|    | 116217 | AU076474  | Hs.123178 | translocase of inner mitochondrial membr | 3.15 |
|    | 104926 | BE298808  | Hs.33363  | DKFZP434N093 protein                     | 3.14 |
| 20 | 105297 | NM_015905 | Hs.183858 | transcriptio intermediary factor 1       | 3.14 |
|    | 125343 | AI475495  | Hs.304101 | ESTs, Weakly similar to ALU7_HUMAN ALU S | 3.14 |
|    | 115618 | H11695    | Hs.322901 | disrupter of silencing 10                | 3.14 |
|    | 124893 | AA830185  | Hs.269680 | ESTs                                     | 3.13 |
|    | 105461 | BE539071  | Hs.69388  | hypothetical protein FLJ20505            | 3.13 |
| 25 | 126165 | AI741816  | Hs.125897 | ESTs                                     | 3.13 |
|    | 105212 | AA205334  | Hs.324278 | Homo sapiens mR; cD DKFZp566M063 (fr     | 3.13 |
|    | 101628 | M57506    | Hs.72918  | small inducible cytokine A1 (I-309, homo | 3.13 |
|    | 107951 | AI300077  | Hs.61590  | ESTs                                     | 3.13 |
|    | 109166 | AA219691  | Hs.73625  | RAB6 interacting, kinesin-like (rabkines | 3.13 |
| 30 | 117299 | N75768    |           | gb:yw30b07.r1 Morton Fetal Cochlea Homo  | 3.13 |
|    | 119694 | AA041350  | Hs.57847  | ESTs, Moderately similar to ICE4_HUMAN C | 3.13 |
|    | 124840 | R56146    | Hs.164515 | EST, Weakly similar to AF090930 1 PRO047 | 3.13 |
|    | 127433 | AW979155  | Hs.298275 | amino acid transporter 2                 | 3.13 |
|    | 128337 | AI123529  | Hs.166592 | ESTs                                     | 3.13 |
| 35 | 134053 | AW628686  | Hs.78851  | KIAA0217 protein                         | 3.13 |
|    | 134475 | NM_014733 | Hs.83790  | KIAA0305 gene product                    | 3.13 |
|    | 128761 | BE300341  | Hs.104925 | ectodermal-neural cortex (with BTB-like  | 3.12 |
|    | 124971 | T23800    | Hs.151001 | hypothetical protein FLJ14728            | 3.12 |
|    | 128314 | T87479    | Hs.291797 | ESTs                                     | 3.12 |
| 40 | 134695 | AB036829  | Hs.178347 | SKIP for skeletal muscle and kidney enri | 3.12 |
|    | 131333 | BE244603  | Hs.25726  | transposon-derived Buster1 transposase-I | 3.12 |
|    | 119781 | AJ278016  | Hs.55565  | ankyrin repeat domain 3                  | 3.12 |
|    | 131824 | U28838    | Hs.32935  | TATA box binding protein (TBP)-associate | 3.11 |
|    | 124595 | AW194851  | Hs.111801 | arsole resistance protein ARS2           | 3.11 |
| 45 | 116115 | AL042355  | Hs.70202  | WD repeat domain 10                      | 3.11 |
|    | 129415 | AI907084  | Hs.111243 | MADS box transcription enhancer factor 2 | 3.11 |
|    | 111552 | T97939    | Hs.191185 | ESTs                                     | 3.10 |
|    | 134861 | NM_000937 | Hs.171880 | polymerase (R) II (D directed) polyp     | 3.10 |
|    | 104971 | BE311926  | Hs.15830  | hypothetical protein FLJ12691            | 3.10 |
| 50 | 126536 | AA156151  |           | gb:zo48c06.r1 Stralagene endothelial cel | 3.10 |
|    | 128246 | AI990612  | Hs.214818 | DMRT-like family C2                      | 3.10 |
|    | 106412 | AA453734  | Hs.10198  | ESTs                                     | 3.10 |
|    | 107902 | AA026627  | Hs.61358  | ESTs                                     | 3.10 |
|    | 112495 | AI346487  | Hs.28739  | ESTs                                     | 3.09 |
| 55 | 131870 | NM_014874 | Hs.3363   | KIAA0214 gene product                    | 3.09 |
|    | 105301 | AW352357  | Hs.7457   | MAGE1 protein                            | 3.09 |
|    | 123670 | AI189844  | Hs.112708 | ESTs, Moderately similar to ZN91_HUMAN Z | 3.09 |
|    | 116474 | AW160774  | Hs.159154 | tubulin, beta, 4                         | 3.09 |
|    | 112064 | AL049390  | Hs.22689  | Homo sapiens mR; cD DKFZp586O1318 (f     | 3.09 |
| 60 | 130525 | AA361850  | Hs.322149 | Human clone 137308 mR, partial cds       | 3.08 |
|    | 120398 | AL133649  | Hs.110953 | retinoic acid induced 1                  | 3.08 |
|    | 102735 | AF111106  | Hs.3382   | protein phosphatase 4, regulatory subuni | 3.08 |
|    | 124748 | R34617    |           | gb:yh85h12.s1 Soares placenta Nb2HP Homo | 3.08 |
| 65 | 120755 | AA312934  | Hs.190745 | Homo sapiens cD: FLJ21326 tis, clone C   | 3.08 |
|    | 118895 | BE304917  | Hs.31097  | hypothetical protein FLJ21478            | 3.08 |
|    | 107463 | AW952022  | Hs.315164 | hypothetical protein similar to actin re | 3.08 |
|    | 114290 | R51383    | Hs.25793  | ESTs                                     | 3.08 |
|    | 119005 | AL038511  | Hs.125316 | ESTs, Weakly similar to S33990 finger pr | 3.08 |
|    | 125676 | BE612918  | Hs.151973 | hypothetical protein FLJ23511            | 3.08 |
| 70 | 127766 | AA723659  | Hs.290607 | EST                                      | 3.08 |
|    | 132693 | BE244200  | Hs.55075  | KIAA0410 gene product                    | 3.07 |
|    | 106812 | BE251590  | Hs.239370 | DKFZP7271051 protein                     | 3.07 |
|    | 125654 | X96753    | Hs.9004   | chondroitin sulfate proteoglycan 4 (mela | 3.07 |
|    | 111836 | R58394    | Hs.25119  | ESTs, Weakly similar to YEX0_YEAST HYPOT | 3.06 |
|    | 101682 | AF043045  | Hs.81008  | filamin B, beta (actin-binding protein-2 | 3.06 |
| 75 | 110004 | H10413    | Hs.268774 | ESTs                                     | 3.06 |
|    | 117591 | N64777    | Hs.44656  | ESTs                                     | 3.06 |
|    | 110737 | AA335609  | Hs.7589   | ESTs, Weakly similar to A46010 X-linked  | 3.06 |
|    | 134337 | NM_004922 | Hs.81964  | SEC24 (S. cerevisiae) related gene famil | 3.06 |
|    | 132450 | AA100012  | Hs.48827  | hypothetical protein FLJ12085            | 3.06 |
| 80 | 125556 | AB033064  | Hs.334806 | KIAA1238 protein                         | 3.06 |
|    | 101811 | NM_002556 | Hs.24734  | oxysterol binding protein                | 3.06 |
|    | 131530 | AA574309  | Hs.283402 | TCR eta                                  | 3.06 |
|    | 105049 | AB032945  | Hs.172506 | myosin VB                                | 3.06 |



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| 5   | 126614 | AA701941   | Hs.187555   | ESTs                                     | 3.05 |
|   | 130960 | AF035621   | Hs.21611  | kinesin family member 3C                 | 3.05 |
|   | 105603 | AW963624   | Hs.31707  | ESTs, Weakly similar to YEW4_YEAST HYPOT | 3.05 |
|   | 107361 | U72513     | Hs.159486   | Human RPL13-2 pseudogene mR, complete    | 3.05 |
|   | 107575 | D81886     | Hs.59908  | ESTs                                     | 3.05 |
| 10  | 116999 | H84644     | Hs.40707  | EST                                      | 3.05 |
|   | 119554 | W38188     |   | (NONE)                                   | 3.05 |
|   | 120934 | AA226198   |   | gb:nc26a07.s1 NCI_CGAP_Pr1 Homo sapiens  | 3.05 |
|   | 125805 | AI160594   | Hs.166656   | ESTs, Highly similar to S49460 glutamate | 3.05 |
|   | 127263 | AA331156   |   | gb:EST35034 Embryo, 6 week, subtracted ( | 3.05 |
| 15  | 128025 | T64877     | Hs.108479   | ESTs                                     | 3.05 |
|   | 131090 | AH43139    | Hs.2288   | visinin-like 1                           | 3.05 |
|   | 112197 | NM_003655  | Hs.5637   | ESTs                                     | 3.05 |
|   | 133492 | L40397     | Hs.74137  | transmembrane trafficking protein        | 3.04 |
|   | 118485 | AA508515   | Hs.291049   | ESTs                                     | 3.04 |
| 20  | 113893 | AI373741   | Hs.59384  | hypothetical protein MGC3047             | 3.04 |
|   | 116911 | AW205577   | Hs.308435   | ESTs, Moderately similar to KIAA0745 pro | 3.04 |
|   | 132833 | U78525     | Hs.57783  | eukaryotic translation initiation factor | 3.04 |
|   | 124724 | H20816     | Hs.112423   | Homo sapiens mR; cD DKFZp586i1420 (f     | 3.04 |
|   | 105894 | AI904740   | Hs.25691  | receptor (calcitonin) activity modifying | 3.04 |
| 25  | 129991 | R28386     | Hs.179925   | ESTs, Weakly similar to ALU8_HUMAN ALU S | 3.04 |
|   | 128714 | T85231     | Hs.179661   | tubulin, beta 5                          | 3.04 |
|   | 134650 | U76376     | Hs.87247  | haxkin, BCL2-interacting protein (cont   | 3.04 |
|   | 106851 | AI458523   |   | gb:tk04g09.x1 NCI_CGAP_Lu24 Homo sapiens | 3.04 |
|   | 133445 | AC005262   | Hs.73797  | guanine nucleotide binding protein (G pr | 3.04 |
| 30  | 102581 | AU077228   | Hs.77256  | enhancer of zeste (Drosophila) homolog 2 | 3.04 |
|   | 127542 | AA703684   | Hs.245474   | ESTs, Moderately similar to ALU5_HUMAN A | 3.03 |
|   | 113043 | AI628789   | Hs.7483   | ESTs                                     | 3.03 |
|   | 134710 | AI433797   | Hs.8889   | serine hydroxymethyltransferase 1 (solub | 3.03 |
|   | 119245 | AI815733   | Hs.114360   | transforming growth factor beta-stimulat | 3.03 |
| 35  | 106391 | AW959538   | Hs.321214   | hypothetical protein DKFZp564D0478       | 3.03 |
|   | 114607 | AF041260   | Hs.129057   | breast carcinoma amplified sequence 1    | 3.03 |
|   | 116083 | AA455706   | Hs.44581  | heat shock protein hsp70-related protein | 3.03 |
|   | 132079 | AI701457   | Hs.38694  | ESTs                                     | 3.03 |
|   | 103825 | AI571835   | Hs.55468  | ESTs                                     | 3.03 |
| 40  | 106438 | AI141031   | Hs.21342  | ESTs                                     | 3.03 |
|   | 124359 | N22508     | Hs.139315   | Homo sapiens cD: FLJ21479 fis, clone C   | 3.03 |
|   | 126384 | AW090198   | Hs.4779   | KIAA1150 protein                         | 3.03 |
|   | 127995 | AA970953   | Hs.128709   | ESTs                                     | 3.03 |
|   | 127981 | AA837029   | Hs.157463   | ESTs                                     | 3.02 |
| 45  | 124417 | N34059     |   | gb:yy28h09.s1 Soares fetal liver spleen  | 3.02 |
|   | 124357 | N22401     |   | gb:yyw37g07.s1 Morton Fetal Cochlea Homo | 3.02 |
|   | 105437 | AF151076   | Hs.25199  | hypothetical protein                     | 3.02 |
|   | 101158 | AW327723   | Hs.76122  | splicing factor, arginine/serine-rich 4  | 3.02 |
|   | 113897 | R91601     | Hs.4947   | hypothetical protein FLJ22584            | 3.02 |
| 50  | 100159 | AA285268   | Hs.23488  | KIAA0107 gene product                    | 3.02 |
|   | 106487 | AI697340   | Hs.135265   | Homo sapiens clone FLB8436 PRO2277 mR,   | 3.02 |
|   | 124977 | F04819     | Hs.190452   | KIAA0365 gene product                    | 3.02 |
|   | 131631 | AA022569   | Hs.29802  | sIt (Drosophila) homolog 2               | 3.01 |
|   | 102259 | AL041219   | Hs.82222  | sema domain, immunoglobulin domain (Ig), | 3.01 |
| 55  | 104399 | AL022316   | Hs.301947   | kraken-like                              | 3.01 |
|   | 116536 | BE218027   | Hs.89969  | ESTs                                     | 3.00 |
|   | 125889 | AA351978   | Hs.4943   | hepatocellular carcinoma associated prot | 3.00 |
|   | 102233 | AW163045   | Hs.79334  | nuclear factor, interleukin 3 regulated  | 3.00 |
|   | 102628 | U90322     | Hs.27812  | G protein-coupled receptor 23            | 3.00 |
| 60  | 112812 | H55977     | Hs.35810  | ESTs                                     | 3.00 |
|   | 114654 | AA101840   | Hs.103679   | ESTs                                     | 3.00 |
|   | 118555 | N68372     |   | gb:za68c10.s1 Soares_fetal_lung_NbHL19W  | 3.00 |
|   | 120005 | W90105     | Hs.94942  | EST                                      | 3.00 |
|   | 123596 | AA421130   | Hs.112640   | EST                                      | 3.00 |
| 65  | 126134 | AL133033   | Hs.4084   | KIAA1025 protein                         | 3.00 |
|   | 126194 | H98755     | Hs.302975   | ESTs, Weakly similar to Z195_HUMAN ZINC  | 3.00 |
|   | 129778 | AK001676   | Hs.12457  | hypothetical protein FLJ10814            | 3.00 |
| Table 3B:                                   |        |            |   |  |      |
| Pkey: Unique Eos probeset identifier number |        |            |   |  |      |
| CAT number: Gene cluster number             |        |            |   |  |      |
| Accession: Genbank accession numbers        |        |            |   |  |      |
| 70  | Pkey   | CAT number | Accession   |  |      |
|   | 123619 | 371681_1   | AA602964 AA609200   |  |      |
|   | 124417 | 1642364_1  | N34059 N46979   |  |      |
|   | 117299 | 1632586_1  | N75768 N22543   |  |      |
|   | 116845 | 393481_1   | AA649530 AA659316 H64973  |  |      |
| 75  | 124748 | 1715080_1  | R34617  |  |      |
|   | 125596 | 1708455_1  | R25698 R56582 R56018  |  |      |
|   | 126257 | 182217_1   | N99638 AW973750 AA326271 H90994 AA558020 AA234435 N59599 R94815   |  |      |
|   | 126280 | 1572221_1  | Z19417 H20666   |  |      |
|   | 126319 | 1528523_1  | D81689 D81802   |  |      |
| 80  | 104172 | 273499_1   | AA476418 AA393338 AA398747 AA476518   |  |      |
|   | 126426 | 110687_1   | AA125984 AA127189 AA065075 AA070377 AA100017 AA079891 AA113255 AA075168 AA082764 AA083380 N84829 AA084752 |  |      |
|   |        |            | AA076512 AA085119 AA085208 AA085045   |  |      |
|   |        |            | AA325606 AA099517 N89423  |  |      |
|   | 126433 | 127143_1   |   |  |      |

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|    |        |                         |   |
|----|--------|-------------------------|---|
| 5  | 127092 | 1779998_1               | T26985 Z44165   |
|    | 127099 | 244301_1                | AA347668 AW956810 Z44271 F07065 F07064 R13506   |
|    | 126536 | 149206_1                | AA156151 Z25109 C05177  |
|    | 103731 | 112052_1                | AA070545 AA131490 AA131373  |
|    | 127263 | 232161_1                | AA331156 AA331157 AA331155  |
| 10 | 126783 | 113388_1                | AA083531 AA126047 AA074915 AA148649   |
|    | 118946 | 1683457_1               | N92834 W25061   |
|    | 127520 | 656170_1                | T51239  |
|    | 127532 | 353907_1                | AJ003429 AJ003367 AA564825  |
|    | 112516 | 1744223_1               | T83909 R88586   |
| 15 | 112538 | 504579_1                | AA908813 R70255   |
|    | 112540 | 1605263_1               | R69751 R70467 H69771 H80879 H80878  |
|    | 113248 | 328626_1                | T63857 AW971220 AA493469 T63699   |
|    | 112631 | 1746257_1               | R82040 R70934   |
|    | 128360 | 1540098_1               | F12374 T74059   |
| 20 | 120514 | 25532_3                 | AA258335 AA258499   |
|    | 127867 | 1511945_1               | C18530 T63953   |
|    | 120637 | 200885_1                | AA811804 AA809404 AA286907 AW977624   |
|    | 121481 | 123001_1                | AA411931 AA411930   |
|    | 120934 | 177521_1                | AA226198 AA226513 AA383773  |
| 25 | 106566 | 120358_1                | BE298210 AI672315 AW086489 BE298417 AA455921 AA902537 BE327124 R14963 AA085210 AW274273 AI333584 AI369742     |
|    | 121743 | 274582_1                | AI039658 AI885095 AI476470 AI287650 AI885299 AI985381 AW592624 AW340136 AI266556 AA456390 AI310815 AA484951   |
|    | 114699 | 135322_1                | AA397636 AA421144   |
|    | 106851 | 322947_1                | AA127386 R15844 AA127404  |
|    | 123731 | genbank_AA609839        | AA58623 AA639708 AA485409 R22065 AA485570   |
| 30 | 123973 | 506369_1                | AA609839  |
|    | 116793 | 74964_1                 | C14805  |
|    | 109700 | genbank_F09609          | T77781 AW014157 D12422 AI918246 AA452599 AA628404 N35886 AA64593 AW301738 T77780 AI042309 AI095302 H06063     |
|    | 118466 | genbank_N66741          | AW510576 H37814 W61360 AI373296 AI702267 AA152465 AW169067 AW169012 AW340355 AI289311                         |
|    | 111273 | genbank_N70934          | F09609  |
| 35 | 118555 | genbank_N68372          | N66741  |
|    | 111462 | genbank_R05296          | N70934  |
|    | 118720 | genbank_N73515          | N68372  |
|    | 118737 | 382979_1                | R05296  |
|    | 111826 | genbank_R35975          | N73515  |
| 40 | 120376 | genbank_AA227469        | AA199686 N73861   |
|    | 120809 | genbank_AA346495        | R35975  |
|    | 120839 | genbank_AA348913        | AA227469  |
|    | 120873 | genbank_AA358015        | AA346495  |
|    | 115498 | genbank_AA291070        | AA348913  |
| 45 | 101045 | entrez_J05614           | AA358015  |
|    | 129969 | genbank_N57818          | AA291070  |
|    | 108407 | genbank_AA075519        | J05614  |
|    | 122939 | genbank_AA477141        | N57818  |
|    | 117031 | genbank_H88353          | AA075519  |
| 50 | 124298 | genbank_H91679          | AA477141  |
|    | 117099 | 321871_1                | H88353  |
|    | 101447 | entrez_M21305           | H91679  |
|    | 124357 | genbank_N22401          | H93699 H97976 H80036  |
|    | 101723 | 2603_1                  | M21305  |
| 55 |        |                         | N22401  |
|    |        |                         | U34304 AA355800 M69181 AA375523 AA093590 AA365595 S67247 AI371761 AW351920 AW181991 H28934 W79172 AA653543    |
|    |        |                         | AA122005 W95572 AF086505 C02448 W57668 T11988 W95465 AA425179 F05724 F12205 F06285 R16384 T66222 F08515       |
|    |        |                         | F07288 AA150346 H83264 T86770 N36366 AA337253 H12001 H82899 H69395 H69380 N29054 N30920 T97385 T95819         |
|    |        |                         | AA463807 AI079860 T11987 AA305048 AA149133 T82813 AA029555 AA035109 AA449123 AA340297 AA724155 W05196         |
| 60 |        |                         | AI859528 AA149134 C16426 C16097 C16587 C16138 C16107 AW021754 C16500 N30019 R55718 R60552 N84522 AI143322     |
|    |        |                         | AW519024 AA490700 N20675 AW296747 C16068 D58331 C16518 AI141214 N67221 C16423 C16537 C16094 C16152 H28935     |
|    |        |                         | T66152 C16362 AW022425 AA602899 AA694603 H22255 W74368 C16356 AI129361 AI917986 AI582253 AI923898 AI038907    |
|    |        |                         | AW191970 AI678861 C16429 C16345 AI277790 R42325 AI640420 AI004136 AI277797 C16100 F09836 T71212 AA152315      |
|    |        |                         | AW090781 AI055902 T16084 AW022915 C16556 AW473979 T96820 AA476595 N75446 F02570 H69286 T99992 AA907493        |
| 65 |        |                         | T34275 AA156107 H11758 AI650288 H82900 AI474575 N66718 F04914 AA505470 AA993349 F01973 AI123277 F04729 C16236 |
|    |        |                         | AA879148 AA029574 AA887046 R08127 D57339 AA490477 AI669818 AI190995 AA035507 AL119272 AL135029 AA258725       |
|    |        |                         | AL079521 N40299 AI630191 N86148 AA341165 T28492 N83749 AI382123 AI065033 AI950411 AI935653 AI275551 AW027482  |
|    |        |                         | AW197337 AI168323 AI336930 AI094099 AI351490 AA258563 AI634763 AI492374 AA983970 AI123565 T72559 F09890       |
|    |        |                         | AA669531 AI445824 T07180 AW084799 AA306254 R60606 W28367 R55928 W27995 AL044845 AA501890 N84045 T97274        |
| 70 | 124677 | genbank_R01073          | N87532 AL135219 AA116066 T06000 AA116057 T07181 R08126  |
|    | 110243 | genbank_H26583          | R01073  |
|    | 101867 | entrez_M96132           | H26583  |
|    | 101941 | entrez_S77583           | M96132  |
|    | 119052 | 149538_1                | S77583  |
| 75 | 126452 | 209811_1                | R10889 R10888   |
|    | 119263 | genbank_T15977          | R26867 R27438   |
|    | 112040 | genbank_R43286          | T15977  |
|    | 103657 | entrez_Z73677           | R43286  |
|    | 119400 | genbank_T92767          | Z73677  |
| 80 | 119554 | NOT_FOUND_entrez_W38188 | T92767  |
|    | 123130 | genbank_AA487200        | W38188  |
|    | 123143 | genbank_AA487595        | AA487200  |
|    | 121950 | genbank_AA429515        | AA487595  |
|    | 123265 | genbank_AA491209        | AA429515  |
|    | 114988 | genbank_AA251089        | AA491209  |
|    | 107794 | genbank_AA019255        | AA251089  |
|    |        |                         | AA019255  |

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123422 genbank\_AA598484 AA598484  
109062 genbank\_AA160941 AA160941

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TABLE 4A: ABOUT 1164 GENES UPREGULATED IN GLIOBLASTOMA

Pkey: Unique Eos probeset identifier number  
ExAccn: Exemplar Accession number, Genbank accession number  
UnigenelD: Unigene number  
Unigene Title: Unigene gene title  
R1: Ratio of brain tumor to body atlas  
R2: Ratio of brain tumor to normal brain

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| Pkey   | ExAccn    | UnigenelD | Unigene Title                            | R1    | R2   |
|--------|-----------|-----------|--|-------|------|
| 412719 | AW016610  | Hs.129911 | ESTs                                     | 117.8 | 3.3  |
| 428321 | AI699994  | Hs.301347 | ESTs                                     | 108.9 | 3.9  |
| 455601 | AI368680  | Hs.816    | SRY (sex determining region Y)-box 2     | 107.5 | 9.9  |
| 431917 | D16181    | Hs.2868   | peripheral myelin protein 2              | 99.0  | 11.8 |
| 415817 | U88967    | Hs.78867  | protein tyrosine phosphatase, receptor-t | 72.0  | 11.3 |
| 449494 | AW237014  | Hs.288650 | aquaporin 4                              | 60.0  | 2.2  |
| 439285 | AL133916  | Hs.298998 | ESTs                                     | 58.2  | 2.2  |
| 447072 | D61594    | Hs.17279  | tyrosylprotein sulfotransferase 1        | 54.2  | 7.1  |
| 456759 | BE259150  | Hs.127792 | delta (Drosophila)-like 3                | 53.5  | 2.5  |
| 427343 | AI880044  | Hs.176977 | protein kinase C binding protein 2       | 49.6  | 2.2  |
| 425088 | AA663372  | Hs.169395 | Homo sapiens cDNA FLJ12015 fis, clone HE | 49.5  | 3.1  |
| 412959 | D87458    | Hs.75090  | KIAA0282 protein                         | 46.3  | 3.0  |
| 447004 | AW296968  | Hs.157539 | ESTs                                     | 43.7  | 3.2  |
| 436878 | BE465204  | Hs.47448  | ESTs                                     | 39.8  | 10.8 |
| 433551 | AI985544  | Hs.289048 | ESTs                                     | 39.7  | 4.3  |
| 425842 | AI587490  | Hs.159623 | NK-2 (Drosophila) homolog B              | 39.3  | 26.2 |
| 407034 | U84540    |           | gb:Human dystrobrevin isoform DTN-3 (DTN | 39.1  | 39.1 |
| 431725 | X65724    | Hs.2839   | Norrie disease (pseudoglioma)            | 38.4  | 3.7  |
| 453392 | U23752    | Hs.32964  | SRY (sex determining region Y)-box 11    | 37.5  | 22.1 |
| 447197 | R36075    |           | gb:yh88b01.s1 Soares placenta Nb2HP Homo | 37.5  | 13.9 |
| 439415 | F05538    | Hs.12825  | ESTs                                     | 35.4  | 3.1  |
| 409395 | U46745    | Hs.54435  | dystrobrevin, alpha                      | 34.3  | 3.0  |
| 449539 | W80363    | Hs.58446  | ESTs                                     | 33.6  | 33.6 |
| 408562 | AI436323  | Hs.31141  | Homo sapiens mRNA for KIAA1568 protein,  | 32.8  | 5.9  |
| 431019 | NM_005249 | Hs.2714   | forkhead box G1B                         | 32.4  | 17.0 |
| 427540 | R12014    | Hs.20976  | ESTs                                     | 32.1  | 2.0  |
| 425057 | AA826434  | Hs.96944  | ESTs                                     | 31.0  | 2.3  |
| 431941 | AK000106  | Hs.272227 | Homo sapiens cDNA FLJ20099 fis, clone CO | 30.8  | 30.8 |
| 416829 | AB013805  | Hs.80220  | calenin (cadherin-associated protein), d | 30.4  | 2.2  |
| 420807 | AA280627  | Hs.57846  | ESTs                                     | 30.4  | 30.4 |
| 444190 | AI878918  | Hs.10526  | cysteine and glycine-rich protein 2      | 30.4  | 30.4 |
| 429466 | M85835    | Hs.12827  | ESTs                                     | 30.2  | 7.2  |
| 444471 | AB020684  | Hs.11217  | KIAA0877 protein                         | 29.5  | 29.5 |
| 451678 | AA374181  | Hs.26799  | DKFZP564D0764 protein                    | 28.8  | 3.0  |
| 439979 | AW500291  | Hs.6823   | hypothetical protein FLJ10430            | 27.7  | 3.2  |
| 433800 | AI034361  | Hs.135150 | lung type-I cell membrane-associated gly | 27.1  | 27.1 |
| 440435 | AL042201  | Hs.21273  | ESTs                                     | 26.9  | 26.9 |
| 411078 | AI222020  | Hs.182364 | ESTs, Weakly similar to 25 kDa trypsin i | 26.0  | 26.0 |
| 407808 | AA663559  | Hs.289109 | dimethylarginine dimethylaminohydrolase  | 25.8  | 2.2  |
| 416155 | AI807264  | Hs.205442 | ESTs, Weakly similar to AF117610 1 inner | 25.5  | 25.5 |
| 421659 | NM_014459 | Hs.106511 | prolactin 17                             | 25.0  | 3.3  |
| 430132 | AA204686  | Hs.234149 | hypothetical protein FLJ20647            | 24.7  | 24.7 |
| 433332 | AI367347  | Hs.127809 | ESTs                                     | 24.6  | 24.6 |
| 452744 | AI267652  | Hs.30504  | Homo sapiens mRNA; cDNA DKFZp434E082 (fr | 23.8  | 23.8 |
| 419271 | N34901    | Hs.238532 | ESTs                                     | 23.6  | 5.5  |
| 447397 | BE247676  | Hs.18442  | E-1 enzyme                               | 23.1  | 3.2  |
| 439039 | AI656707  | Hs.48713  | ESTs                                     | 23.0  | 7.2  |
| 414175 | AI308876  | Hs.103849 | ESTs                                     | 22.2  | 2.0  |
| 451099 | R52795    | Hs.25954  | interleukin 13 receptor, alpha 2         | 22.0  | 7.6  |
| 410102 | AW248508  | Hs.279727 | Homo sapiens cDNA FLJ14035 fis, clone HE | 21.6  | 2.3  |
| 415910 | U20350    | Hs.78913  | chemokine (C-X3-C) receptor 1            | 21.2  | 3.0  |
| 451468 | AW503398  | Hs.210047 | ESTs                                     | 21.0  | 4.7  |
| 454117 | BE410100  | Hs.40368  | adaptor-related protein complex 1, sigma | 20.8  | 20.8 |
| 443850 | AW014723  | Hs.134719 | ESTs                                     | 20.4  | 38.5 |
| 418738 | AW388633  | Hs.6682   | ESTs                                     | 20.2  | 2.2  |
| 449433 | AI672096  | Hs.9012   | ESTs                                     | 19.9  | 16.6 |
| 435706 | W31254    | Hs.7045   | GL004 protein                            | 19.7  | 19.7 |
| 407192 | AA609200  |           | gb:af12e02.s1 Soares_testis_NHT Homo sap | 19.7  | 19.7 |
| 416892 | L24498    | Hs.80409  | growth arrest and DNA-damage-inducible,  | 19.6  | 19.6 |
| 442562 | BE379584  | Hs.34789  | ESTs                                     | 19.4  | 19.4 |
| 439451 | AF086270  | Hs.278554 | heterochromatin-like protein 1           | 19.1  | 17.4 |
| 426320 | W47595    | Hs.169300 | transforming growth factor, beta 2       | 18.7  | 5.4  |
| 412986 | X81120    | Hs.75110  | cannabinoid receptor 1 (brain)           | 18.6  | 18.6 |
| 452106 | AI141031  | Hs.21342  | ESTs                                     | 18.6  | 10.3 |
| 431173 | AW971198  | Hs.294068 | ESTs                                     | 18.6  | 18.6 |
| 422583 | AA410506  | Hs.118578 | Hsapiens mRNA for ribosomal protein L18  | 18.5  | 18.5 |
| 419088 | AI538323  | Hs.77496  | small nuclear ribonucleoprotein polypept | 18.5  | 18.5 |
| 443547 | AW271273  | Hs.23767  | Homo sapiens cDNA FLJ12666 fis, clone NT | 18.5  | 5.1  |
| 451592 | AI805416  | Hs.213897 | ESTs                                     | 18.4  | 18.4 |
| 450313 | AI038989  | Hs.24809  | hypothetical protein FLJ10826            | 18.3  | 18.3 |

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|    |        |           |           |  |      |      |
|----|--------|-----------|-----------|--|------|------|
|    | 422544 | AB018259  | Hs.118140 | KIAA0716 gene product                    | 18.2 | 4.7  |
|    | 408096 | BE250162  | Hs.83765  | dihydrofolate reductase                  | 18.0 | 18.0 |
|    | 418027 | AB037807  | Hs.83293  | hypothetical protein                     | 18.0 | 8.2  |
| 5  | 414117 | W88559    | Hs.1787   | proteolipid protein (Pelizaeus-Merzbache | 18.0 | 18.0 |
|    | 429418 | AI381028  | Hs.99283  | ESTs                                     | 17.8 | 17.8 |
|    | 432527 | AW975028  | Hs.102754 | ESTs                                     | 17.7 | 4.2  |
|    | 447809 | AW207605  | Hs.164230 | ESTs, Highly similar to phosphodiesteras | 17.5 | 4.3  |
|    | 419704 | AA429104  | Hs.45057  | ESTs                                     | 17.4 | 4.6  |
| 10 | 436476 | AA326108  | Hs.53631  | ESTs, Weakly similar to enhancer-of-spli | 17.4 | 2.1  |
|    | 445133 | AW157646  | Hs.153506 | ESTs, Weakly similar to AF150755 1 micro | 17.3 | 18.8 |
|    | 446859 | AI335361  | Hs.226376 | ESTs                                     | 17.2 | 2.8  |
|    | 409049 | AI423132  | Hs.146343 | ESTs                                     | 17.2 | 3.8  |
|    | 443672 | AA323362  | Hs.9667   | butyrobetaine (gamma), 2-oxoglutarate di | 17.2 | 11.0 |
| 15 | 407748 | AL079409  | Hs.38176  | KIAA0606 protein; SCN Circadian Oscillat | 17.0 | 6.3  |
|    | 438527 | AI969251  | Hs.143237 | ESTs                                     | 16.9 | 16.9 |
|    | 417791 | AW965339  | Hs.111471 | ESTs                                     | 16.8 | 10.5 |
|    | 417355 | D13168    | Hs.82002  | endothelin receptor type B               | 16.4 | 16.4 |
|    | 427897 | NM_017413 | Hs.181060 | apelin; peptide ligand for APJ receptor  | 16.3 | 4.2  |
| 20 | 419721 | NM_001650 | Hs.288650 | aquaporin 4                              | 16.2 | 4.4  |
|    | 427701 | AA411101  | Hs.221750 | ESTs                                     | 16.1 | 3.9  |
|    | 432435 | BE218886  | Hs.282070 | ESTs                                     | 16.1 | 5.7  |
|    | 426809 | BE313114  | Hs.29706  | ESTs                                     | 16.0 | 10.0 |
|    | 407881 | AW072003  | Hs.40968  | heparan sulfate (glucosamine) 3-O-sulfot | 15.9 | 15.9 |
| 25 | 400859 |           |           |  | 15.7 | 15.7 |
|    | 409731 | AA125985  | Hs.56145  | thymosin, beta, identified in neuroblast | 15.6 | 15.6 |
|    | 420092 | AA814043  | Hs.88045  | ESTs                                     | 15.6 | 5.4  |
|    | 449605 | AW138581  | Hs.198416 | ESTs                                     | 15.5 | 3.0  |
|    | 422365 | AF035537  | Hs.115521 | REV3 (yeast homolog)-like, catalytic sub | 15.3 | 4.6  |
| 30 | 449611 | AI970394  | Hs.197075 | ESTs                                     | 15.2 | 15.2 |
|    | 414922 | D00723    | Hs.77631  | glycine cleavage system protein H (amino | 15.2 | 5.6  |
|    | 405238 |           |           |  | 15.1 | 2.8  |
|    | 429007 | D80642    |           | gb:HUM092E09B Human fetal brain (TFujiwa | 15.0 | 3.5  |
|    | 409638 | AW450420  | Hs.21335  | ESTs                                     | 14.9 | 7.1  |
| 35 | 445888 | AF070564  | Hs.13415  | Homo sapiens clone 24571 mRNA sequence   | 14.8 | 5.7  |
|    | 416737 | AF154335  | Hs.79691  | LIM domain protein                       | 14.7 | 4.2  |
|    | 429163 | AA884766  |           | gb:am20a10.s1 Soares_NFL_T_GBC_S1 Homo s | 14.6 | 3.0  |
|    | 436870 | AW204219  | Hs.43679  | ESTs                                     | 14.6 | 2.6  |
|    | 443181 | AI039201  | Hs.54548  | ESTs                                     | 14.6 | 3.5  |
| 40 | 436281 | AW411194  | Hs.120051 | ESTs                                     | 14.5 | 8.5  |
|    | 449448 | D60730    | Hs.57471  | ESTs                                     | 14.4 | 4.8  |
|    | 422564 | AI148006  | Hs.222120 | ESTs                                     | 14.4 | 14.4 |
|    | 448243 | AW369771  | Hs.77496  | small nuclear ribonucleoprotein polypept | 14.3 | 2.4  |
|    | 428748 | AW593206  | Hs.98785  | ESTs                                     | 14.2 | 14.2 |
| 45 | 452576 | AB023177  | Hs.29900  | KIAA0960 protein                         | 14.1 | 8.1  |
|    | 452461 | N78223    | Hs.108106 | transcription factor                     | 14.1 | 12.8 |
|    | 449670 | F07693    | Hs.23869  | Homo sapiens mRNA; cDNA DKFZp434K2172 (f | 14.1 | 14.1 |
|    | 436637 | AI783629  | Hs.26766  | ESTs                                     | 14.0 | 2.3  |
|    | 429597 | NM_003816 | Hs.2442   | a disintegrin and metalloproteinase doma | 13.9 | 13.9 |
| 50 | 419078 | M93119    | Hs.89584  | insulinoma-associated 1                  | 13.9 | 2.9  |
|    | 410889 | X91662    | Hs.66744  | twist (Drosophila) homolog (acrocephalos | 13.9 | 4.1  |
|    | 452355 | N54926    | Hs.29202  | G protein-coupled receptor 34            | 13.9 | 13.9 |
|    | 421452 | AI925946  | Hs.104530 | fetal hypothetical protein               | 13.9 | 13.9 |
|    | 430290 | AI734110  | Hs.136355 | ESTs                                     | 13.8 | 13.8 |
|    | 430387 | AW372884  | Hs.240770 | nuclear cap binding protein subunit 2, 2 | 13.6 | 13.6 |
| 55 | 415875 | AA894876  | Hs.5687   | protein phosphatase 1B (formerly 2C), ma | 13.5 | 13.5 |
|    | 416795 | AI497778  | Hs.168053 | ESTs, Highly similar to AF227948 1 HBV p | 13.5 | 13.5 |
|    | 422025 | BE348774  | Hs.122554 | ESTs                                     | 13.3 | 13.3 |
|    | 400992 |           |           |  | 13.3 | 5.5  |
| 60 | 413174 | AA723564  | Hs.191343 | ESTs                                     | 13.2 | 2.5  |
|    | 425187 | AW014486  | Hs.22509  | ESTs                                     | 13.1 | 8.2  |
|    | 456965 | AW131883  | Hs.172792 | ESTs, Weakly similar to hypothetical pro | 13.1 | 2.7  |
|    | 419852 | AW503756  | Hs.286184 | hypothetical protein dJ551D2.5           | 13.0 | 2.4  |
|    | 409327 | L41162    | Hs.53563  | collagen, type IX, alpha 3               | 12.9 | 4.0  |
| 65 | 439519 | AA837118  | Hs.118366 | ESTs                                     | 12.9 | 7.6  |
|    | 436299 | AK000767  | Hs.5111   | hypothetical protein FLJ20729            | 12.7 | 3.1  |
|    | 446657 | AI335191  | Hs.260702 | ESTs, Moderately similar to ALU7_HUMAN A | 12.6 | 12.6 |
|    | 423073 | BE252922  | Hs.123119 | MAD (mothers against decapentaplegic, Dr | 12.6 | 12.6 |
|    | 424278 | AK000723  | Hs.144517 | hypothetical protein FLJ20716            | 12.6 | 12.6 |
| 70 | 451996 | AW514021  | Hs.245510 | ESTs                                     | 12.6 | 7.0  |
|    | 400860 |           |           |  | 12.5 | 23.1 |
|    | 439579 | AF086400  |           | gb:Homo sapiens full length insert cDNA  | 12.4 | 12.4 |
|    | 408312 | AF263613  | Hs.44198  | intracellular membrane-associated calciu | 12.4 | 12.4 |
| 75 | 419948 | AB041035  | Hs.93847  | NADPH oxidase 4                          | 12.4 | 2.4  |
|    | 427304 | AA761526  | Hs.163853 | ESTs                                     | 12.3 | 12.3 |
|    | 419498 | AL036591  | Hs.20987  | hypothetical protein FLJ10392            | 12.2 | 12.2 |
|    | 428137 | AA421792  | Hs.170999 | ESTs                                     | 12.2 | 12.2 |
|    | 432683 | AW995441  | Hs.10475  | ESTs                                     | 12.2 | 2.0  |
|    | 406622 | AA056060  | Hs.202577 | Homo sapiens cDNA FLJ12166 fis, clone MA | 12.1 | 12.1 |
| 80 | 453884 | AA355925  | Hs.36232  | KIAA0186 gene product                    | 12.0 | 5.2  |
|    | 441440 | AI807981  | Hs.30495  | ESTs                                     | 12.0 | 3.6  |
|    | 414217 | AI309298  | Hs.279893 | Homo sapiens cDNA: FLJ23165 fis, clone L | 12.0 | 62.7 |
|    | 410227 | AB009284  | Hs.61152  | exostosins (multiple)-like 2             | 11.9 | 2.9  |
|    | 439444 | AI277652  | Hs.54578  | ESTs                                     | 11.9 | 16.5 |

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|    |        |           |           |  |      |      |
|----|--------|-----------|-----------|--|------|------|
|    | 433309 | AA807060  | Hs.126558 | ESTs                                     | 11.7 | 9.0  |
|    | 439170 | AA332365  | Hs.165539 | ESTs                                     | 11.6 | 9.7  |
|    | 417160 | N76497    | Hs.1787   | proteolipid protein (Pelizaeus-Merzbache | 11.5 | 7.2  |
|    | 424668 | D83702    | Hs.151573 | cryptochrome 1 (photolyase-like)         | 11.5 | 5.8  |
| 5  | 410611 | AW954134  | Hs.20924  | KIAA1628 protein                         | 11.5 | 28.2 |
|    | 437124 | AA554458  | Hs.204200 | ESTs                                     | 11.5 | 11.5 |
|    | 418858 | AW961605  | Hs.21145  | Homo sapiens cDNA: FLJ22489 fis, clone H | 11.3 | 11.3 |
|    | 423600 | AI633559  | Hs.29076  | Homo sapiens cDNA: FLJ21841 fis, clone H | 11.3 | 2.8  |
| 10 | 429393 | AA383024  | Hs.201603 | ESTs, Highly similar to hypothetical pro | 11.3 | 11.3 |
|    | 431103 | M57399    | Hs.44     | pleiotrophin (heparin binding growth fac | 11.3 | 3.4  |
|    | 452092 | BE245374  | Hs.27842  | hypothetical protein FLJ11210            | 11.3 | 11.7 |
|    | 431701 | AW935490  | Hs.14658  | ESTs                                     | 11.3 | 2.6  |
|    | 429399 | AA452244  | Hs.16727  | ESTs                                     | 11.2 | 2.2  |
| 15 | 408988 | AL119844  | Hs.49476  | Homo sapiens clone TUA8 Cri-du-chat regi | 11.2 | 27.8 |
|    | 442671 | AI005668  | Hs.134779 | EST                                      | 11.1 | 11.1 |
|    | 402524 |           |           |  | 11.1 | 11.1 |
|    | 415558 | AA885143  | Hs.125719 | ESTs                                     | 11.1 | 11.1 |
|    | 422390 | AW450893  | Hs.121830 | ESTs, Weakly similar to KIAA0924 protein | 11.0 | 8.8  |
| 20 | 418475 | AI858732  | Hs.30443  | sentrin/SUMO-specific protease           | 11.0 | 6.1  |
|    | 458809 | AW972512  | Hs.20985  | sin3-associated polypeptide, 30kD        | 11.0 | 5.6  |
|    | 410297 | AA148710  | Hs.109441 | ESTs                                     | 11.0 | 3.3  |
|    | 444017 | U04840    | Hs.214    | neuro-oncological ventral antigen 1      | 11.0 | 11.0 |
|    | 437814 | AI088192  | Hs.135474 | ESTs, Weakly similar to DDx9_HUMAN ATP-D | 10.9 | 3.3  |
| 25 | 427194 | AA399018  | Hs.250835 | ESTs                                     | 10.8 | 8.0  |
|    | 432060 | AW971364  |           | gb:EST383453 MAGE resequences, MAGL Homo | 10.8 | 10.0 |
|    | 453861 | AI026838  | Hs.30120  | ESTs                                     | 10.8 | 10.8 |
|    | 408829 | NM_006042 | Hs.48384  | heparan sulfate (glucosamine) 3-O-sulfol | 10.6 | 3.3  |
|    | 416913 | AW934714  |           | gb:RC1-DT0001-031299-011-a11 DT0001 Homo | 10.6 | 3.4  |
| 30 | 418049 | AA211467  | Hs.190488 | hypothetical protein FLJ10120            | 10.6 | 10.6 |
|    | 413063 | AL035737  | Hs.75184  | chitinase 3-like 1 (cartilage glycoprote | 10.6 | 27.2 |
|    | 425264 | AA353953  | Hs.20369  | ESTs, Weakly similar to gonadotropin ind | 10.5 | 2.0  |
|    | 434408 | AI031771  | Hs.132586 | ESTs                                     | 10.5 | 10.5 |
|    | 451697 | AW449774  | Hs.257208 | ESTs                                     | 10.5 | 6.2  |
| 35 | 436754 | AI061288  | Hs.133437 | ESTs, Moderately similar to gonadotropin | 10.3 | 10.3 |
|    | 410298 | AI693821  | Hs.182185 | ESTs                                     | 10.3 | 2.9  |
|    | 412766 | BE544475  | Hs.54347  | ESTs                                     | 10.3 | 10.3 |
|    | 450689 | AI369275  | Hs.243010 | ESTs, Moderately similar to RTC0_HUMAN G | 10.3 | 10.3 |
|    | 408331 | NM_007240 | Hs.44229  | dual specificity phosphatase 12          | 10.3 | 4.5  |
| 40 | 442007 | AA301116  | Hs.142838 | Homo sapiens cDNA: FLJ23444 fis, clone H | 10.3 | 10.3 |
|    | 410386 | W26187    | Hs.3327   | Homo sapiens cDNA: FLJ22219 fis, clone H | 10.2 | 2.1  |
|    | 440684 | AI253123  | Hs.127356 | ESTs, Highly similar to NEST_HUMAN NEST1 | 10.1 | 10.1 |
|    | 420892 | AW975076  | Hs.172589 | nuclear phosphoprotein similar to S, cer | 10.0 | 10.0 |
|    | 419594 | AA013051  | Hs.91417  | topoisomerase (DNA) II binding protein   | 9.9  | 15.8 |
| 45 | 419972 | AL041465  | Hs.294038 | ESTs, Moderately similar to ALU2_HUMAN A | 9.7  | 23.2 |
|    | 433730 | AK002135  | Hs.3542   | hypothetical protein FLJ11273            | 9.6  | 6.5  |
|    | 434851 | AA806164  | Hs.116502 | ESTs                                     | 9.5  | 6.5  |
|    | 436306 | AA805939  | Hs.117927 | ESTs                                     | 9.5  | 4.7  |
|    | 453331 | AI240665  | Hs.8895   | ESTs                                     | 9.2  | 5.8  |
| 50 | 414429 | R51494    | Hs.71818  | ESTs                                     | 9.0  | 6.2  |
|    | 424998 | U58615    | Hs.154133 | chitinase 3-like 2                       | 8.9  | 18.1 |
|    | 446936 | HI0207    | Hs.47314  | ESTs                                     | 8.9  | 3.6  |
|    | 410276 | AI554545  | Hs.68301  | ESTs                                     | 8.8  | 3.8  |
|    | 453857 | AL080235  | Hs.35861  | DKFZP586E1621 protein                    | 8.8  | 3.8  |
| 55 | 448321 | NM_005883 | Hs.20912  | adenomatous polyposis coli like          | 8.8  | 2.0  |
|    | 414783 | AW069569  | Hs.75839  | zinc finger protein 6 (CMPX1)            | 8.7  | 3.0  |
|    | 441079 | AW150697  | Hs.107418 | ESTs                                     | 8.7  | 2.2  |
|    | 437517 | AI927675  | Hs.99858  | ribosomal protein L7a                    | 8.6  | 4.5  |
| 60 | 409062 | AL157488  | Hs.50150  | Homo sapiens mRNA; cDNA DKFZp564B182 (fr | 8.6  | 12.2 |
|    | 429630 | AL133101  | Hs.99508  | Homo sapiens mRNA; cDNA DKFZp434O0921 (f | 8.6  | 10.4 |
|    | 409260 | AW242407  | Hs.18479  | ESTs                                     | 8.5  | 11.6 |
|    | 442343 | AA992480  | Hs.129874 | ESTs                                     | 8.4  | 4.6  |
|    | 416439 | AA180363  | Hs.118769 | ESTs                                     | 8.4  | 7.2  |
|    | 429054 | AI948688  | Hs.266619 | ESTs                                     | 8.2  | 9.2  |
| 65 | 421633 | AF121860  | Hs.106260 | sorting nexin 10                         | 8.2  | 2.6  |
|    | 433285 | AW975944  | Hs.237396 | ESTs                                     | 8.1  | 3.3  |
|    | 433226 | AW503733  | Hs.9414   | KIAA1488 protein                         | 8.0  | 13.4 |
|    | 424900 | AL035588  | Hs.153203 | MycD family inhibitor                    | 8.0  | 2.5  |
|    | 425681 | AB018297  | Hs.159183 | KIAA0754 protein                         | 7.9  | 4.8  |
| 70 | 446034 | AW293376  | Hs.160323 | ESTs                                     | 7.9  | 3.7  |
|    | 435020 | AW505076  | Hs.301855 | DiGeorge syndrome critical region gene 8 | 7.6  | 6.4  |
|    | 446985 | AL038704  | Hs.156827 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 7.5  | 7.8  |
|    | 446619 | AU076643  | Hs.313    | secreted phosphoprotein 1 (osteopontin,  | 7.5  | 3.9  |
|    | 418522 | AA605038  | Hs.7149   | Homo sapiens cDNA: FLJ21950 fis, clone H | 7.5  | 2.2  |
| 75 | 439864 | AI720078  | Hs.291997 | ESTs                                     | 7.4  | 6.9  |
|    | 419723 | AL120193  | Hs.92614  | Homo sapiens growth differentiation fact | 7.4  | 3.5  |
|    | 447896 | AI436124  | Hs.294069 | ESTs, Weakly similar to ORF2 contains a  | 7.3  | 22.1 |
|    | 404210 |           |           |  | 7.3  | 40.8 |
|    | 436671 | AW137159  | Hs.146151 | ESTs                                     | 7.2  | 11.8 |
| 80 | 439231 | AW581935  | Hs.141480 | ESTs                                     | 7.2  | 2.5  |
|    | 418030 | BE207573  | Hs.83321  | neuromedin B                             | 7.1  | 6.4  |
|    | 459290 | NM_001546 | Hs.34853  | inhibitor of DNA binding 4, dominant neg | 7.0  | 6.7  |
|    | 423869 | BE409301  | Hs.134012 | C1q-related factor                       | 7.0  | 4.9  |
|    | 414825 | X06370    | Hs.77432  | epidermal growth factor receptor (avian  | 6.9  | 6.4  |

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|    |        |           |           |   |     |      |
|----|--------|-----------|-----------|---|-----|------|
|    | 420018 | U56387    | Hs.94376  | proprotein convertase subtilisin/kexin 1  | 6.9 | 8.6  |
|    | 428600 | AW863261  | Hs.15036  | ESTs, Highly similar to AF161358.1 HSPC0  | 6.9 | 7.7  |
|    | 438380 | T06430    | Hs.6194   | chondroitin sulfate proteoglycan BEHAB/b  | 6.9 | 3.1  |
|    | 402604 |           |           |   | 6.8 | 7.0  |
| 5  | 417022 | NM_014737 | Hs.80905  | Ras association (RalGDS/AF-6) domain fam  | 6.8 | 2.5  |
|    | 405239 | U89281    | Hs.11958  | oxidative 3 alpha hydroxysteroid dehydro  | 6.8 | 2.9  |
|    | 433577 | AW007080  | Hs.8817   | ESTs                                      | 6.6 | 2.6  |
|    | 434629 | AA789081  | Hs.4029   | glioma-amplified sequence-41              | 6.6 | 13.9 |
|    | 413886 | AW958264  | Hs.103832 | ESTs, Weakly similar to TRHY_HUMAN TRICH  | 6.6 | 2.2  |
| 10 | 451460 | AI797550  | Hs.209652 | ESTs                                      | 6.5 | 13.7 |
|    | 442145 | AI022650  | Hs.8117   | erbB2-interacting protein ERBIN           | 6.5 | 15.6 |
|    | 437273 | AL137451  | Hs.120873 | ESTs, Highly similar to hypothetical pro  | 6.5 | 2.4  |
|    | 418365 | AW014345  | Hs.161690 | ESTs                                      | 6.4 | 12.8 |
|    | 421684 | BE281591  | Hs.106768 | hypothetical protein FLJ10511             | 6.4 | 4.3  |
| 15 | 449458 | AI805078  | Hs.208261 | ESTs                                      | 6.4 | 2.3  |
|    | 426413 | AA377823  |           | gb:EST90805 Synovial sarcoma Homo sapien  | 6.3 | 13.2 |
|    | 426423 | NM_012446 | Hs.169833 | single-stranded-DNA-binding protein       | 6.3 | 10.9 |
|    | 417709 | D87434    | Hs.82426  | KIAA0247 gene product                     | 6.3 | 23.3 |
| 20 | 448499 | BE613280  | Hs.250655 | prothymosin, alpha (gene sequence 28)     | 6.2 | 2.9  |
|    | 444880 | AW118683  | Hs.154150 | ESTs                                      | 6.2 | 19.4 |
|    | 432715 | AA247152  | Hs.200483 | ESTs, Weakly similar to KIAA1074 protein  | 6.2 | 12.7 |
|    | 444864 | AW965446  | Hs.46637  | ESTs, Weakly similar to cDNA EST yk289g5  | 6.2 | 4.1  |
|    | 407792 | AI077715  | Hs.39384  | putative secreted ligand homologous to f  | 6.2 | 3.4  |
| 25 | 431962 | AL049385  | Hs.272251 | Homo sapiens mRNA; cDNA DKFZp586M1418 (f  | 6.1 | 2.6  |
|    | 424232 | AB015982  | Hs.143460 | protein kinase C, nu                      | 6.1 | 14.6 |
|    | 436443 | AW138211  | Hs.128746 | ESTs                                      | 6.1 | 2.8  |
|    | 433647 | AA603367  | Hs.222294 | ESTs                                      | 6.1 | 15.0 |
|    | 449961 | AW265634  | Hs.133100 | ESTs                                      | 6.1 | 3.4  |
| 30 | 448704 | AW080932  | Hs.249247 | heterogeneous nuclear protein similar to  | 6.1 | 6.1  |
|    | 408393 | AW015318  | Hs.23165  | ESTs                                      | 6.1 | 21.6 |
|    | 450693 | AW450461  | Hs.203965 | ESTs                                      | 6.1 | 2.2  |
|    | 407846 | AA426202  | Hs.40403  | Cbp/p300-interacting transactivator, wit  | 6.0 | 2.4  |
|    | 445817 | NM_003642 | Hs.13340  | histone acetyltransferase 1               | 6.0 | 10.9 |
| 35 | 440650 | R44692    | Hs.6640   | ESTs                                      | 6.0 | 2.1  |
|    | 417675 | AI808607  | Hs.3781   | similar to murine leucine-rich repeat pr  | 6.0 | 2.4  |
|    | 411083 | N41340    | Hs.68318  | hypothetical protein FLJ20344             | 6.0 | 3.6  |
|    | 407910 | AA650274  | Hs.41296  | fibronectin leucine rich transmembrane p  | 6.0 | 6.0  |
|    | 402855 |           |           |   | 6.0 | 2.6  |
| 40 | 445594 | AW058463  | Hs.12940  | zinc-fingers and homeoboxes 1             | 6.0 | 11.6 |
|    | 418791 | AA936633  | Hs.194628 | ESTs                                      | 5.9 | 6.7  |
|    | 409262 | AK000631  | Hs.52256  | hypothetical protein FLJ20624             | 5.9 | 2.3  |
|    | 435677 | AA694142  | Hs.293726 | ESTs                                      | 5.9 | 11.8 |
|    | 430334 | AI824719  | Hs.47557  | ESTs                                      | 5.9 | 7.5  |
| 45 | 452834 | AI638627  | Hs.105685 | ESTs                                      | 5.9 | 2.6  |
|    | 427315 | AA179949  | Hs.175563 | Homo sapiens mRNA; cDNA DKFZp564N0763 (f  | 5.8 | 3.1  |
|    | 428250 | AW809208  | Hs.183297 | DKFZP565F2124 protein                     | 5.8 | 2.0  |
|    | 418506 | AA064248  | Hs.85339  | G protein-coupled receptor 39             | 5.8 | 2.5  |
|    | 417115 | AW952792  | Hs.1066   | small nuclear ribonucleoprotein polypept  | 5.8 | 16.0 |
| 50 | 436758 | AW977167  | Hs.155272 | ESTs                                      | 5.8 | 3.8  |
|    | 446332 | AK001635  | Hs.14838  | hypothetical protein FLJ10773             | 5.7 | 5.1  |
|    | 423943 | AF163570  | Hs.135756 | polymerase (DNA-directed) kappa           | 5.7 | 11.1 |
|    | 428180 | AI129767  | Hs.182874 | Homo sapiens cDNA: FLJ21929 fis, clone H  | 5.6 | 7.1  |
|    | 424343 | AW956360  | Hs.4748   | ESTs, Highly similar to JN0902 pituitary  | 5.6 | 2.2  |
| 55 | 417318 | AW953937  | Hs.12891  | ESTs                                      | 5.6 | 25.0 |
|    | 423582 | BE000831  | Hs.23837  | Homo sapiens cDNA FLJ11812 fis, clone HE  | 5.6 | 4.1  |
|    | 427472 | AA522639  | Hs.131250 | transposon-derived Buster3 transposase-I  | 5.4 | 3.5  |
|    | 434701 | AA460479  | Hs.4096   | KIAA0742 protein                          | 5.4 | 21.2 |
|    | 430147 | R60704    | Hs.234434 | hairly/enhancer-of-split related with YRP | 5.3 | 2.7  |
| 60 | 411019 | AW993097  | Hs.48617  | Homo sapiens cDNA FLJ12540 fis, clone NT  | 5.3 | 4.1  |
|    | 424939 | AK000059  | Hs.153881 | Homo sapiens NY-REN-52 antigen mRNA, par  | 5.3 | 2.4  |
|    | 424028 | AF055084  | Hs.153692 | KIAA0686 protein                          | 5.3 | 2.7  |
|    | 444534 | AW271626  | Hs.42294  | ESTs                                      | 5.3 | 2.1  |
|    | 426171 | AI128606  | Hs.301454 | ESTs                                      | 5.2 | 3.8  |
| 65 | 431843 | AA516420  | Hs.183526 | ESTs                                      | 5.2 | 6.2  |
|    | 433204 | AI589645  | Hs.128690 | ESTs                                      | 5.2 | 5.8  |
|    | 424635 | AA420887  | Hs.115455 | Homo sapiens cDNA FLJ14259 fis, clone PL  | 5.2 | 8.4  |
|    | 436223 | AK001884  | Hs.23799  | ESTs                                      | 5.2 | 2.4  |
|    | 450649 | NM_001429 | Hs.297722 | Human DNA sequence from clone RP1-85F18   | 5.2 | 15.3 |
| 70 | 441689 | AI123705  | Hs.106932 | ESTs                                      | 5.2 | 2.2  |
|    | 443392 | AI055821  | Hs.293420 | ESTs                                      | 5.1 | 3.3  |
|    | 416179 | R19015    | Hs.79067  | MAD (mothers against decapentaplegic, Dr  | 5.1 | 16.7 |
|    | 452167 | N75238    | Hs.13075  | Homo sapiens cDNA: FLJ23013 fis, clone L  | 5.1 | 18.7 |
|    | 434001 | AW950905  | Hs.3697   | serine (or cysteine) proteinase inhibito  | 5.0 | 2.4  |
| 75 | 458435 | AI418718  | Hs.144121 | ESTs, Weakly similar to dJ37E16.2 (H.sap  | 5.0 | 3.9  |
|    | 433586 | T85301    |           | gb:yd78d06.s1 Soares fetal liver spleen   | 5.0 | 2.8  |
|    | 452040 | AW973242  | Hs.293690 | ESTs                                      | 5.0 | 4.5  |
|    | 404029 |           |           |   | 5.0 | 4.3  |
|    | 421141 | AW117261  | Hs.125914 | ESTs                                      | 5.0 | 2.1  |
| 80 | 402605 |           |           |   | 4.9 | 4.2  |
|    | 435839 | AF249744  | Hs.25951  | Rho guanine nucleotide exchange factor (  | 4.9 | 2.5  |
|    | 416404 | AA180138  | Hs.107924 | ESTs                                      | 4.9 | 2.4  |
|    | 435615 | Y15065    | Hs.4975   | potassium voltage-gated channel, KQT-lik  | 4.9 | 7.2  |
|    | 448425 | AI500359  | Hs.233401 | ESTs                                      | 4.9 | 4.9  |

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|    |        |           |           |  |     |      |
|----|--------|-----------|-----------|--|-----|------|
|    | 445773 | H73456    | Hs.13299  | Homo sapiens mRNA; cDNA DKFZp761M0111 (f | 4.9 | 2.9  |
|    | 448451 | AW015994  |           | gb:U1-H-B10p-abh-g-09-0-U1.s1 NCI_CGAP_S | 4.9 | 2.2  |
|    | 444838 | AV651680  | Hs.208558 | ESTs                                     | 4.8 | 6.7  |
|    | 452438 | BE514230  | Hs.29595  | JM4 protein                              | 4.8 | 2.7  |
| 5  | 443898 | AW804296  | Hs.9950   | Sec51 gamma                              | 4.8 | 7.2  |
|    | 452776 | AA194540  | Hs.13522  | ESTs                                     | 4.8 | 3.4  |
|    | 426108 | AA622037  | Hs.166468 | programmed cell death 5                  | 4.8 | 16.7 |
|    | 416774 | AI005169  | Hs.28274  | Homo sapiens cDNA: FLJ22049 fis, clone H | 4.8 | 3.2  |
| 10 | 427704 | AW971063  | Hs.292882 | ESTs                                     | 4.8 | 23.8 |
|    | 433588 | AI056872  | Hs.133386 | ESTs                                     | 4.8 | 12.8 |
|    | 410108 | AA081659  | Hs.191098 | KIAA1479 protein                         | 4.7 | 2.1  |
|    | 433556 | W56321    | Hs.111450 | Homo sapiens cDNA: FLJ21715 fis, clone C | 4.7 | 11.2 |
|    | 418962 | AA714835  | Hs.271863 | ESTs                                     | 4.7 | 2.2  |
|    | 404049 |           |           |  | 4.7 | 3.0  |
| 15 | 436222 | AI206737  | Hs.122810 | Homo sapiens cDNA FLJ11489 fis, clone HE | 4.7 | 3.3  |
|    | 425234 | AW152225  | Hs.165909 | ESTs                                     | 4.7 | 3.1  |
|    | 426490 | NM_001621 | Hs.170087 | aryl hydrocarbon receptor                | 4.7 | 9.1  |
|    | 426514 | BE616633  | Hs.301122 | bone morphogenetic protein 7 (osteogenic | 4.7 | 2.7  |
|    | 428722 | U76456    | Hs.190787 | tissue inhibitor of metalloproteinase 4  | 4.6 | 6.7  |
| 20 | 451989 | AF189797  | Hs.27413  | adaptor protein containing pH domain, PT | 4.6 | 13.4 |
|    | 412490 | AW803564  | Hs.288850 | Homo sapiens cDNA: FLJ22528 fis, clone H | 4.6 | 18.4 |
|    | 422488 | AI679968  | Hs.152060 | ESTs                                     | 4.6 | 7.7  |
|    | 428862 | NM_000346 | Hs.2316   | SRY (sex-determining region Y)-box 9 (ca | 4.6 | 4.6  |
| 25 | 413724 | AA131466  | Hs.23767  | Homo sapiens cDNA FLJ12666 fis, clone NT | 4.5 | 11.9 |
|    | 442495 | AI184717  |           | gb:q64b01.x1 Soares_testis_NHT Homo sap  | 4.5 | 4.5  |
|    | 403549 |           |           |  | 4.5 | 11.6 |
|    | 456209 | W50633    | Hs.297792 | ESTs                                     | 4.5 | 5.1  |
|    | 421181 | NM_005574 | Hs.184585 | LIM domain only 2 (rhombotin-like 1)     | 4.5 | 10.6 |
| 30 | 439566 | AF086387  |           | gb:Homo sapiens full length insert cDNA  | 4.4 | 2.6  |
|    | 446329 | NM_013272 | Hs.14805  | solute carrier family 21 (organic anion  | 4.4 | 17.2 |
|    | 446488 | AB037782  | Hs.15119  | KIAA1361 protein                         | 4.4 | 8.4  |
|    | 426110 | NM_002913 | Hs.166563 | replication factor C (activator 1) 1 (14 | 4.4 | 2.5  |
|    | 427413 | BE547647  | Hs.177781 | superoxide dismutase 2, mitochondrial    | 4.4 | 14.3 |
| 35 | 424340 | AA339036  | Hs.7033   | ESTs                                     | 4.4 | 3.9  |
|    | 421552 | AF026692  | Hs.105700 | secreted frizzled-related protein 4      | 4.3 | 31.1 |
|    | 422033 | AW245805  | Hs.110903 | claudin 5 (transmembrane protein deleted | 4.3 | 6.1  |
|    | 434476 | AW858520  | Hs.271825 | ESTs                                     | 4.3 | 4.5  |
|    | 420582 | BE047878  | Hs.99093  | Homo sapiens chromosome 19, cosmid R2837 | 4.3 | 3.6  |
|    | 419904 | AA974411  | Hs.18672  | ESTs                                     | 4.3 | 17.1 |
| 40 | 407939 | W05608    |           | gb:za85e07.r1 Soares_fetal_lung_NbHL19W  | 4.3 | 9.0  |
|    | 425836 | AW956596  | Hs.94842  | ESTs                                     | 4.3 | 3.2  |
|    | 426304 | AA374532  | Hs.297985 | ESTs                                     | 4.3 | 6.6  |
|    | 439553 | AW021103  | Hs.6631   | hypothetical protein FLJ20373            | 4.3 | 2.3  |
| 45 | 424723 | BE409813  | Hs.152337 | protein arginine N-methyltransferase 3(h | 4.3 | 2.5  |
|    | 426064 | BE387014  | Hs.166146 | Homer, neuronal immediate early gene, 3  | 4.2 | 4.1  |
|    | 409509 | AL036923  | Hs.127006 | ESTs                                     | 4.2 | 16.4 |
|    | 424391 | BE550112  | Hs.112712 | ESTs                                     | 4.2 | 3.8  |
|    | 425248 | AW957442  | Hs.252766 | ESTs                                     | 4.2 | 11.1 |
| 50 | 418259 | AA215404  | Hs.137289 | ESTs                                     | 4.2 | 19.3 |
|    | 445525 | BE149866  | Hs.14831  | ESTs                                     | 4.2 | 3.1  |
|    | 414821 | M63835    | Hs.77424  | Fc fragment of IgG, high affinity Ia, re | 4.2 | 34.8 |
|    | 430935 | AW072916  | Hs.115654 | ESTs                                     | 4.2 | 3.0  |
|    | 442233 | AW967149  | Hs.28439  | ESTs, Weakly similar to ORF2 [M.musculus | 4.2 | 2.4  |
| 55 | 416959 | D28459    | Hs.80612  | ubiquitin-conjugating enzyme E2A (RAD6 h | 4.1 | 15.3 |
|    | 437097 | N45312    | Hs.46506  | ESTs                                     | 4.1 | 15.6 |
|    | 428189 | AA424030  | Hs.46627  | ESTs                                     | 4.1 | 3.6  |
|    | 434963 | AW974957  | Hs.288719 | Homo sapiens cDNA FLJ12142 fis, clone MA | 4.1 | 12.2 |
|    | 425500 | AB011541  | Hs.158200 | EGF-like-domain, multiple 4              | 4.1 | 2.8  |
| 60 | 435177 | AI018174  | Hs.42936  | ESTs                                     | 4.1 | 2.1  |
|    | 418357 | Z44718    | Hs.301010 | ESTs, Highly similar to AF159851 1 Rho G | 4.1 | 4.1  |
|    | 419086 | NM_000216 | Hs.89591  | Kallmann syndrome 1 sequence             | 4.1 | 4.1  |
|    | 436557 | W15573    | Hs.5027   | ESTs                                     | 4.0 | 2.1  |
|    | 425588 | F07396    | Hs.46751  | ESTs                                     | 4.0 | 2.2  |
| 65 | 423905 | AW579960  | Hs.135150 | lung type-I cell membrane-associated gly | 4.0 | 3.6  |
|    | 437095 | D14661    | Hs.119    | Wilms' tumour 1-associated protein       | 4.0 | 10.0 |
|    | 425332 | AA633306  | Hs.127279 | ESTs                                     | 4.0 | 10.9 |
|    | 431556 | AF016028  | Hs.260039 | sarcomer (Kras oncogene-associated gene  | 4.0 | 3.8  |
|    | 427209 | H06509    | Hs.92423  | KIAA1566 protein                         | 4.0 | 3.1  |
|    | 435468 | AW362803  | Hs.166271 | ESTs                                     | 4.0 | 2.2  |
| 70 | 416773 | AK000340  | Hs.79828  | hypothetical protein FLJ20333            | 4.0 | 2.6  |
|    | 440483 | AI200836  | Hs.150386 | ESTs                                     | 4.0 | 2.5  |
|    | 444821 | AA053564  | Hs.12040  | STE20-like kinase                        | 4.0 | 10.4 |
|    | 433873 | AW156913  | Hs.150478 | ESTs, Weakly similar to KIAA0987 protein | 4.0 | 2.3  |
| 75 | 420028 | AB014680  | Hs.8786   | carbohydrate (chondroitin 6/keratan) sul | 3.9 | 2.8  |
|    | 446706 | AW807631  | Hs.190488 | hypothetical protein FLJ10120            | 3.9 | 3.8  |
|    | 424530 | AI632083  | Hs.28511  | ESTs                                     | 3.9 | 2.2  |
|    | 446851 | AW007332  | Hs.16261  | Homo sapiens cDNA: FLJ22063 fs, clone H  | 3.9 | 16.0 |
|    | 424720 | M89907    | Hs.152292 | SWI/SNF related, matrix associated, acti | 3.9 | 4.5  |
| 80 | 409456 | U34962    | Hs.54473  | cardiac-specific homeo box               | 3.9 | 8.0  |
|    | 420439 | AW270041  | Hs.193053 | eukaryotic translation initiation factor | 3.9 | 7.9  |
|    | 447340 | AW961327  | Hs.280833 | ESTs                                     | 3.9 | 2.1  |
|    | 430887 | N66801    | Hs.260287 | ESTs, Weakly similar to ALU7_HUMAN ALU S | 3.9 | 2.5  |
|    | 409361 | NM_005982 | Hs.54416  | sine oculis homeobox (Drosophila) homolo | 3.9 | 4.6  |

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|    |        |           |           |  |     |      |
|----|--------|-----------|-----------|--|-----|------|
|    | 426509 | M31166    | Hs.2050   | pentaxin-related gene, rapidly induced b | 3.9 | 4.0  |
|    | 410079 | U94362    | Hs.58589  | glycogenin 2                             | 3.9 | 18.3 |
|    | 426818 | AA554827  | Hs.124841 | ESTs, Weakly similar to ALU5_HUMAN ALU S | 3.9 | 3.0  |
|    | 435232 | NM_001262 | Hs.4854   | cyclin-dependent kinase inhibitor 2C (o1 | 3.8 | 4.0  |
| 5  | 427228 | AA115770  | Hs.174051 | small nuclear ribonucleoprotein 70kD pol | 3.8 | 7.9  |
|    | 443801 | AW206942  | Hs.253594 | ESTs                                     | 3.8 | 3.4  |
|    | 450746 | D82673    | Hs.169921 | general transcription factor II, i, pseu | 3.8 | 2.2  |
|    | 443837 | AI984625  | Hs.9884   | spindle pole body protein                | 3.8 | 6.5  |
|    | 435760 | AF231922  | Hs.213004 | chromosome 21 open reading frame 62      | 3.8 | 2.2  |
| 10 | 426757 | AW205640  | Hs.158206 | ESTs                                     | 3.7 | 3.1  |
|    | 443101 | AI268936  | Hs.129872 | sperm surface protein                    | 3.7 | 2.4  |
|    | 440118 | AB040893  | Hs.6968   | KIAA1460 protein                         | 3.7 | 3.5  |
|    | 410612 | AW502698  | Hs.118152 | ESTs                                     | 3.7 | 22.5 |
|    | 435869 | AF255910  | Hs.54650  | vascular endothelial junction-associated | 3.7 | 4.2  |
| 15 | 433208 | AW002834  | Hs.24095  | ESTs                                     | 3.7 | 16.0 |
|    | 432357 | AA452506  | Hs.274412 | similar to yeast Upf3, variant A         | 3.7 | 2.6  |
|    | 413916 | N49813    | Hs.75615  | apolipoprotein C-II                      | 3.7 | 5.4  |
|    | 429766 | AA612710  | Hs.146140 | ESTs                                     | 3.7 | 3.2  |
|    | 437470 | AL390147  | Hs.134742 | hypothetical protein DKFZp547D065        | 3.7 | 6.4  |
| 20 | 438459 | T49300    | Hs.35304  | Homo sapiens cDNA FLJ13655 fis, clone PL | 3.7 | 10.7 |
|    | 420361 | N92054    | Hs.206910 | ESTs                                     | 3.7 | 18.7 |
|    | 408819 | AW163483  | Hs.48320  | DKFZP566B1346 protein                    | 3.7 | 8.8  |
|    | 411960 | R77776    | Hs.18103  | ESTs                                     | 3.7 | 2.3  |
|    | 435923 | BE301930  | Hs.5010   | Homo sapiens clone 24672 mRNA sequence   | 3.7 | 2.2  |
| 25 | 440145 | AW021433  | Hs.250863 | ESTs                                     | 3.7 | 3.8  |
|    | 453740 | AL120295  |           | gb:DKFZp761M067_s1 761 (synonym: hamy2)  | 3.6 | 3.0  |
|    | 440975 | AW499914  | Hs.7579   | hypothetical protein FLJ10402            | 3.6 | 2.0  |
|    | 443135 | AI376331  | Hs.156103 | ESTs                                     | 3.6 | 12.4 |
|    | 419687 | AI638859  | Hs.227699 | ESTs, Weakly similar to Yhr217cp [S.cere | 3.6 | 2.7  |
| 30 | 451029 | AA852097  | Hs.25829  | ras-related protein                      | 3.6 | 2.9  |
|    | 414512 | AL044336  | Hs.6831   | golgi resident protein GCP60             | 3.6 | 10.5 |
|    | 410853 | H04588    | Hs.30469  | ESTs                                     | 3.6 | 23.9 |
|    | 419900 | AI469960  | Hs.170698 | ESTs                                     | 3.6 | 3.6  |
|    | 429673 | AA884407  | Hs.211595 | protein tyrosine phosphatase, non-recept | 3.6 | 7.5  |
| 35 | 428290 | AI932995  | Hs.183475 | Homo sapiens clone 25061 mRNA sequence   | 3.6 | 9.6  |
|    | 444381 | BE387335  | Hs.283713 | ESTs, Weakly similar to CA54_HUMAN COLLA | 3.6 | 4.9  |
|    | 442104 | L20971    | Hs.188    | phosphodiesterase 4B, cAMP-specific (dun | 3.6 | 2.1  |
|    | 441269 | AW015206  | Hs.178784 | ESTs                                     | 3.6 | 2.8  |
|    | 447961 | W32791    | Hs.170405 | ESTs                                     | 3.5 | 4.6  |
| 40 | 447735 | AA775268  | Hs.6127   | Homo sapiens cDNA: FLJ23020 fis, clone L | 3.5 | 2.1  |
|    | 437680 | AA761075  | Hs.293567 | ESTs                                     | 3.5 | 3.5  |
|    | 447710 | AI420523  | Hs.161282 | ESTs                                     | 3.5 | 3.5  |
|    | 436446 | AW016809  | Hs.119021 | ESTs                                     | 3.5 | 2.2  |
|    | 448412 | AI219083  | Hs.42532  | ESTs, Moderately similar to ALU8_HUMAN A | 3.5 | 4.1  |
| 45 | 409712 | AA167385  | Hs.13533  | ESTs                                     | 3.5 | 3.8  |
|    | 404048 |           |           |  | 3.5 | 3.2  |
|    | 440516 | S42303    | Hs.161    | cadherin 2, type 1, N-cadherin (neuronal | 3.5 | 5.1  |
|    | 409342 | AU077058  | Hs.54089  | BRCA1 associated RING domain 1           | 3.5 | 10.6 |
| 50 | 456608 | AA502764  | Hs.123469 | ESTs, Weakly similar to AF208855 1 BM-01 | 3.5 | 3.8  |
|    | 426101 | AL049987  | Hs.166361 | Homo sapiens mRNA; cDNA DKFZp564F112 (fr | 3.5 | 32.2 |
|    | 436252 | AI539519  | Hs.120969 | Homo sapiens cDNA FLJ11562 fis, clone HE | 3.5 | 4.6  |
|    | 433854 | AA610649  |           | gb:np95c03.s1 NCL_CGAP_Thy1 Homo sapiens | 3.5 | 3.5  |
|    | 408495 | W68796    | Hs.237731 | ESTs                                     | 3.5 | 6.1  |
|    | 418801 | AA228366  | Hs.115122 | ESTs                                     | 3.5 | 5.1  |
| 55 | 422493 | AW474183  | Hs.233816 | ESTs                                     | 3.5 | 15.2 |
|    | 428141 | D50402    | Hs.182611 | solute carrier family 11 (proton-coupled | 3.5 | 2.4  |
|    | 414591 | AI888490  | Hs.55902  | ESTs                                     | 3.5 | 8.3  |
|    | 439627 | BE621702  | Hs.29076  | Homo sapiens cDNA: FLJ21841 fis, clone H | 3.5 | 30.2 |
|    | 444969 | AI203334  | Hs.160628 | ESTs                                     | 3.5 | 3.1  |
| 60 | 435370 | AI964074  | Hs.225838 | ESTs                                     | 3.5 | 3.0  |
|    | 443228 | W24781    | Hs.293798 | ESTs                                     | 3.4 | 4.6  |
|    | 414612 | BE274552  | Hs.76578  | protein inhibitor of activated STAT3     | 3.4 | 5.0  |
|    | 437410 | AW023340  | Hs.14880  | ESTs                                     | 3.4 | 2.7  |
|    | 444172 | BE147740  | Hs.104558 | ESTs                                     | 3.4 | 12.9 |
| 65 | 428484 | AF104032  | Hs.184601 | solute carrier family 7 (cationic amino  | 3.4 | 2.8  |
|    | 437860 | AA333063  | Hs.279898 | Homo sapiens cDNA: FLJ23165 fis, clone L | 3.4 | 4.0  |
|    | 428776 | AW016636  | Hs.155647 | ESTs, Highly similar to R29144 1 [H.sapi | 3.4 | 2.5  |
|    | 409493 | AA386192  | Hs.193482 | ESTs                                     | 3.4 | 3.4  |
|    | 432559 | AW452948  | Hs.257631 | ESTs                                     | 3.4 | 6.3  |
| 70 | 451455 | AI937227  | Hs.8821   | liver-expressed antimicrobial peptide    | 3.4 | 6.1  |
|    | 444153 | AK001610  | Hs.10414  | hypothetical protein FLJ10748            | 3.4 | 2.6  |
|    | 422872 | BE326786  | Hs.187646 | ESTs                                     | 3.4 | 2.2  |
|    | 414761 | AU077228  | Hs.77256  | enhancer of zeste (Drosophila) homolog 2 | 3.4 | 2.6  |
|    | 416131 | L03532    | Hs.79024  | heterogeneous nuclear ribonucleoprotein  | 3.4 | 9.5  |
| 75 | 408576 | NM_003542 | Hs.46423  | H4 histone family, member G              | 3.4 | 3.4  |
|    | 431770 | BE221880  | Hs.268555 | 5'-3' exonuclease 2                      | 3.4 | 21.2 |
|    | 426030 | BE243933  | Hs.108642 | zinc finger protein 22 (KOX 15)          | 3.4 | 2.1  |
|    | 422573 | AW297985  | Hs.28777  | H2A histone family, member L             | 3.4 | 3.7  |
|    | 436865 | AW880358  | Hs.190488 | hypothetical protein FLJ10120            | 3.4 | 7.6  |
| 80 | 442091 | AW770493  | Hs.195904 | guanine nucleotide binding protein (G pr | 3.4 | 2.9  |
|    | 418699 | BE539639  | Hs.173030 | ESTs, Weakly similar to ALU8_HUMAN ALU S | 3.4 | 5.5  |
|    | 434577 | R37316    | Hs.179769 | Homo sapiens cDNA: FLJ22487 fis, clone H | 3.4 | 3.9  |
|    | 430314 | AA369601  | Hs.239138 | pre-B-cell colony-enhancing factor       | 3.4 | 16.8 |



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|    |        |           |           |  |     |      |
|----|--------|-----------|-----------|--|-----|------|
| 5  | 447279 | AA325308  | Hs.18016  | Homo sapiens mRNA; cDNA DKFZp586H0324 (f | 3.3 | 3.0  |
|    | 410020 | T86315    | Hs.728    | ribonuclease, RNase A family, 2 (liver,  | 3.3 | 5.8  |
|    | 447272 | NM_014827 | Hs.17969  | KIAA0663 gene product                    | 3.3 | 13.4 |
|    | 407656 | AW747986  | Hs.37443  | Homo sapiens mRNA; cDNA DKFZp434B2119 (f | 3.3 | 2.3  |
|    | 435354 | AA678267  | Hs.117115 | ESTs                                     | 3.3 | 5.5  |
| 10 | 443884 | N20617    | Hs.226627 | leptin receptor                          | 3.3 | 8.6  |
|    | 444984 | H15474    | Hs.12214  | Homo sapiens clone 23716 mRNA sequence   | 3.3 | 2.0  |
|    | 431053 | S40369    | Hs.249141 | Glutamate receptor subunit               | 3.3 | 2.4  |
|    | 424682 | AW604804  | Hs.151717 | KIAA0437 protein                         | 3.3 | 13.7 |
|    | 457972 | AI419060  | Hs.47448  | ESTs                                     | 3.3 | 4.2  |
| 15 | 424762 | AL119442  | Hs.183684 | eukaryotic translation initiation factor | 3.3 | 3.2  |
|    | 438666 | AW014493  | Hs.125727 | ESTs                                     | 3.3 | 10.8 |
|    | 447796 | AW953622  | Hs.223025 | RAB31, member RAS oncogene family        | 3.3 | 4.2  |
|    | 426751 | W92744    | Hs.22664  | ESTs                                     | 3.3 | 2.6  |
|    | 436251 | BE515065  | Hs.5092   | nucleolar protein (KKE/D repeat)         | 3.3 | 3.9  |
| 20 | 452688 | AA721140  | Hs.49930  | ESTs, Weakly similar to B34087 hypotheti | 3.3 | 4.9  |
|    | 416359 | AL046210  | Hs.16493  | hypothetical protein DKFZp762N2316       | 3.3 | 4.2  |
|    | 424090 | X99699    | Hs.139262 | XIAP associated factor-1                 | 3.3 | 2.9  |
|    | 434987 | AW975114  | Hs.293273 | ESTs                                     | 3.3 | 2.2  |
|    | 428642 | NM_014899 | Hs.188006 | KIAA0878 protein                         | 3.3 | 5.7  |
| 25 | 420372 | AW960049  | Hs.293660 | ESTs, Weakly similar to A49618 probable  | 3.3 | 5.5  |
|    | 422224 | NM_013982 | Hs.113264 | neuregulin 2                             | 3.2 | 3.0  |
|    | 432482 | L19267    | Hs.275924 | dystrophin myotonic-containing WD repea  | 3.2 | 2.7  |
|    | 439963 | AW247529  | Hs.6793   | platelet-activating factor acetylhydrola | 3.2 | 2.0  |
|    | 428418 | AI368826  | Hs.30654  | ESTs                                     | 3.2 | 2.4  |
| 30 | 416728 | AB024597  | Hs.79658  | casein kinase 1, epsilon                 | 3.2 | 2.8  |
|    | 416224 | NM_002902 | Hs.79088  | relucalocalbin 2, EF-hand calcium bindin | 3.2 | 2.2  |
|    | 429803 | W81489    | Hs.223025 | RAB31, member RAS oncogene family        | 3.2 | 4.3  |
|    | 431387 | AI878854  | Hs.252229 | v-maf musculoaponeurotic fibrosarcoma (a | 3.2 | 2.8  |
|    | 404171 |           |           |  | 3.2 | 35.8 |
| 35 | 435575 | AF213457  | Hs.44234  | triggering receptor expressed on myeloid | 3.2 | 2.6  |
|    | 426421 | AW367884  | Hs.169832 | zinc finger protein 42 (myeloid-specific | 3.2 | 3.8  |
|    | 445070 | NM_000677 | Hs.258    | adenosine A3 receptor                    | 3.2 | 7.6  |
|    | 407047 | X65965    |           | gb:H.sapiens SOD-2 gene for manganese su | 3.2 | 82.0 |
|    | 446006 | NM_004403 | Hs.13530  | deafness, autosomal dominant 5           | 3.2 | 2.2  |
| 40 | 430890 | X54232    | Hs.2699   | glypican 1                               | 3.2 | 4.3  |
|    | 439807 | AA376417  | Hs.173501 | Homo sapiens mRNA for FLJ00008 protein,  | 3.2 | 2.3  |
|    | 430412 | AW341754  | Hs.189305 | ESTs                                     | 3.2 | 2.0  |
|    | 442807 | AL049274  | Hs.8736   | Homo sapiens mRNA; cDNA DKFZp564H203 (fr | 3.2 | 2.7  |
|    | 420253 | AI656055  | Hs.96200  | neighbor of A-kinase anchoring protein 9 | 3.2 | 2.9  |
| 45 | 436042 | AF284422  | Hs.119178 | cation-chloride cotransporter-interactin | 3.2 | 4.6  |
|    | 423422 | AC005175  | Hs.126425 | NY-REN-24 antigen                        | 3.2 | 4.0  |
|    | 413020 | R98736    |           | gb:yr31h09.r1 Soares fetal liver spleen  | 3.2 | 4.1  |
|    | 452877 | AI250789  | Hs.32478  | ESTs                                     | 3.2 | 4.0  |
|    | 418113 | AI272141  | Hs.83484  | SRY (sex determining region Y)-box 4     | 3.1 | 9.0  |
| 50 | 421097 | AI280112  | Hs.125232 | Homo sapiens cDNA FLJ13266 fis, clone OV | 3.1 | 2.0  |
|    | 450219 | AI826999  | Hs.224624 | ESTs                                     | 3.1 | 23.7 |
|    | 434256 | AI378817  | Hs.191847 | ESTs                                     | 3.1 | 3.4  |
|    | 421407 | T82331    | Hs.127453 | ESTs                                     | 3.1 | 3.9  |
|    | 451198 | AW964541  | Hs.11500  | Homo sapiens cDNA: FLJ21127 fis, clone C | 3.1 | 3.9  |
| 55 | 445664 | AW968638  | Hs.237691 | ESTs                                     | 3.1 | 7.9  |
|    | 411089 | AA456454  | Hs.118637 | Homo sapiens cDNA FLJ13365 fis, clone PL | 3.1 | 6.0  |
|    | 458050 | AA834708  |           | gb:od99d04.s1 NCI_CGAP_Ov2 Homo sapiens  | 3.1 | 4.4  |
|    | 454140 | AB040888  | Hs.41793  | hypothetical protein FLJ10474            | 3.1 | 2.7  |
|    | 417270 | AA429615  | Hs.98593  | Homo sapiens cDNA: FLJ23233 fis, clone C | 3.1 | 2.4  |
| 60 | 427951 | AI826125  | Hs.43546  | ESTs                                     | 3.1 | 2.3  |
|    | 443693 | AI344782  | Hs.9683   | protein-kinase, interferon-inducible dou | 3.1 | 7.2  |
|    | 413367 | NM_006517 | Hs.75317  | solute carrier family 15 (monocarboxylic | 3.1 | 2.6  |
|    | 429402 | AF116571  | Hs.201671 | SRY (sex determining region Y)-box 13    | 3.1 | 6.5  |
|    | 447752 | M73700    | Hs.347    | lactotransferrin                         | 3.1 | 19.4 |
| 65 | 408949 | AF189011  | Hs.49163  | putative ribonuclease III                | 3.1 | 3.7  |
|    | 418039 | R08859    | Hs.193172 | ESTs                                     | 3.1 | 3.8  |
|    | 447343 | AA256641  | Hs.236894 | ESTs, Highly similar to LRP1_HUMAN LOW-D | 3.1 | 2.2  |
|    | 424441 | X14850    | Hs.147097 | H2A histone family, member X             | 3.1 | 3.2  |
|    | 435163 | AA668884  | Hs.19155  | ESTs                                     | 3.1 | 2.1  |
| 70 | 428712 | AW085131  | Hs.190452 | KIAA0365 gene product                    | 3.1 | 2.7  |
|    | 434542 | AA769310  | Hs.61260  | hypothetical protein FLJ13164            | 3.1 | 14.3 |
|    | 428147 | AW629965  | Hs.234983 | ESTs                                     | 3.1 | 2.7  |
|    | 415825 | Y18024    | Hs.78877  | inositol 1,4,5-trisphosphate 3-kinase B  | 3.1 | 2.5  |
|    | 422170 | AI791949  | Hs.112432 | anti-Mullerian hormone                   | 3.1 | 8.1  |
| 75 | 448801 | N57423    | Hs.179898 | HSPC055 protein                          | 3.0 | 2.0  |
|    | 413542 | BE295928  | Hs.75424  | inhibitor of DNA binding 1, dominant neg | 3.0 | 18.3 |
|    | 431562 | AI884334  | Hs.11637  | ESTs                                     | 3.0 | 3.9  |
|    | 410274 | AA381807  | Hs.61762  | hypoxia-inducible protein 2              | 3.0 | 3.0  |
|    | 458962 | NM_005859 | Hs.25180  | purine-rich element binding protein A    | 3.0 | 3.0  |
| 80 | 436277 | R88520    | Hs.120917 | ESTs                                     | 3.0 | 2.7  |
|    | 453288 | AW583292  | Hs.274412 | similar to yeast Upf3, variant A         | 3.0 | 3.0  |
|    | 447471 | AF039843  | Hs.18676  | sprouty (Drosophila) homolog 2           | 3.0 | 4.1  |
|    | 442554 | AW467376  | Hs.129640 | ESTs                                     | 3.0 | 4.7  |
|    | 441466 | AW673081  | Hs.54828  | ESTs                                     | 3.0 | 3.0  |
|    | 420297 | AI628272  | Hs.88323  | ESTs                                     | 3.0 | 8.1  |
|    | 445101 | T75202    | Hs.12314  | Homo sapiens mRNA; cDNA DKFZp586C1019 (f | 3.0 | 18.7 |
|    | 453405 | AI567972  | Hs.49919  | ESTs                                     | 3.0 | 9.6  |

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|    |        |           |           |  |     |      |
|----|--------|-----------|-----------|--|-----|------|
|    | 434521 | NM_002267 | Hs.3886   | karyopherin alpha 3 (importin alpha 4)   | 3.0 | 9.3  |
|    | 447948 | A1620923  | Hs.46679  | ESTs                                     | 3.0 | 10.1 |
|    | 445756 | AA290690  | Hs.288493 | ESTs                                     | 3.0 | 3.5  |
| 5  | 413243 | AA769266  | Hs.193657 | ESTs                                     | 3.0 | 5.9  |
|    | 422845 | AA317841  | Hs.301838 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 3.0 | 2.2  |
|    | 419409 | AW297831  | Hs.143792 | ESTs                                     | 3.0 | 2.1  |
|    | 446441 | AK001782  | Hs.15093  | hypothetical protein                     | 3.0 | 2.1  |
|    | 427150 | BE616183  | Hs.173737 | ras-related C3 botulinum toxin substrate | 3.0 | 4.1  |
| 10 | 421043 | BE379455  | Hs.89072  | ESTs                                     | 3.0 | 3.0  |
|    | 427239 | BE270447  | Hs.174070 | ubiquitin carrier protein                | 3.0 | 4.1  |
|    | 433312 | AI241331  | Hs.131765 | ESTs                                     | 3.0 | 11.0 |
|    | 415102 | M31899    | Hs.77929  | excision repair cross-complementing rode | 3.0 | 6.0  |
|    | 414702 | L22005    | Hs.76932  | cell division cycle 34                   | 3.0 | 3.3  |
| 15 | 428673 | AW601325  | Hs.274472 | high-mobility group (nonhistone chromoso | 3.0 | 15.8 |
|    | 422676 | D28481    | Hs.1570   | histamine receptor H1                    | 3.0 | 2.1  |
|    | 451693 | BE220445  | Hs.279635 | ESTs                                     | 3.0 | 2.3  |
|    | 412420 | AL035668  | Hs.73853  | bone morphogenetic protein 2             | 3.0 | 10.5 |
|    | 424005 | AB033041  | Hs.137507 | KIAA1215 protein                         | 3.0 | 3.9  |
| 20 | 440769 | BE561793  |           | gb:601346842F1 NIH_MGC_8 Homo sapiens cD | 3.0 | 5.1  |
|    | 428332 | AA578229  |           | gb:nl22b12.s1 NCI_CGAP_HSC1 Homo sapiens | 3.0 | 2.3  |
|    | 430293 |           | Hs.238272 | inositol 1,4,5-triphosphate receptor, ty | 3.0 | 6.3  |
|    | 450883 | NM_001348 | Hs.25619  | death-associated protein kinase 3        | 3.0 | 5.6  |
|    | 407879 | AA045464  | Hs.6557   | ESTs                                     | 2.9 | 7.0  |
| 25 | 426167 | AF039023  | Hs.167496 | Homo sapiens cDNA FLJ11120 fis, clone PL | 2.9 | 2.6  |
|    | 435281 | AB020699  | Hs.4864   | KIAA0892 protein                         | 2.9 | 3.9  |
|    | 432339 | AW411259  | Hs.26945  | ESTs                                     | 2.9 | 2.9  |
|    | 440524 | R71264    | Hs.16798  | ESTs                                     | 2.9 | 9.7  |
|    | 409083 | BE383668  | Hs.42484  | hypothetical protein FLJ10618            | 2.9 | 4.4  |
| 30 | 427729 | AB033100  | Hs.300646 | Homo sapiens cDNA FLJ11744 fis, clone HE | 2.9 | 3.1  |
|    | 422072 | AB018255  | Hs.111138 | KIAA0712 gene product                    | 2.9 | 2.9  |
|    | 435904 | AF261655  | Hs.8910   | 1,2-alpha-mannosidase IC                 | 2.9 | 3.6  |
|    | 440100 | BE382685  | Hs.158549 | ESTs                                     | 2.9 | 3.6  |
|    | 448356 | AL120837  | Hs.20993  | high-glucose-regulated protein 8         | 2.9 | 13.9 |
| 35 | 428005 | AW302245  | Hs.181390 | casein kinase 1, gamma 2                 | 2.9 | 3.7  |
|    | 403019 | AA834626  | Hs.66718  | RAD54 (S.cerevisiae)-like                | 2.9 | 5.8  |
|    | 419175 | AW270037  | Hs.179507 | KIAA0779 protein                         | 2.9 | 2.3  |
|    | 433592 | NM_004642 | Hs.3436   | deleted in oral cancer (mouse, homolog)  | 2.9 | 2.3  |
|    | 413922 | AI535895  | Hs.221024 | ESTs                                     | 2.9 | 2.8  |
| 40 | 428593 | AW207440  | Hs.185973 | degenerative spermatocyte (homolog Dros  | 2.9 | 3.3  |
|    | 441789 | D52059    | Hs.7972   | KIAA0871 protein                         | 2.9 | 2.1  |
|    | 459107 | AA811881  | Hs.28505  | ubiquitin-conjugating enzyme E2H (homolo | 2.9 | 2.8  |
|    | 448560 | BE613183  | Hs.23213  | ESTs                                     | 2.9 | 3.0  |
|    | 425304 | AA463844  | Hs.31339  | fibroblast growth factor 11              | 2.9 | 3.3  |
| 45 | 434846 | AW295389  | Hs.119768 | ESTs                                     | 2.9 | 5.1  |
|    | 408146 | R45621    | Hs.81057  | ESTs, Moderately similar to CL3BC [R.nor | 2.9 | 5.1  |
|    | 446644 | NM_003272 | Hs.15791  | transmembrane 7 superfamily member 1 (up | 2.9 | 2.8  |
|    | 446808 | AA703226  | Hs.16193  | Homo sapiens mRNA; cDNA DKFZp586B211 (fr | 2.9 | 8.5  |
|    | 433017 | Y15067    | Hs.279914 | zinc finger protein 232                  | 2.9 | 2.2  |
| 50 | 429500 | X78565    | Hs.289114 | hexabrachion (tenascin C, cytolaclin)    | 2.9 | 4.5  |
|    | 444706 | AK000398  | Hs.11747  | hypothetical protein FLJ20391            | 2.9 | 3.6  |
|    | 407825 | BE002320  | Hs.287864 | Homo sapiens cDNA FLJ14030 fis, clone HE | 2.9 | 2.1  |
|    | 431730 | AF208856  | Hs.268122 | hypothetical protein                     | 2.9 | 2.5  |
|    | 447118 | AB014599  | Hs.17411  | KIAA0699 protein                         | 2.8 | 2.1  |
| 55 | 453496 | AA442103  | Hs.33084  | solute carrier family 2 (facilitated glu | 2.8 | 7.4  |
|    | 426227 | H84455    | Hs.40639  | ESTs                                     | 2.8 | 2.3  |
|    | 456534 | X91195    | Hs.100623 | phospholipase C, beta 3, neighbor pseudo | 2.8 | 76.2 |
|    | 421465 | AK001020  | Hs.104627 | Homo sapiens cDNA FLJ10158 fis, clone HE | 2.8 | 6.1  |
|    | 409095 | AW337272  | Hs.293655 | ESTs                                     | 2.8 | 34.0 |
| 60 | 424066 | Z99348    | Hs.112461 | ESTs                                     | 2.8 | 2.1  |
|    | 432945 | AL043683  | Hs.271357 | ESTs, Weakly similar to unnamed protein  | 2.8 | 11.9 |
|    | 414079 | H19184    | Hs.205230 | ESTs                                     | 2.8 | 2.1  |
|    | 414359 | M62194    | Hs.75929  | cadherin 11, type 2, OB-cadherin (osteob | 2.8 | 3.9  |
|    | 438890 | AA827756  | Hs.135049 | ESTs                                     | 2.8 | 4.9  |
| 65 | 430354 | AA954810  | Hs.239784 | human homolog of Drosophila Scribble     | 2.8 | 5.2  |
|    | 458367 | AA068470  | Hs.83135  | p53-responsive gene 6                    | 2.8 | 4.4  |
|    | 412014 | AI620650  | Hs.43761  | ESTs                                     | 2.8 | 4.8  |
|    | 428727 | AF078847  | Hs.191356 | general transcription factor IIH, polype | 2.8 | 6.7  |
|    | 447942 | F12628    | Hs.155470 | zinc finger protein 38 (KIX 25)          | 2.8 | 2.2  |
| 70 | 426432 | AF001601  | Hs.169857 | paraaxonase 2                            | 2.8 | 3.5  |
|    | 439189 | AI951185  | Hs.144630 | nuclear receptor subfamily 2, group F, m | 2.8 | 2.5  |
|    | 446756 | AW028485  | Hs.26136  | ESTs                                     | 2.8 | 4.1  |
|    | 432148 | AW504912  | Hs.81907  | ESTs, Moderately similar to ALU4_HUMAN A | 2.8 | 2.6  |
|    | 405649 |           |           |  | 2.8 | 3.8  |
| 75 | 414473 | BE302693  |           | gb:ba74c02.y1 NIH_MGC_20 Homo sapiens cD | 2.8 | 2.4  |
|    | 443839 | AW139834  | Hs.143321 | ESTs                                     | 2.8 | 2.1  |
|    | 448804 | AW512213  | Hs.42500  | ADP-ribosylation factor-like 5           | 2.8 | 2.7  |
|    | 426825 | AL133415  | Hs.2064   | vimentin                                 | 2.8 | 25.0 |
|    | 417528 | H47315    | Hs.27519  | ESTs                                     | 2.8 | 11.6 |
| 80 | 453657 | W23237    | Hs.296162 | ESTs                                     | 2.8 | 3.2  |
|    | 432714 | Y12059    | Hs.278675 | bromodomain-containing 4                 | 2.8 | 6.7  |
|    | 441072 | AW275480  | Hs.39504  | ESTs                                     | 2.7 | 2.7  |
|    | 441297 | AW403084  | Hs.7766   | ubiquitin-conjugating enzyme E2E 1 (homo | 2.7 | 2.2  |
|    | 443849 | BE566066  | Hs.9893   | ASB-3 protein                            | 2.7 | 3.0  |

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|    |        |          |           |  |     |      |
|----|--------|----------|-----------|--|-----|------|
|    | 406243 | Y00787   | Hs.624    | interleukin 8                            | 2.7 | 3.8  |
|    | 446243 | BE296396 | Hs.14512  | Homo sapiens cDNA FLJ11761 fis, clone HE | 2.7 | 3.3  |
|    | 432238 | AL133057 | Hs.274135 | Homo sapiens mRNA; cDNA DKFZp434K1815 (f | 2.7 | 3.0  |
| 5  | 433944 | AL117518 | Hs.3686   | KIAA0978 protein                         | 2.7 | 3.1  |
|    | 411400 | AA311919 | Hs.69851  | GAR1 protein                             | 2.7 | 15.0 |
|    | 436840 | AW450376 | Hs.130803 | ESTs, Highly similar to T00367 hypotheti | 2.7 | 4.1  |
|    | 428281 | AA194554 | Hs.183434 | ATPase, H+ transporting, lysosomal (vacu | 2.7 | 3.2  |
|    | 426340 | Z97989   | Hs.165370 | FYN oncogene related to SRC, FGR, YES    | 2.7 | 2.0  |
| 10 | 408320 | AI125867 | Hs.20734  | ESTs                                     | 2.7 | 4.7  |
|    | 422363 | T56979   | Hs.115474 | replication factor C (activator 1) 3 (38 | 2.7 | 2.2  |
|    | 436440 | AI471862 | Hs.196008 | Homo sapiens cDNA FLJ11723 fis, clone HE | 2.7 | 4.7  |
|    | 408912 | AB011084 | Hs.48924  | KIAA0512 gene product                    | 2.7 | 2.1  |
|    | 419304 | AI271326 | Hs.146101 | ESTs                                     | 2.7 | 3.4  |
| 15 | 415045 | AA321559 | Hs.38270  | Homo sapiens cDNA: FLJ20984 fis, clone C | 2.7 | 2.3  |
|    | 441872 | BE567100 | Hs.154938 | hypothetical protein MDS025              | 2.7 | 2.3  |
|    | 422343 | AI628633 |           | gb:ty77d05.x1 NCI_CGAP_Kid11 Homo sapien | 2.7 | 2.5  |
|    | 415539 | AI733881 | Hs.72472  | ESTs                                     | 2.7 | 2.7  |
|    | 443823 | BE089782 | Hs.9877   | hypothetical protein                     | 2.7 | 4.7  |
| 20 | 419881 | AA329340 | Hs.44649  | ESTs                                     | 2.7 | 3.3  |
|    | 429155 | BE242291 | Hs.197540 | hypoxia-inducible factor 1, alpha subuni | 2.7 | 5.5  |
|    | 431319 | AA873350 |           | gb:oh64h02.s1 NCI_CGAP_Kid5 Homo sapiens | 2.7 | 65.9 |
|    | 430219 | X99209   | Hs.235887 | HMT1 (hnRNP methyltransferase, S. cerevi | 2.7 | 3.1  |
|    | 421016 | AA504583 | Hs.101047 | transcription factor 3 (E2A immunoglobul | 2.7 | 5.2  |
| 25 | 417259 | AW903838 | Hs.81800  | chondroitin sulfate proteoglycan 2 (vers | 2.7 | 10.7 |
|    | 431747 | AW979134 | Hs.10700  | hypothetical protein                     | 2.7 | 2.9  |
|    | 408085 | N25929   | Hs.42500  | ADP-ribosylation factor-like 5           | 2.7 | 7.8  |
|    | 426218 | AF119043 | Hs.168005 | transcriptional intermediary factor 1 ga | 2.7 | 4.5  |
|    | 434845 | BE267057 | Hs.4200   | hypothetical protein R32184_1            | 2.7 | 4.6  |
| 30 | 451644 | N23235   | Hs.30567  | ESTs                                     | 2.7 | 2.3  |
|    | 428408 | W74437   | Hs.188757 | Homo sapiens mRNA; cDNA DKFZp564M113 (fr | 2.7 | 5.7  |
|    | 446627 | AI973016 | Hs.15725  | hypothetical protein SBBI48              | 2.7 | 2.9  |
|    | 450167 | AA446404 | Hs.24563  | NTF2-related export protein 1            | 2.7 | 9.9  |
|    | 408821 | AL050385 | Hs.48332  | NIMA (never in mitosis gene a)-related k | 2.7 | 2.1  |
| 35 | 452068 | W76412   | Hs.57877  | ESTs                                     | 2.7 | 2.1  |
|    | 431129 | AL137751 | Hs.263671 | Homo sapiens mRNA; cDNA DKFZp434I0812 (f | 2.7 | 6.2  |
|    | 429025 | AI399910 | Hs.4842   | ESTs                                     | 2.7 | 2.9  |
|    | 421114 | AW975051 | Hs.293155 | ESTs                                     | 2.7 | 8.8  |
|    | 428755 | D87454   | Hs.192956 | KIAA0265 protein                         | 2.7 | 3.0  |
| 40 | 416391 | AI878927 | Hs.79284  | mesoderm specific transcript (mouse) hom | 2.7 | 5.7  |
|    | 414283 | AW960011 | Hs.154993 | ESTs                                     | 2.7 | 5.9  |
|    | 425262 | D87119   | Hs.155418 | GS3955 protein                           | 2.7 | 3.7  |
|    | 447726 | AL137638 | Hs.19368  | Homo sapiens mRNA; cDNA DKFZp434J065 (fr | 2.7 | 14.3 |
|    | 424623 | AW963062 | Hs.166809 | ESTs                                     | 2.7 | 5.6  |
| 45 | 444772 | AW450800 | Hs.176859 | ESTs                                     | 2.7 | 2.7  |
|    | 428419 | U49436   | Hs.286236 | eukaryotic translation initiation factor | 2.7 | 4.6  |
|    | 441049 | W88920   | Hs.29341  | hypothetical protein FLJ22376            | 2.7 | 4.5  |
|    | 412758 | Y07818   | Hs.74566  | dihydropyrimidinase-like 3               | 2.6 | 5.1  |
|    | 447720 | AL038765 | Hs.161304 | ESTs                                     | 2.6 | 3.2  |
| 50 | 419708 | AK000753 | Hs.92374  | hypothetical protein                     | 2.6 | 3.0  |
|    | 445502 | AW379160 | Hs.12613  | DKFZP434J214 protein                     | 2.6 | 5.0  |
|    | 437370 | AL359567 | Hs.161962 | Homo sapiens mRNA; cDNA DKFZp547D023 (fr | 2.6 | 2.9  |
|    | 444147 | AB002306 | Hs.10351  | KIAA0308 protein                         | 2.6 | 6.8  |
|    | 433193 | AB040881 | Hs.32580  | Homo sapiens cDNA FLJ13122 fis, clone NT | 2.6 | 3.2  |
| 55 | 445439 | BE243084 | Hs.12719  | regulator of nonsense transcripts 1      | 2.6 | 3.9  |
|    | 450309 | W61348   | Hs.4864   | KIAA0892 protein                         | 2.6 | 3.8  |
|    | 422092 | AB007883 | Hs.111373 | KIAA0423 protein                         | 2.6 | 2.3  |
|    | 424118 | BE269041 | Hs.140452 | cargo selection protein (mannose 6 phosp | 2.6 | 5.5  |
|    | 407618 | AW054922 | Hs.53478  | Homo sapiens cDNA FLJ12366 fis, clone MA | 2.6 | 2.9  |
| 60 | 446493 | AK001389 | Hs.15144  | hypothetical protein DKFZp564Q043        | 2.6 | 3.2  |
|    | 442878 | AI868648 | Hs.22315  | ESTs                                     | 2.6 | 4.7  |
|    | 448771 | BE315511 | Hs.296244 | SNARE protein                            | 2.6 | 5.0  |
|    | 416611 | AA568308 | Hs.192789 | ESTs, Weakly similar to ALU7_HUMAN ALU S | 2.6 | 7.7  |
|    | 409348 | AI401535 | Hs.146090 | ESTs                                     | 2.6 | 3.5  |
|    | 439349 | AI660898 | Hs.195602 | ESTs                                     | 2.6 | 3.2  |
| 65 | 428433 | AA521410 | Hs.41371  | ESTs                                     | 2.6 | 7.9  |
|    | 436565 | BE547674 | Hs.204169 | ESTs                                     | 2.6 | 3.0  |
|    | 438662 | AA223599 | Hs.6351   | cleavage and polyadenylation specific fa | 2.6 | 2.6  |
|    | 429362 | T25833   | Hs.200478 | ubiquitin-conjugating enzyme E2M (homolo | 2.6 | 2.3  |
| 70 | 459035 | AW291109 | Hs.208787 | ESTs                                     | 2.6 | 2.6  |
|    | 451814 | AA847992 | Hs.137003 | ESTs                                     | 2.6 | 19.1 |
|    | 452331 | AA598509 | Hs.29117  | H.sapiens mRNA for pur alpha extended 3' | 2.6 | 2.2  |
|    | 438461 | AW075485 | Hs.286049 | phosphoserine aminotransferase           | 2.6 | 2.1  |
|    | 424362 | AL137646 | Hs.146001 | Homo sapiens mRNA; cDNA DKFZp586F0824 (f | 2.6 | 4.9  |
| 75 | 423699 | H41850   | Hs.131846 | PCAF associated factor 65 alpha          | 2.6 | 3.7  |
|    | 441226 | BE563042 | Hs.118820 | ESTs                                     | 2.6 | 2.5  |
|    | 444940 | AK002148 | Hs.12151  | hypothetical protein FLJ11286            | 2.6 | 3.4  |
|    | 448731 | AI522273 | Hs.42640  | ESTs                                     | 2.6 | 3.2  |
|    | 424250 | AF073310 | Hs.143648 | insulin receptor substrate 2             | 2.6 | 2.5  |
| 80 | 433468 | AA832055 | Hs.232217 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 2.6 | 3.3  |
|    | 419925 | AA159850 | Hs.93765  | lipoma HMGIC fusion partner              | 2.6 | 4.6  |
|    | 441364 | AW450466 | Hs.126830 | ESTs                                     | 2.6 | 2.6  |
|    | 425922 | AL157466 | Hs.162751 | Homo sapiens mRNA; cDNA DKFZp761E2423 (f | 2.5 | 2.7  |
|    | 434974 | AA778711 | Hs.4310   | eukaryotic translation initiation factor | 2.5 | 2.5  |

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|    |        |           |           |  |     |      |
|----|--------|-----------|-----------|--|-----|------|
| 5  | 408392 | U28831    | Hs.44566  | KIAA1641 protein                         | 2.5 | 25.4 |
|    | 432426 | AW973152  | Hs.31050  | ESTs                                     | 2.5 | 10.0 |
|    | 436623 | AI417073  | Hs.107265 | ESTs                                     | 2.5 | 2.1  |
|    | 452683 | AI089575  | Hs.9071   | progesterone membrane binding protein    | 2.5 | 2.6  |
|    | 410582 | AW867197  | Hs.14562  | Homo sapiens cDNA: FLJ21616 fis, clone C | 2.5 | 3.7  |
| 10 | 441328 | AI982794  | Hs.159473 | ESTs                                     | 2.5 | 9.2  |
|    | 453983 | H94987    | Hs.16450  | ESTs                                     | 2.5 | 26.1 |
|    | 438826 | R26709    | Hs.10095  | hypothetical protein from EUROMAGE 1669  | 2.5 | 2.3  |
|    | 427899 | AA829286  | Hs.181062 | serum amyloid A1                         | 2.5 | 20.3 |
|    | 427820 | BE222494  | Hs.180919 | inhibitor of DNA binding 2, dominant neg | 2.5 | 3.5  |
| 15 | 458933 | AI638429  | Hs.24763  | RAN binding protein 1                    | 2.5 | 3.5  |
|    | 444871 | U46386    | Hs.12102  | sorting nexin 3                          | 2.5 | 2.3  |
|    | 411329 | AL360265  | Hs.69554  | hypothetical protein FLJ20552            | 2.5 | 2.9  |
|    | 424074 | AI902456  | Hs.210761 | ESTs                                     | 2.5 | 4.0  |
|    | 438988 | H30039    | Hs.107674 | ESTs                                     | 2.5 | 2.7  |
| 20 | 412836 | AA121384  | Hs.191446 | ESTs                                     | 2.5 | 5.7  |
|    | 430189 | AI298841  | Hs.135133 | ESTs, Weakly similar to ORF YNL310c [S.c | 2.5 | 3.0  |
|    | 432841 | M93425    | Hs.62     | protein tyrosine phosphatase, non-recept | 2.5 | 13.4 |
|    | 416926 | H03109    | Hs.108920 | HT018 protein                            | 2.5 | 2.8  |
|    | 451429 | AA525993  | Hs.173699 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 2.5 | 3.9  |
| 25 | 416388 | AI417358  | Hs.73677  | ESTs                                     | 2.5 | 4.2  |
|    | 421561 | Z45399    | Hs.105779 | protein inhibitor of activated STAT prot | 2.5 | 7.5  |
|    | 436480 | AJ271643  | Hs.87469  | putative acid-sensing ion channel        | 2.5 | 2.6  |
|    | 416273 | AW575591  | Hs.79123  | KIAA0084 protein                         | 2.5 | 2.6  |
|    | 427149 | H94688    | Hs.173737 | ras-related C3 botulinum toxin substrate | 2.5 | 2.6  |
| 30 | 453041 | AI680737  | Hs.289068 | transcription factor 4                   | 2.5 | 2.2  |
|    | 446899 | NM_005397 | Hs.16426  | podocalyxin-like                         | 2.5 | 4.7  |
|    | 447301 | AW958124  | Hs.142442 | HP1-BP74                                 | 2.5 | 3.2  |
|    | 447769 | AW873704  | Hs.48764  | ESTs                                     | 2.5 | 2.4  |
|    | 447754 | AW073310  | Hs.163533 | Homo sapiens cDNA FLJ14142 fis, clone MA | 2.5 | 2.5  |
| 35 | 427087 | BE073913  | Hs.173515 | uncharacterized hypothalamus protein HT0 | 2.5 | 23.6 |
|    | 440903 | AI468079  | Hs.126623 | ESTs                                     | 2.5 | 2.3  |
|    | 432353 | NM_016558 | Hs.274411 | SCAN domain-containing 1                 | 2.5 | 4.1  |
|    | 408196 | AL034548  | Hs.43627  | SRY (sex determining region Y)-box 22    | 2.5 | 2.5  |
|    | 411373 | BE326276  | Hs.8861   | ESTs                                     | 2.5 | 3.9  |
| 40 | 452402 | AI138530  | Hs.22216  | peroxisome proliferative activated recep | 2.5 | 2.4  |
|    | 429998 | AI458063  | Hs.57841  | ESTs                                     | 2.5 | 2.6  |
|    | 421772 | Z24958    | Hs.108139 | zinc finger protein 212                  | 2.5 | 3.7  |
|    | 442573 | H93365    | Hs.7567   | Homo sapiens cDNA: FLJ21962 fis, clone H | 2.5 | 2.1  |
|    | 444677 | AL110212  | Hs.9242   | purine-rich element binding protein B    | 2.5 | 3.4  |
| 45 | 441887 | AW967865  | Hs.92145  | ESTs                                     | 2.5 | 3.3  |
|    | 451031 | AI360187  | Hs.4254   | ESTs                                     | 2.5 | 4.8  |
|    | 432450 | AI990739  | Hs.77968  | ORF                                      | 2.5 | 2.4  |
|    | 415860 | D56051    | Hs.78888  | diazepam binding inhibitor (GABA recepto | 2.5 | 4.8  |
|    | 439630 | AA313607  | Hs.58633  | Homo sapiens cDNA: FLJ22145 fis, clone H | 2.4 | 2.3  |
| 50 | 428607 | AB002353  | Hs.186840 | KIAA0355 gene product                    | 2.4 | 4.0  |
|    | 415402 | AA164687  | Hs.297889 | ESTs                                     | 2.4 | 2.5  |
|    | 446888 | AL030996  | Hs.16411  | hypothetical protein LOC57187            | 2.4 | 2.2  |
|    | 439208 | AK000299  | Hs.180952 | dynactin p62 subunit                     | 2.4 | 2.4  |
|    | 452900 | AA626794  | Hs.250655 | prothymosin, alpha (gene sequence 28)    | 2.4 | 3.4  |
| 55 | 408657 | AA782601  | Hs.173328 | protein phosphatase 2, regulatory subuni | 2.4 | 3.6  |
|    | 439143 | AI359214  | Hs.179292 | ESTs                                     | 2.4 | 2.5  |
|    | 439867 | AA847510  | Hs.161292 | ESTs                                     | 2.4 | 9.3  |
|    | 408138 | AA535740  | Hs.301967 | Homo sapiens mRNA; cDNA DKFZp434M196 (fr | 2.4 | 5.6  |
|    | 428386 | R17298    | Hs.295923 | seven in absentia (Drosophila) homolog 1 | 2.4 | 4.2  |
| 60 | 417289 | D86962    | Hs.81875  | growth factor receptor-bound protein 10  | 2.4 | 2.2  |
|    | 405268 |           |           |  | 2.4 | 3.1  |
|    | 439734 | AC005013  | Hs.149    | cAMP response element-binding protein CR | 2.4 | 3.6  |
|    | 445378 | AV653564  | Hs.226946 | ESTs                                     | 2.4 | 2.4  |
|    | 454085 | D82418    | Hs.29626  | ESTs, Weakly similar to unknown [D.melan | 2.4 | 22.0 |
| 65 | 427354 | T57896    | Hs.191095 | ESTs                                     | 2.4 | 3.6  |
|    | 452906 | BE207039  | Hs.75621  | serine (or cysteine) proteinase inhibito | 2.4 | 2.2  |
|    | 450065 | AL050107  | Hs.301558 | DKFZP58611419 protein                    | 2.4 | 3.6  |
|    | 451091 | AA810932  | Hs.131899 | ESTs, Weakly similar to coded for by C.  | 2.4 | 2.7  |
|    | 414839 | X63692    | Hs.77462  | DNA (cytosine-5)-methyltransferase 1     | 2.4 | 2.6  |
| 70 | 420303 | AA258282  | Hs.278436 | KIAA1474 protein                         | 2.4 | 2.0  |
|    | 437068 | AA743643  | Hs.291427 | ESTs                                     | 2.4 | 2.6  |
|    | 417446 | AL118671  | Hs.82163  | monoamine oxidase B                      | 2.4 | 4.4  |
|    | 421454 | AI660389  | Hs.286108 | chorionic somatomammotropin hormone 1 (p | 2.4 | 3.5  |
|    | 434943 | AI929819  | Hs.320    | xeroderma pigmentosum, complementation g | 2.4 | 6.4  |
| 75 | 446342 | BE298665  | Hs.14846  | Homo sapiens mRNA; cDNA DKFZp564D016 (fr | 2.4 | 3.0  |
|    | 452847 | AK000857  | Hs.30783  | hypothetical protein FLJ20850            | 2.4 | 2.1  |
|    | 422506 | R20909    | Hs.117816 | sorcin                                   | 2.4 | 2.2  |
|    | 405204 |           |           |  | 2.4 | 4.3  |
|    | 419441 | AW023731  | Hs.274368 | Homo sapiens mRNA; cDNA DKFZp58611524 (f | 2.4 | 11.7 |
| 80 | 442293 | AW292634  | Hs.150358 | ESTs                                     | 2.4 | 2.1  |
|    | 451484 | AV648896  | Hs.26461  | hypothetical protein                     | 2.4 | 2.0  |
|    | 438545 | AB032977  | Hs.6298   | KIAA1151 protein                         | 2.4 | 2.1  |
|    | 442724 | AA355525  | Hs.159604 | cysteinyl-tRNA synthetase                | 2.4 | 2.8  |
|    | 405517 |           |           |  | 2.4 | 6.6  |
|    | 413822 | R08950    | Hs.272044 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 2.4 | 3.8  |
|    | 445679 | AI343868  | Hs.58800  | Homo sapiens cDNA FLJ12488 fis, clone NT | 2.4 | 2.3  |
|    | 406636 | BE294925  | Hs.46680  | CGI-12 protein                           | 2.4 | 8.1  |

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|----|--------|-----------|-----------|--|-----|-------|
| 5  | 409142 | AL136877  | Hs.50758  | chromosome-associated polypeptide C      | 2.4 | 2.4   |
|    | 422043 | AL133649  | Hs.110953 | Homo sapiens mRNA; cDNA DKFp434A139 (fr  | 2.4 | 2.1   |
|    | 424687 | J05070    | Hs.151738 | matrix metalloproteinase 9 (gelatinase B | 2.4 | 2.6   |
|    | 442560 | AA365342  | Hs.228598 | ESTs                                     | 2.4 | 4.9   |
|    | 418126 | T91451    | Hs.86538  | ESTs                                     | 2.4 | 11.7  |
| 10 | 413313 | NM_002047 | Hs.75280  | glycyl-tRNA synthetase                   | 2.4 | 2.1   |
|    | 415167 | AA160784  | Hs.26410  | ESTs                                     | 2.4 | 4.4   |
|    | 440040 | BE219431  | Hs.300713 | ESTs                                     | 2.4 | 3.4   |
|    | 443595 | AF169312  | Hs.9613   | PPAR(gamma)-angiotensin related protein  | 2.4 | 10.7  |
|    | 438977 | AA482026  | Hs.298625 | ESTs                                     | 2.4 | 2.8   |
| 15 | 452066 | AA772149  | Hs.16979  | ESTs                                     | 2.4 | 5.4   |
|    | 428500 | AI815395  | Hs.184641 | delta-6 fatty acid desaturase            | 2.4 | 2.2   |
|    | 408503 | AW119059  | Hs.63163  | ESTs, Weakly similar to UDP-GalNAc:polyp | 2.4 | 2.7   |
|    | 433401 | AF039698  | Hs.284217 | serologically defined colon cancer anti  | 2.4 | 4.8   |
|    | 412676 | NM_000165 | Hs.74471  | gap junction protein, alpha 1, 43kD (con | 2.4 | 2.2   |
| 20 | 453753 | BE252983  | Hs.35086  | ubiquitin specific protease 1            | 2.4 | 2.8   |
|    | 424050 | AA211218  | Hs.138381 | farnesyltransferase, CAAX box, alpha     | 2.4 | 3.9   |
|    | 440225 | BE295782  | Hs.159    | tumor necrosis factor receptor superfam  | 2.4 | 76.7  |
|    | 430512 | AF182294  | Hs.241578 | U6 snRNA-associated Sm-like protein LSm8 | 2.4 | 12.3  |
|    | 415156 | X84908    | Hs.78060  | phosphorylase kinase, beta               | 2.4 | 10.4  |
| 25 | 435975 | AL118990  | Hs.41997  | alpha-1-8 glycoprotein                   | 2.4 | 7.7   |
|    | 429831 | AA564489  | Hs.137526 | ESTs                                     | 2.4 | 4.1   |
|    | 407373 | AA031576  | Hs.143812 | Homo sapiens cDNA FLJ12956 fis, clone NT | 2.4 | 3.3   |
|    | 422221 | AA306649  |           | gb:EST177656 Jurkat T-cells Vi Homo sapi | 2.4 | 3.8   |
|    | 451351 | AW058261  | Hs.168213 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 2.4 | 3.3   |
| 30 | 410082 | AA081594  | Hs.158311 | Musashi (Drosophila) homolog 1           | 2.4 | 2.5   |
|    | 430304 | AL122071  | Hs.238927 | Homo sapiens mRNA; cDNA DKFp434H1235 (f  | 2.4 | 6.5   |
|    | 418863 | AL135743  | Hs.25566  | ESTs                                     | 2.4 | 5.2   |
|    | 448414 | BE391820  | Hs.21145  | Homo sapiens cDNA: FLJ22489 fis, clone H | 2.4 | 3.7   |
|    | 428351 | AK001701  | Hs.183779 | Homo sapiens cDNA FLJ10590 fis, clone NT | 2.4 | 6.2   |
| 35 | 425750 | AL050276  | Hs.159456 | zinc finger protein 268                  | 2.4 | 5.1   |
|    | 425295 | AW367283  | Hs.75839  | zinc finger protein 6 (CMPX1)            | 2.4 | 113.6 |
|    | 408772 | W88532    | Hs.254562 | ESTs                                     | 2.4 | 12.3  |
|    | 425307 | F24978    | Hs.294084 | ESTs                                     | 2.4 | 4.0   |
|    | 405203 |           |           | ESTs                                     | 2.4 | 2.5   |
| 40 | 453537 | AA036755  | Hs.283681 | ESTs                                     | 2.4 | 3.6   |
|    | 431427 | AK000401  | Hs.252748 | Homo sapiens cDNA FLJ20394 fis, clone KA | 2.4 | 6.2   |
|    | 458021 | AI885190  | Hs.156089 | ESTs, Weakly similar to KIAA1339 protein | 2.4 | 4.3   |
|    | 453928 | BE222198  | Hs.143851 | ESTs                                     | 2.4 | 2.6   |
|    | 446853 | AV660630  | Hs.87627  | disrupter of silencing 10                | 2.3 | 9.7   |
| 45 | 441626 | AA281167  | Hs.111911 | ESTs                                     | 2.3 | 23.0  |
|    | 446138 | AW504182  | Hs.13999  | KIAA0700 protein                         | 2.3 | 2.2   |
|    | 452568 | AA805634  | Hs.3337   | transmembrane 4 superfamily member 1     | 2.3 | 22.2  |
|    | 417665 | AW852858  | Hs.22852  | ESTs                                     | 2.3 | 8.0   |
|    | 420088 | AC005486  | Hs.298033 | Homo sapiens cDNA: FLJ22286 fis, clone H | 2.3 | 5.1   |
| 50 | 421456 | AW579842  | Hs.104557 | hypothetical protein FLJ10697            | 2.3 | 2.5   |
|    | 412093 | BE242691  | Hs.14947  | ESTs                                     | 2.3 | 31.4  |
|    | 428172 | U09357    | Hs.182828 | zinc finger protein 136 (clone pHZ-20)   | 2.3 | 4.9   |
|    | 450447 | AF212223  | Hs.25010  | hypothetical protein P15-2               | 2.3 | 2.3   |
|    | 436001 | AW903849  | Hs.173840 | HUEL (C4orf1)-interacting protein        | 2.3 | 4.1   |
| 55 | 414786 | AI246482  | Hs.249989 | ESTs                                     | 2.3 | 2.1   |
|    | 459284 | AF155660  | Hs.34401  | mitochondrial solute carrier             | 2.3 | 2.9   |
|    | 452701 | NM_005110 | Hs.30332  | glutamine-fructose-6-phosphate transamin | 2.3 | 2.6   |
|    | 446320 | AF126245  | Hs.14791  | acyl-Coenzyme A dehydrogenase family, me | 2.3 | 3.9   |
|    | 446669 | AW972832  | Hs.29468  | ESTs                                     | 2.3 | 3.8   |
| 60 | 434616 | D79338    | Hs.239720 | CCR4-NOT transcription complex, subunit  | 2.3 | 3.6   |
|    | 452135 | AI492175  | Hs.301805 | ESTs                                     | 2.3 | 2.3   |
|    | 408696 | AW958157  | Hs.16542  | ESTs                                     | 2.3 | 2.8   |
|    | 436176 | AL121422  | Hs.184013 | ESTs, Highly similar to unnamed protein  | 2.3 | 3.2   |
|    | 419713 | AW968058  | Hs.92381  | rudix (nucleoside diphosphate linked moi | 2.3 | 17.0  |
| 65 | 414197 | W44877    | Hs.55501  | ESTs                                     | 2.3 | 11.8  |
|    | 445270 | AI762154  | Hs.54982  | Homo sapiens cDNA FLJ14014 fis, clone HE | 2.3 | 4.2   |
|    | 412247 | AF022375  | Hs.73793  | vascular endothelial growth factor       | 2.3 | 5.1   |
|    | 426494 | AL119528  | Hs.170098 | KIAA0372 gene product                    | 2.3 | 4.4   |
|    | 405687 |           |           | ESTs                                     | 2.3 | 2.2   |
| 70 | 417410 | AF063020  | Hs.82110  | PC4 and SFRS1 interacting protein 1      | 2.3 | 2.0   |
|    | 450747 | AI064821  | Hs.48306  | ESTs, Highly similar to EWS_HUMAN RNA-BI | 2.3 | 3.8   |
|    | 433680 | AI805366  | Hs.199945 | ESTs                                     | 2.3 | 6.7   |
|    | 420025 | AF184939  | Hs.94392  | LDL induced EC protein                   | 2.3 | 2.4   |
|    | 413407 | AI356293  | Hs.75339  | inositol polyphosphate phosphatase-like  | 2.3 | 3.1   |
| 75 | 452908 | AB001451  | Hs.30965  | neuronal Shc adaptor homolog             | 2.3 | 3.0   |
|    | 424414 | AI361002  | Hs.94814  | Homo sapiens cDNA FLJ12168 fis, clone MA | 2.3 | 2.0   |
|    | 435791 | AA243086  | Hs.25204  | chondroitin 4-O-sulfotransferase 2       | 2.3 | 2.4   |
|    | 457635 | AV660976  | Hs.3569   | hypothetical protein                     | 2.3 | 6.9   |
|    | 427985 | AI770170  | Hs.65583  | ESTs                                     | 2.3 | 2.3   |
| 80 | 445498 | AV654019  | Hs.180402 | Homo sapiens cDNA: FLJ23506 fis, clone L | 2.3 | 2.3   |
|    | 410310 | J02931    | Hs.62192  | coagulation factor III (thromboplastin,  | 2.3 | 4.1   |
|    | 450368 | AU077158  | Hs.24930  | tubulin-specific chaperone a             | 2.3 | 3.5   |
|    | 444614 | R44284    | Hs.2730   | heterogeneous nuclear ribonucleoprotein  | 2.3 | 2.6   |
|    | 448607 | AL042506  | Hs.21599  | Homo sapiens cDNA FLJ10107 fis, clone HE | 2.3 | 2.8   |
|    | 447975 | BE378418  | Hs.127240 | ESTs                                     | 2.3 | 2.2   |
|    | 429767 | AW793022  | Hs.218329 | hypothetical protein                     | 2.3 | 11.5  |
|    | 408377 | AA479033  | Hs.130315 | ESTs                                     | 2.3 | 2.3   |

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|----|--------|-----------|-----------|---|-----|-------|
|    | 448481 | W15284    | Hs.74832  | ESTs                                      | 2.3 | 3.3   |
|    | 452833 | BE559681  | Hs.30736  | KIAA0124 protein                          | 2.3 | 2.8   |
|    | 421057 | T58283    | Hs.42679  | ESTs                                      | 2.3 | 11.0  |
| 5  | 408885 | CQ2741    | Hs.48712  | hypothetical protein FLJ20736             | 2.3 | 4.6   |
|    | 427615 | BE410107  | Hs.179817 | CGI-82 protein                            | 2.3 | 2.3   |
|    | 448861 | AL049951  | Hs.22370  | Homo sapiens mRNA; cDNA DKFZp564O0122 (f  | 2.3 | 6.3   |
|    | 430154 | AW583058  | Hs.234726 | serine (or cysteine) proteinase inhibito  | 2.3 | 34.6  |
|    | 428494 | AA233439  | Hs.184634 | hypothetical protein FLJ20005             | 2.3 | 10.2  |
| 10 | 422987 | AW407887  | Hs.301772 | serine/threonine kinase 11 (Peutz-Jegher  | 2.3 | 3.2   |
|    | 408216 | AA741038  | Hs.6670   | ESTs                                      | 2.3 | 3.3   |
|    | 407862 | BE548267  | Hs.50724  | Homo sapiens cDNA FLJ10934 fis, clone OV  | 2.3 | 5.7   |
|    | 432215 | AU076609  | Hs.2934   | ribonucleotide reductase M1 polypeptide   | 2.3 | 2.1   |
|    | 410086 | AI268405  | Hs.13467  | Homo sapiens BAC clone RP11-121A8 from 7  | 2.3 | 2.2   |
| 15 | 444853 | AW576245  | Hs.149740 | Homo sapiens mRNA for FLJ00028 protein,   | 2.3 | 4.5   |
|    | 413284 | AU077055  | Hs.289107 | baculoviral IAP repeat-containing 2       | 2.3 | 4.8   |
|    | 445547 | D86181    | Hs.273    | galactosylceramidase (Krabbe disease)     | 2.3 | 2.5   |
|    | 420258 | AA477514  | Hs.96247  | translin-associated factor X              | 2.3 | 3.5   |
|    | 437223 | C15105    | Hs.107884 | ESTs                                      | 2.3 | 2.7   |
| 20 | 437353 | AA749195  | Hs.143746 | ESTs                                      | 2.3 | 2.6   |
|    | 426224 | BE085860  | Hs.168075 | karyopherin (importin) beta 2             | 2.3 | 36.1  |
|    | 402575 | Z23024    | Hs.138860 | Rho GTPase activating protein 1           | 2.3 | 3.1   |
|    | 430712 | AW044647  | Hs.196284 | ESTs                                      | 2.3 | 2.4   |
|    | 452036 | NM_003966 | Hs.27621  | sema domain, seven thrombospondin repeat  | 2.3 | 2.4   |
| 25 | 425180 | U00115    | Hs.155024 | B-cell CLL/lymphoma 6 (zinc finger prote  | 2.3 | 4.3   |
|    | 441648 | H05734    | Hs.30559  | ESTs                                      | 2.3 | 2.1   |
|    | 424130 | AL050136  | Hs.140945 | Homo sapiens mRNA; cDNA DKFZp586L141 (fr  | 2.3 | 2.9   |
|    | 414682 | AL021154  | Hs.76884  | inhibitor of DNA binding 3, dominant neg  | 2.3 | 12.2  |
|    | 423814 | AF105020  | Hs.132989 | putative protein O-mannosyltransferase    | 2.3 | 3.7   |
| 30 | 421641 | AI638184  | Hs.106334 | Homo sapiens clone 23836 mRNA sequence    | 2.3 | 2.3   |
|    | 427882 | AA640987  | Hs.193767 | ESTs                                      | 2.3 | 10.2  |
|    | 442159 | AW163390  | Hs.8123   | chromobox homolog 3 (Drosophila HP1 gamm  | 2.3 | 4.4   |
|    | 412541 | BE009398  | Hs.74002  | nuclear receptor coactivator 1            | 2.3 | 2.4   |
|    | 447217 | BE465754  | Hs.17778  | neurophilin 2                             | 2.3 | 3.0   |
| 35 | 452336 | AA960961  | Hs.29147  | hypothetical protein FLJ11015             | 2.3 | 4.1   |
|    | 423913 | NM_016436 | Hs.301055 | hepatocellular carcinoma-associated anti  | 2.3 | 3.4   |
|    | 411737 | AW160339  | Hs.71791  | hypothetical protein                      | 2.2 | 2.0   |
|    | 412276 | BE262621  | Hs.73798  | macrophage migration inhibitory factor (  | 2.2 | 2.4   |
|    | 456974 | M12529    | Hs.169401 | apolipoprotein E                          | 2.2 | 2.6   |
| 40 | 416033 | NM_012201 | Hs.78979  | Golgi apparatus protein 1                 | 2.2 | 10.4  |
|    | 406739 | AI566709  | Hs.182426 | ribosomal protein S2                      | 2.2 | 115.3 |
|    | 448646 | AU077149  | Hs.21704  | transcription factor 12 (HTF4, helix-loo  | 2.2 | 4.2   |
|    | 437371 | AK000868  | Hs.5570   | hypothetical protein FLJ10006             | 2.2 | 3.6   |
|    | 451413 | AA448974  | Hs.26367  | PC3-96 protein                            | 2.2 | 6.2   |
| 45 | 408665 | T88845    | Hs.112200 | ESTs, Weakly similar to ALU7_HUMAN ALU S  | 2.2 | 3.2   |
|    | 437548 | AI701596  | Hs.121592 | ESTs                                      | 2.2 | 3.0   |
|    | 452053 | AI750575  | Hs.173933 | nuclear factor I/A                        | 2.2 | 3.3   |
|    | 428303 | AW974476  | Hs.183601 | regulator of G-protein signalling 16      | 2.2 | 3.4   |
|    | 441376 | H94227    | Hs.6592   | ESTs, Weakly similar to salivary proline  | 2.2 | 2.5   |
| 50 | 413399 | BE091833  | Hs.6592   | gb:IL2-BT0731-260400-076-F04 BT0731 Homo  | 2.2 | 2.1   |
|    | 448913 | AA194422  | Hs.22564  | myosin VI                                 | 2.2 | 2.4   |
|    | 439053 | BE244588  | Hs.6456   | chaperonin containing TCP1, subunit 2 (b  | 2.2 | 3.1   |
|    | 428065 | AI634046  | Hs.157313 | ESTs                                      | 2.2 | 3.5   |
|    | 425846 | AA102174  | Hs.159629 | myosin IXB                                | 2.2 | 7.1   |
| 55 | 426404 | AA377607  | Hs.273138 | ESTs                                      | 2.2 | 3.3   |
|    | 423464 | NM_016240 | Hs.128856 | CSR1 protein                              | 2.2 | 2.1   |
|    | 436135 | D85390    | Hs.5057   | carboxypeptidase D                        | 2.2 | 9.1   |
|    | 450476 | AL045285  | Hs.246849 | ESTs, Moderately similar to ALU6_HUMAN A  | 2.2 | 2.5   |
|    | 420798 | W93774    | Hs.99935  | keratin 10 (epidermolytic hyperkeratosis  | 2.2 | 2.8   |
| 60 | 433530 | BE349534  | Hs.281789 | ESTs                                      | 2.2 | 2.1   |
|    | 436297 | AI084582  | Hs.5106   | hypothetical protein FLJ10569             | 2.2 | 2.4   |
|    | 433058 | H86865    | Hs.280666 | Homo sapiens chromosome 19, cosmid R3218  | 2.2 | 2.3   |
|    | 435924 | AW029203  | Hs.191952 | ESTs                                      | 2.2 | 3.2   |
|    | 417125 | AW181998  | Hs.81248  | CUG triplet repeat, RNA-binding protein   | 2.2 | 2.3   |
| 65 | 449338 | H73444    | Hs.394    | adrenomedullin                            | 2.2 | 18.3  |
|    | 446065 | AA085191  | Hs.6949   | ESTs, Weakly similar to T2D3_HUMAN TRANS  | 2.2 | 3.1   |
|    | 410668 | BE379794  | Hs.65403  | hypothetical protein                      | 2.2 | 2.5   |
|    | 424092 | AW290893  | Hs.96918  | Homo sapiens cDNA: FLJ21561 fis, clone C  | 2.2 | 10.8  |
|    | 437801 | AA613865  | Hs.5848   | Homo sapiens mRNA; cDNA DKFZp564L222 (fr  | 2.2 | 2.5   |
| 70 | 412491 | W31589    | Hs.73957  | RABSA, member RAS oncogene family         | 2.2 | 2.4   |
|    | 446392 | AF142419  | Hs.15020  | homolog of mouse quaking QKI (KH domain   | 2.2 | 3.4   |
|    | 450503 | R35917    | Hs.25042  | Homo sapiens mRNA full length insert cDN  | 2.2 | 2.8   |
|    | 432476 | T94344    |           | gb:ye31h10.s1 Stratagene lung (937210) H  | 2.2 | 2.6   |
|    | 424251 | AA677466  | Hs.143696 | coactivator-associated arginine methyltr  | 2.2 | 5.0   |
| 75 | 456619 | AV647917  | Hs.107153 | inhibitor of growth family, member 1-like | 2.2 | 2.6   |
|    | 433411 | AI658666  | Hs.49994  | ESTs                                      | 2.2 | 2.1   |
|    | 424714 | AI114630  | Hs.208334 | Homo sapiens cDNA: FLJ21874 fis, clone H  | 2.2 | 2.7   |
|    | 416326 | AF186780  | Hs.79219  | RalGDS-like gene; KIAA0959 protein        | 2.2 | 2.2   |
|    | 407696 | AI697340  | Hs.76549  | ATPase, Na+/K+ transporting, alpha 1 pol  | 2.2 | 6.5   |
| 80 | 445939 | BE018658  | Hs.141003 | Homo sapiens cDNA: FLJ21691 fis, clone C  | 2.2 | 4.4   |
|    | 414765 | X07854    | Hs.77269  | guanine nucleotide binding protein (G pr  | 2.2 | 6.2   |
|    | 407136 | T64896    | Hs.287420 | Homo sapiens cDNA FLJ11533 fis, clone HE  | 2.2 | 2.8   |
|    | 453665 | AA626250  | Hs.181165 | eukaryotic translation elongation factor  | 2.2 | 2.3   |
|    | 433608 | AW340005  | Hs.164485 | ESTs                                      | 2.2 | 2.1   |

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|    |        |           |           |   |     |       |
|----|--------|-----------|-----------|---|-----|-------|
| 5  | 447646 | BE619752  | Hs.66053  | ESTs, Weakly similar to S22126 finger pr  | 2.2 | 4.1   |
|    | 433139 | AB029826  | Hs.47649  | 3-methylcrotonyl-CoA carboxylase biotin-  | 2.2 | 11.7  |
|    | 413433 | NM_003199 | Hs.289068 | transcription factor 4                    | 2.2 | 2.2   |
|    | 421535 | AB002359  | Hs.105478 | phosphoribosylformylglycinamide synthase  | 2.2 | 2.2   |
|    | 428591 | BE313029  | Hs.185807 | Homo sapiens clone 24758 mRNA sequence    | 2.2 | 4.8   |
| 10 | 417248 | AA329449  | Hs.247302 | twisted gastrulation                      | 2.2 | 2.5   |
|    | 403966 |           |           |   | 2.2 | 5.2   |
|    | 437112 | AA744692  | Hs.166539 | ESTs                                      | 2.2 | 3.0   |
|    | 414799 | AI752416  | Hs.77326  | insulin-like growth factor binding prote  | 2.2 | 4.9   |
|    | 431049 | AA846576  | Hs.103267 | hypothetical protein FLJ22548 similar to  | 2.2 | 4.4   |
| 15 | 422100 | AI096988  | Hs.111554 | ADP-ribosylation factor-like 7            | 2.2 | 2.5   |
|    | 426543 | AV650198  | Hs.170311 | heterogeneous nuclear ribonucleoprotein   | 2.2 | 2.4   |
|    | 423720 | AL044191  | Hs.23388  | Homo sapiens cDNA: FLJ21310 fis, clone C  | 2.2 | 4.2   |
|    | 443804 | AL135352  | Hs.255883 | ESTs                                      | 2.2 | 2.2   |
|    | 435080 | AI831760  | Hs.155111 | ESTs                                      | 2.2 | 2.5   |
| 20 | 452808 | AF244135  | Hs.30670  | hepatocellular carcinoma-associated anti  | 2.2 | 7.1   |
|    | 433934 | AW273261  | Hs.216292 | ESTs                                      | 2.2 | 2.1   |
|    | 432004 | BE018302  | Hs.2894   | placental growth factor, vascular endoth  | 2.2 | 4.4   |
|    | 452518 | AA280722  | Hs.24758  | ESTs                                      | 2.2 | 3.0   |
|    | 409600 | AJ011679  | Hs.55099  | Homo sapiens mRNA; cDNA DKFZp586D2123 (f  | 2.2 | 2.3   |
| 25 | 448965 | AF092134  | Hs.22679  | CGI-24 protein                            | 2.2 | 4.0   |
|    | 444954 | AW247076  | Hs.12163  | eukaryotic translation initiation factor  | 2.2 | 5.3   |
|    | 458894 | AW292171  | Hs.23978  | scaffold attachment factor B              | 2.2 | 2.5   |
|    | 402269 |           |           |   | 2.2 | 2.2   |
|    | 423796 | AF047033  | Hs.301617 | Homo sapiens mRNA full length insert cDN  | 2.2 | 4.0   |
| 30 | 413836 | W92003    | Hs.70614  | ESTs                                      | 2.2 | 3.6   |
|    | 432231 | AA339977  | Hs.274127 | CLST 11240 protein                        | 2.1 | 2.1   |
|    | 412204 | AI125507  | Hs.130629 | ESTs                                      | 2.1 | 3.0   |
|    | 438807 | AA848011  | Hs.124570 | ESTs, Weakly similar to reverse transcri  | 2.1 | 2.2   |
|    | 404170 |           |           |   | 2.1 | 41.6  |
| 35 | 434858 | AW979012  | Hs.134462 | ESTs                                      | 2.1 | 2.2   |
|    | 426982 | AA149707  | Hs.173091 | ubiquitin-like 3                          | 2.1 | 2.1   |
|    | 421939 | BE169531  | Hs.109727 | TAK1-binding protein 2; KIAA0733 protein  | 2.1 | 26.5  |
|    | 442432 | BE093569  | Hs.38178  | Homo sapiens cDNA: FLJ23468 fis, clone H  | 2.1 | 3.7   |
|    | 424950 | AA602917  | Hs.156974 | ESTs                                      | 2.1 | 19.9  |
| 40 | 418123 | AA669830  | Hs.83530  | hypothetical protein                      | 2.1 | 4.6   |
|    | 440467 | AK001519  | Hs.7194   | CGI-74 protein                            | 2.1 | 5.3   |
|    | 437092 | AA744292  | Hs.181244 | major histocompatibility complex, class   | 2.1 | 3.0   |
|    | 421579 | NM_002975 | Hs.105927 | stem cell growth factor, lymphocyte secr  | 2.1 | 3.3   |
|    | 428953 | AA306610  | Hs.194676 | DKFZP434C013 protein                      | 2.1 | 5.0   |
| 45 | 457313 | AF047002  | Hs.241520 | transcriptional coactivator               | 2.1 | 3.5   |
|    | 420570 | AI453665  | Hs.290870 | ESTs, Weakly similar to S23650 retroviru  | 2.1 | 2.1   |
|    | 446918 | AL135125  | Hs.13913  | KIAA1577 protein                          | 2.1 | 2.3   |
|    | 427567 | N24236    | Hs.179662 | nucleosome assembly protein 1-like 1      | 2.1 | 2.8   |
|    | 446363 | AL117440  | Hs.301967 | Homo sapiens mRNA; cDNA DKFZp434M196 (fr  | 2.1 | 4.0   |
| 50 | 428482 | AI290352  | Hs.184592 | KIAA0344 gene product                     | 2.1 | 2.8   |
|    | 456559 | AI336273  | Hs.102548 | glucocorticoid receptor DNA binding fact  | 2.1 | 2.3   |
|    | 442819 | BE622721  | Hs.301766 | ESTs, Weakly similar to hypothetical pro  | 2.1 | 27.1  |
|    | 428808 | AA436007  | Hs.188780 | ESTs                                      | 2.1 | 5.0   |
|    | 414893 | AA215295  | Hs.77578  | ubiquitin specific protease 9, X chromos  | 2.1 | 15.9  |
| 55 | 447023 | AA356764  | Hs.17109  | integral membrane protein 2A              | 2.1 | 3.0   |
|    | 402250 | AV655272  | Hs.20252  | novel Ras family protein                  | 2.1 | 4.2   |
|    | 429952 | AF080158  | Hs.226573 | inhibitor of kappa light polypeptide gen  | 2.1 | 7.9   |
|    | 420006 | H14429    | Hs.94300  | serologically defined colon cancer antig  | 2.1 | 5.6   |
|    | 407316 | AA031663  | Hs.28802  | centaurin-alpha 2 protein                 | 2.1 | 4.4   |
| 60 | 417139 | M69043    | Hs.81328  | nuclear factor of kappa light polypeptid  | 2.1 | 103.2 |
|    | 414774 | X02419    | Hs.77274  | plasminogen activator, urokinase          | 2.1 | 29.9  |
|    | 430488 | D19589    | Hs.4220   | ESTs, Moderately similar to tetracycline  | 2.1 | 2.1   |
|    | 428680 | U69199    | Hs.90259  | ESTs, Weakly similar to alpha 1 [I].sapie | 2.1 | 2.5   |
|    | 448501 | AA332316  | Hs.4273   | hypothetical protein FLJ13159             | 2.1 | 2.0   |
| 65 | 422552 | N39729    | Hs.118243 | deoxyribonuclease II, lysosomal           | 2.1 | 2.9   |
|    | 419476 | AW953030  | Hs.59425  | Homo sapiens cDNA: FLJ23323 fis, clone H  | 2.1 | 3.1   |
|    | 408681 | AW953853  | Hs.292833 | ESTs                                      | 2.1 | 3.9   |
|    | 417353 | AA375752  | Hs.76362  | general transcription factor IIA, 2 (12k  | 2.1 | 4.1   |
|    | 422070 | AF149785  | Hs.111126 | pituitary tumor-transforming 1 interacti  | 2.1 | 4.9   |
| 70 | 442711 | AF151073  | Hs.8645   | hypothetical protein                      | 2.1 | 2.2   |
|    | 450139 | AK001838  | Hs.296323 | Homo sapiens cDNA FLJ10976 fis, clone PL  | 2.1 | 7.4   |
|    | 452897 | BE050508  | Hs.269233 | ESTs                                      | 2.1 | 4.2   |
|    | 409147 | AI889208  | Hs.17283  | hypothetical protein FLJ10890             | 2.1 | 4.5   |
|    | 433028 | AI199144  | Hs.283737 | AD-017 protein                            | 2.1 | 2.6   |
| 75 | 407831 | BE613377  | Hs.15580  | Homo sapiens cDNA: FLJ22276 fis, clone H  | 2.1 | 8.5   |
|    | 417871 | AA521368  | Hs.24252  | ESTs                                      | 2.1 | 2.9   |
|    | 428754 | AI521102  | Hs.301374 | ESTs, Moderately similar to ALU5_HUMAN A  | 2.1 | 5.3   |
|    | 430127 | AA219498  | Hs.233952 | proteasome (prosome, macropain) subunit,  | 2.1 | 4.3   |
|    | 442622 | NM_000435 | Hs.8546   | Notch (Drosophila) homolog 3              | 2.1 | 8.5   |
| 80 | 414242 | AA749230  | Hs.22666  | ESTs                                      | 2.1 | 2.8   |
|    | 433323 | AA805132  | Hs.30701  | ESTs                                      | 2.1 | 5.0   |
|    | 439022 | AA356599  | Hs.173904 | ESTs                                      | 2.1 | 6.4   |
|    | 443357 | AW016773  | Hs.75515  | apolipoprotein C-II                       | 2.1 | 2.0   |
|    | 449103 | T24968    | Hs.23038  | HSPC071 protein                           | 2.1 | 2.7   |
|    | 427512 | AB018322  | Hs.179507 | KIAA0779 protein                          | 2.1 | 2.0   |
|    | 426728 | NM_007118 | Hs.171957 | triple functional domain (PTPRF) interact | 2.1 | 2.9   |
|    | 440112 | AA099014  | Hs.231029 | ESTs                                      | 2.1 | 2.3   |

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|    |        |           |           |  |     |      |
|----|--------|-----------|-----------|--|-----|------|
| 5  | 446920 | BE397649  | Hs.31257  | Homo sapiens cDNA FLJ13634 fis, clone PL | 2.1 | 4.8  |
|    | 428459 | D44650    | Hs.184411 | gene with multiple splice variants near  | 2.1 | 2.9  |
|    | 432842 | AW674093  | Hs.279525 | hypothetical protein PRO2605             | 2.1 | 2.3  |
|    | 438829 | AA826926  | Hs.204214 | ESTs                                     | 2.1 | 2.7  |
|    | 411442 | N25956    | Hs.101810 | Homo sapiens cDNA FLJ14232 fis, clone NT | 2.1 | 2.2  |
| 10 | 409423 | AI969783  | Hs.43071  | ESTs, Weakly similar to AF151900 1 CGI-1 | 2.1 | 2.2  |
|    | 456804 | AI421645  | Hs.139851 | caveolin 2                               | 2.1 | 15.2 |
|    | 434536 | H14486    | Hs.3903   | Cdc42 effector protein 4; binder of Rho  | 2.1 | 2.8  |
|    | 447126 | AW150632  | Hs.62954  | ferritin, heavy polypeptide 1            | 2.1 | 25.0 |
|    | 442328 | AI952430  | Hs.265237 | ESTs                                     | 2.1 | 2.1  |
| 15 | 444488 | AW192879  | Hs.184796 | ESTs, Weakly similar to PET2_HUMAN OLIGO | 2.1 | 2.9  |
|    | 438874 | H02780    | Hs.184796 | gb:yj41a11.r1 Soares placenta Nb2HP Homo | 2.1 | 10.6 |
|    | 412805 | AW954569  | Hs.296287 | ESTs                                     | 2.1 | 4.6  |
|    | 446334 | U52427    | Hs.14839  | polymerase (RNA) II (DNA directed) polyp | 2.1 | 2.3  |
|    | 427201 | AB037860  | Hs.173933 | nuclear factor IIA                       | 2.1 | 5.1  |
| 20 | 436997 | AA741151  | Hs.137323 | ESTs                                     | 2.1 | 3.0  |
|    | 426369 | AF134157  | Hs.169487 | Kreiser (mouse) maf-related leucine zip  | 2.1 | 2.3  |
|    | 453613 | F06838    | Hs.14763  | ESTs                                     | 2.1 | 2.4  |
|    | 413276 | Z24725    | Hs.75260  | mitogen inducible 2                      | 2.1 | 5.5  |
|    | 422050 | AA302741  | Hs.25786  | ESTs                                     | 2.1 | 4.0  |
| 25 | 424797 | AA622394  | Hs.153177 | ribosomal protein S28                    | 2.1 | 2.1  |
|    | 437365 | AW965771  | Hs.91065  | hypothetical protein DKFZp761B2423       | 2.1 | 3.0  |
|    | 412482 | AI499930  | Hs.181043 | KIAA0788 protein                         | 2.1 | 2.7  |
|    | 418662 | AI801098  | Hs.151500 | ESTs                                     | 2.1 | 2.1  |
|    | 404030 |           |           | ESTs                                     | 2.1 | 2.1  |
| 30 | 437802 | AI475995  | Hs.122910 | ESTs                                     | 2.1 | 3.8  |
|    | 441130 | AI160734  | Hs.283429 | SMC (mouse) homolog, X chromosome        | 2.1 | 3.5  |
|    | 416084 | L16991    | Hs.79006  | deoxythymidylate kinase (thymidylate kin | 2.1 | 7.4  |
|    | 409944 | BE297925  | Hs.57687  | four and a half LIM domains 3            | 2.1 | 6.3  |
|    | 425421 | L11669    | Hs.157145 | tetracycline transporter-like protein    | 2.1 | 7.1  |
| 35 | 428399 | NM_006276 | Hs.184167 | splicing factor, arginine/serine-rich 7  | 2.1 | 2.7  |
|    | 421313 | NM_014923 | Hs.103329 | KIAA0970 protein                         | 2.1 | 2.6  |
|    | 445229 | BE276013  | Hs.172364 | Homo sapiens mRNA for FLJ00086 protein,  | 2.1 | 4.7  |
|    | 401001 |           |           | ESTs                                     | 2.1 | 14.7 |
|    | 425159 | NM_004341 | Hs.154868 | carbamoyl-phosphate synthetase 2, aspart | 2.1 | 7.2  |
| 40 | 438855 | AW946276  | Hs.6441   | tissue inhibitor of metalloproteinase 2  | 2.1 | 4.9  |
|    | 433369 | Z49254    | Hs.3254   | mitochondrial ribosomal protein L23      | 2.1 | 25.0 |
|    | 433228 | F28212    | Hs.284247 | KIAA1491 protein                         | 2.1 | 5.1  |
|    | 445392 | AA057478  | Hs.23272  | ESTs                                     | 2.0 | 2.3  |
|    | 433891 | AA613792  |           | gb:no97h03.s1 NCI_CGAP_Pr2 Homo sapiens  | 2.0 | 2.5  |
| 45 | 432572 | AI660840  | Hs.191202 | ESTs, Weakly similar to ALUE_HUMAN !!!   | 2.0 | 2.9  |
|    | 448474 | AI792014  | Hs.13809  | ESTs                                     | 2.0 | 12.1 |
|    | 427045 | H86504    | Hs.173328 | protein phosphatase 2, regulatory subuni | 2.0 | 2.9  |
|    | 444916 | AB028956  | Hs.12144  | KIAA1033 protein                         | 2.0 | 4.2  |
|    | 439177 | AW820275  | Hs.76611  | ESTs                                     | 2.0 | 3.3  |
| 50 | 423533 | NM_014339 | Hs.129751 | interleukin 17 receptor                  | 2.0 | 5.0  |
|    | 430057 | AW450303  | Hs.2534   | bone morphogenetic protein receptor, typ | 2.0 | 2.3  |
|    | 424429 | U63830    | Hs.146847 | TRAF family member-associated NFkB activ | 2.0 | 12.7 |
|    | 428385 | AF112213  | Hs.184062 | putative Rab5-interacting protein        | 2.0 | 4.6  |
|    | 458946 | AA009716  | Hs.42311  | ESTs                                     | 2.0 | 16.4 |
| 55 | 444816 | Z48633    | Hs.283742 | H.sapiens mRNA for retroltransposon      | 2.0 | 4.9  |
|    | 426829 | AI761241  | Hs.301719 | ESTs                                     | 2.0 | 2.4  |
|    | 433619 | AW965275  | Hs.284288 | hqp0256 protein                          | 2.0 | 4.4  |
|    | 421985 | AK001779  | Hs.110445 | CGI-97 protein                           | 2.0 | 3.8  |
|    | 439895 | AB037773  | Hs.6762   | hypothetical protein FLJ10595            | 2.0 | 2.2  |
| 60 | 449188 | AW072939  | Hs.23200  | myotubularin related protein 1           | 2.0 | 2.2  |
|    | 404820 |           |           | ESTs                                     | 2.0 | 2.7  |
|    | 425811 | AL039104  | Hs.159557 | karyopherin alpha 2 (RAG cohort 1, impor | 2.0 | 2.5  |
|    | 422163 | AF027208  | Hs.297332 | Homo sapiens cDNA: FLJ21471 fis, clone C | 2.0 | 3.7  |
|    | 431172 | AI125639  | Hs.250666 | halry (Drosophila)-homolog               | 2.0 | 10.2 |
| 65 | 415200 | AL040328  | Hs.301912 | Homo sapiens cDNA: FLJ22920 fis, clone K | 2.0 | 2.1  |
|    | 458176 | AI961519  | Hs.140309 | ESTs, Weakly similar to KIAA0681 protein | 2.0 | 5.0  |
|    | 407895 | R44203    | Hs.265540 | HSPC042 protein                          | 2.0 | 4.6  |
|    | 449816 | AI701457  | Hs.38694  | ESTs                                     | 2.0 | 2.0  |
|    | 422976 | AU075657  | Hs.1600   | sec61 homolog                            | 2.0 | 5.7  |
| 70 | 430220 | BE378277  | Hs.152230 | ESTs                                     | 2.0 | 11.7 |
|    | 435446 | AA682305  | Hs.133268 | ESTs                                     | 2.0 | 4.2  |
|    | 431031 | AA830335  | Hs.105273 | ESTs                                     | 2.0 | 14.1 |
|    | 425233 | Z17861    | Hs.155218 | E1B-55kDa-associated protein 5           | 2.0 | 5.6  |
|    | 426458 | D83032    | Hs.169984 | nuclear protein                          | 2.0 | 5.9  |
| 75 | 421965 | AA301100  |           | gb:EST14128 Testis tumor Homo sapiens cD | 2.0 | 2.1  |
|    | 427128 | AW301984  | Hs.173685 | Homo sapiens cDNA FLJ12619 fis, clone NT | 2.0 | 6.3  |
|    | 449722 | BE280074  | Hs.23960  | cyclin B1                                | 2.0 | 2.1  |
|    | 450816 | BE271927  | Hs.87385  | ESTs                                     | 2.0 | 2.4  |
|    | 453507 | AF083217  | Hs.33085  | WD repeat domain 3                       | 2.0 | 13.1 |
| 80 | 422801 | AF125672  | Hs.287994 | nuclear receptor co-repressor 2          | 2.0 | 3.5  |
|    | 418178 | AA043951  | Hs.83715  | Sjogren syndrome antigen B (autoantigen  | 2.0 | 3.9  |
|    | 417819 | AI253112  | Hs.133540 | ESTs                                     | 2.0 | 4.0  |
|    | 414787 | AL049332  | Hs.77311  | BTG family, member 3                     | 2.0 | 4.0  |
|    | 447032 | AK000310  | Hs.17138  | hypothetical protein FLJ20303            | 2.0 | 7.0  |
|    | 431742 | NM_016652 | Hs.268281 | CGI-201 protein                          | 2.0 | 2.5  |
|    | 448431 | BE613061  | Hs.300697 | ESTs, Weakly similar to CA13_HUMAN COLLA | 2.0 | 6.5  |
|    | 456444 | AA884517  | Hs.31856  | ESTs, Weakly similar to KIAA1453 protein | 2.0 | 2.5  |



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|    |        |           |           |  |     |      |
|----|--------|-----------|-----------|--|-----|------|
| 5  | 419178 | NM_006284 | Hs.89657  | TATA box binding protein (TBP)-associate | 2.0 | 6.0  |
|    | 445437 | AW014360  | Hs.202119 | ESTs, Weakly similar to A46010 X-linked  | 2.0 | 2.2  |
|    | 449910 | A1074585  | Hs.58440  | ESTs                                     | 2.0 | 2.1  |
|    | 435963 | AF271212  | Hs.87627  | disrupter of silencing 10                | 2.0 | 2.1  |
|    | 421283 | A1760018  | Hs.205071 | ESTs                                     | 2.0 | 2.6  |
| 10 | 414482 | S57498    | Hs.76252  | endothelin receptor type A               | 2.0 | 2.4  |
|    | 450960 | AB013897  | Hs.25722  | Homo sapiens mRNA for HKR1, partial cds  | 2.0 | 2.1  |
|    | 438644 | A1126162  | Hs.129037 | ESTs                                     | 2.0 | 2.1  |
|    | 458343 | A1004775  | Hs.205091 | ESTs, Weakly similar to WW domain bindin | 2.0 | 6.5  |
|    | 412574 | BE410731  | Hs.74050  | follicular lymphoma variant translocatio | 2.0 | 12.4 |
| 15 | 458079 | A1796870  | Hs.54277  | ESTs                                     | 2.0 | 3.8  |
|    | 450582 | A1339732  | Hs.13144  | HSPC160 protein                          | 2.0 | 2.8  |
|    | 409936 | AK001691  | Hs.57655  | hypothetical protein FLJ10829            | 2.0 | 3.1  |
|    | 426865 | D63476    | Hs.172813 | PAK-interacting exchange factor beta     | 2.0 | 3.3  |
|    | 446430 | AA346837  | Hs.15075  | hypothetical protein DKFZp434E2216       | 2.0 | 2.0  |

Table 4B:

|             |                                       |
|-------------|---------------------------------------|
| Pkey:       | Unique Eos probeset identifier number |
| CAT number: | Gene cluster number                   |
| Accession:  | Genbank accession numbers             |

|    |        |            |   |
|----|--------|------------|---|
|    | Pkey   | CAT Number | Accession   |
| 25 | 447197 | 2176805_1  | R36075 R36167 A1366546  |
|    | 407192 | 2200202_1  | AA602964 AA609200   |
|    | 429007 | 327976_1   | AA443145 BF958169 AW904500 AL119015 D80642  |
|    | 429163 | 1238297_1  | AW974271 AA592975 AA447312 AA884765   |
|    | 439579 | 24302_1    | AF086400 W73990 W79232  |
| 30 | 432060 | 1235850_1  | AA525021 AW971364 AA570759  |
|    | 416913 | 924456_1   | AW934714 AW749864 AW749902 BE162498 BE161005 BE162499 BE161005 AA190449 AW513465 BE162500 BE161007                            |
|    | 425413 | 372468_1   | AW554494 AA377823 BG219617 BG195685 BG616269 A1022688   |
|    | 433586 | 32908_1    | BC011194 AW517087 AA601054 T85512   |
|    | 448451 | 7632_32    | AW000978 R39898 AW015994 A1599202 BF821479 A1521706   |
| 35 | 442495 | 928718_1   | A1184717 AW518883 AF121173  |
|    | 439566 | 23928_1    | AF086387 W72711 W77884  |
|    | 407939 | 600387_1   | AW118352 AW196215 W05608  |
|    | 453740 | 612139_1   | AL120295 BG291384 T88779  |
|    | 433854 | 899720_1   | BG675161 H59558 A1699484 AA610649 A1937812  |
| 40 | 413020 | 1485885_1  | BE048113 R98736 Z42904  |
|    | 458050 | 61684_1    | AK057874 AW901381 AW901380 AV730240 T50211 AA828756 AA834708  |
|    | 440769 | 21430_5    | BG419454 BF924037 R13764 AW793200 BE561793 BG698295 BE270077  |
|    | 428932 | 1137866_1  | BI008697 AA481363 AA436432 BI008696 AA578229 AA481375   |
|    | 414473 | 35761_3    | BG392866 BE302693   |
| 45 | 422343 | 786037_1   | AW961833 AA309282 AA551780 A1628633 AA551995 AW378461   |
|    | 431319 | 122030_1   | BG435498 BG924768 AV718636 AA873350 T82428 T82429 AU185416 AA658442   |
|    | 422221 | 319_18     | BG910399 BE826714 BF905312 AA306649 Z40822 N76633   |
|    | 413399 | 1511159_1  | BE091833 BE091874 BE091871  |
|    | 432476 | 1237465_1  | AW973269 AA548913 T94344 AA834800 AA857492  |
| 50 | 438874 | 52147_1    | AF075017 R66779 R22463 H02780   |
|    | 433891 | 647290_1   | AW182329 AA613792 T05304 AW858385   |
|    | 421965 | 1883_13    | BC022394 A1742351 BE676249 A1742341 AW572776 A1566256 A1538553 BI837905 AA301100 AA620903 A1142397 AW082310 A1147387 BF509145 |
|    |        |            | AW968207 AA468415 AU185163 AW450843 A1568752 AW137191   |
|    |        |            |   |

TABLE 4C:

|              |   |
|--------------|---|
| Pkey:        | Unique number corresponding to an Eos probeset  |
| Ref:         | Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <u>Nature</u> 402:489-495. |
| Strand:      | Indicates DNA strand from which exons were predicted.   |
| NL_position: | Indicates nucleotide positions of predicted exons.  |

|    |        |         |        |                                     |
|----|--------|---------|--------|-------------------------------------|
|    | Pkey   | Ref     | Strand | NL_position                         |
| 60 | 400859 | 9757499 | Minus  | 91888-92018,98131-98294,99474-99570 |
|    | 405238 | 7249119 | Minus  | 51728-51835                         |
|    | 400992 | 8096828 | Plus   | 140390-140822                       |
|    | 400860 | 9757499 | Minus  | 151830-152104,152649-152744         |
|    | 402524 | 9798518 | Minus  | 20529-21096                         |
| 65 | 404210 | 5006246 | Plus   | 169926-170121                       |
|    | 402604 | 9909420 | Plus   | 20393-20767                         |
|    | 402855 | 9662953 | Minus  | 59763-59909                         |
|    | 404029 | 7671252 | Plus   | 108716-111112                       |
|    | 402505 | 9909420 | Minus  | 47680-47973                         |
| 70 | 404049 | 3688074 | Minus  | 75765-78155                         |
|    | 403549 | 8081591 | Minus  | 137150-137362                       |
|    | 404048 | 3688074 | Minus  | 54421-56808                         |
|    | 404171 | 9930793 | Plus   | 173667-173783,176876-177055         |
|    | 405549 | 4926908 | Minus  | 50032-50132,50624-50764             |
| 75 | 405268 | 4156151 | Minus  | 24404-24521                         |
|    | 405204 | 7230116 | Plus   | 126569-126754                       |
|    | 405517 | 9454624 | Plus   | 114757-114877                       |
|    | 405203 | 7230116 | Plus   | 125295-125463                       |
|    | 405687 | 6249668 | Minus  | 54787-54891,55844-55917             |
| 80 | 403966 | 8568881 | Plus   | 158193-158277,160116-160290         |
|    | 402269 | 3128156 | Minus  | 1168-1324,5492-5611,23445-23851     |
|    | 404170 | 9930793 | Plus   | 168836-169248                       |
|    |        |         |        |                                     |
|    |        |         |        |                                     |

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404030 7671252 Plus 149362-151749  
401001 7229886 Minus 113631-113762  
404820 4678240 Plus 20475-21085

5

TABLE 5A: ABOUT 43 GENES UPREGULATED IN GLIOBLASTOMA THAT ENCODE PREDICTED MEMBRANE PROTEINS

Pkey: Unique Eos probeset identifier number  
ExAccn: Exemplar Accession number, Genbank accession number  
UnigeneID: Unigene number  
Unigene Title: Unigene gene title  
R1: Ratio of brain tumor to body atlas  
R2: Ratio of brain tumor to normal brain

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| Pkey   | ExAccn    | UnigeneID | Unigene title  | R1   | R2   |
|--------|-----------|-----------|--|------|------|
| 415817 | U88967    | Hs.78867  | protein tyrosine phosphatase, receptor-t             | 72.0 | 11.3 |
| 447072 | D61594    | Hs.17279  | tyrosylprotein sulfotransferase 1                    | 54.2 | 7.1  |
| 451099 | R52795    | Hs.25954  | interleukin 13 receptor, alpha 2                     | 22.0 | 7.6  |
| 415910 | U20350    | Hs.78913  | chemokine (C-X3-C) receptor 1                        | 21.2 | 3.0  |
| 412986 | X81120    | Hs.75110  | cannabinoid receptor 1 (brain)                       | 18.6 | 18.6 |
| 417355 | D13168    | Hs.82002  | endothelin receptor type B                           | 16.4 | 16.4 |
| 419721 | NM_001660 | Hs.288650 | aquaporin 4  | 16.2 | 4.4  |
| 452355 | N54926    | Hs.29202  | G protein-coupled receptor 34                        | 13.9 | 13.9 |
| 410227 | AB009284  | Hs.61152  | exostosins (multiple)-like 2                         | 11.9 | 2.9  |
| 419723 | AL120193  | Hs.92614  | Homo sapiens growth differentiation factor           | 7.4  | 3.5  |
| 414825 | X06370    | Hs.77432  | epidermal growth factor receptor (avian              | 6.9  | 6.4  |
| 443898 | AW804296  | Hs.9950   | Sec61 gamma  | 4.8  | 7.2  |
| 422033 | AW245895  | Hs.110903 | claudin 5 (transmembrane protein deleted             | 4.3  | 6.1  |
| 414821 | M53835    | Hs.77424  | Fc fragment of IgG, high affinity Ia, re             | 4.2  | 34.8 |
| 431556 | AF016028  | Hs.260039 | sarcomas (Kras oncogene-associated gene              | 4.0  | 3.8  |
| 435869 | AF255910  | Hs.54650  | vascular endothelial junction-associated             | 3.7  | 4.2  |
| 440516 | S42303    | Hs.161    | cadherin 2, type 1, N-cadherin (neuronal             | 3.5  | 5.1  |
| 428141 | D50402    | Hs.182611 | solute carrier family 11 (proton-coupled             | 3.5  | 2.4  |
| 428484 | AF104032  | Hs.184601 | solute carrier family 7 (cationic amino              | 3.4  | 2.8  |
| 431053 | S40369    | Hs.249141 | Glutamate receptor subunit                           | 3.3  | 2.4  |
| 445070 | NM_000577 | Hs.258    | adenosine A3 receptor                                | 3.2  | 7.6  |
| 430890 | X54232    | Hs.2699   | glypican 1   | 3.2  | 4.3  |
| 423422 | AC005175  | Hs.128425 | NY-REN-24 antigen                                    | 3.2  | 4.0  |
| 413367 | NM_006517 | Hs.75317  | solute carrier family 16 (monocarboxylic             | 3.1  | 2.6  |
| 447471 | AF039843  | Hs.18676  | sprouty (Drosophila) homolog 2                       | 3.0  | 4.1  |
| 427150 | BE616183  | Hs.173737 | ras-related C3 botulinum toxin substrate             | 3.0  | 4.1  |
| 422676 | D28481    | Hs.1570   | histamine receptor H1                                | 3.0  | 2.1  |
| 430293 | AI416988  | Hs.238272 | inositol 1,4,5-trisphosphate receptor, ty            | 3.0  | 6.3  |
| 453496 | AA442103  | Hs.33084  | solute carrier family 2 (facilitated glu             | 2.8  | 7.4  |
| 428281 | AA194554  | Hs.183434 | ATPase, H <sup>+</sup> transporting, lysosomal (vacu | 2.7  | 3.2  |
| 417446 | AL118671  | Hs.82163  | monoamine oxidase B                                  | 2.4  | 4.4  |
| 412676 | NM_000165 | Hs.74471  | gap junction protein, alpha 1, 43kD (con             | 2.4  | 2.2  |
| 440225 | BE295782  | Hs.159    | tumor necrosis factor receptor superfam              | 2.4  | 76.7 |
| 450447 | AF212223  | Hs.25010  | hypothetical protein P15-2                           | 2.3  | 2.3  |
| 410310 | J02931    | Hs.62192  | coagulation factor III (thromboplastin,              | 2.3  | 4.1  |
| 452036 | NM_003966 | Hs.27621  | sema domain, seven thrombospondin repeat             | 2.3  | 2.4  |
| 447217 | BE465754  | Hs.17778  | neuropilin 2   | 2.3  | 3.0  |
| 447023 | AA356764  | Hs.17109  | integral membrane protein 2A                         | 2.1  | 3.0  |
| 422070 | AF149785  | Hs.111126 | pituitary tumor-transforming 1 interacti             | 2.1  | 4.9  |
| 456804 | AI421645  | Hs.139851 | caveolin 2   | 2.1  | 15.2 |
| 430057 | AW450303  | Hs.2534   | bone morphogenetic protein receptor, typ             | 2.0  | 2.3  |
| 422163 | AF027208  | Hs.297332 | Homo sapiens cDNA: FLJ21471 fis, clone C             | 2.0  | 3.7  |
| 414482 | S57498    | Hs.76252  | endothelin receptor type A                           | 2.0  | 2.4  |

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TABLE 6A: ABOUT 397 GENES DOWNREGULATED IN GLIOBLASTOMA

Pkey: Unique Eos probeset identifier number  
ExAccn: Exemplar Accession number, Genbank accession number  
UnigeneID: Unigene number  
Unigene Title: Unigene gene title  
R1: Ratio of normal brain to body atlas  
R2: Ratio of normal brain to brain tumor

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| Pkey   | Ex Accn    | UnigeneID | Title                                    | R1    | R2    |
|--------|------------|-----------|--|-------|-------|
| 439340 | AB032436   | Hs.6535   | brain-specific Na-dependent inorganic ph | 4.47  | 77.82 |
| 424846 | AU077324   | Hs.1832   | neuropeptide Y                           | 4.49  | 55.32 |
| 428874 | W32133     | Hs.194366 | transhyretin (prealbumin, amyloidosis t  | 7.06  | 45.64 |
| 416836 | D54745     | Hs.80247  | cholecystokinin                          | 9.45  | 44.59 |
| 401412 | c14p3_2958 |           | exon                                     | 3.20  | 32.56 |
| 451835 | T63643     | Hs.209715 | ESTs, Weakly similar to ALU7_HUMAN ALU S | 3.21  | 28.93 |
| 412768 | AW996044   | Hs.26239  | ESTs                                     | 3.16  | 28.12 |
| 415448 | T68645     | Hs.952    | solute carrier family 10 (sodium/bile ac | 3.27  | 27.04 |
| 411305 | BE241596   | Hs.69547  | myelin basic protein                     | 13.80 | 25.92 |
| 438054 | AA776626   | Hs.62183  | ESTs                                     | 3.59  | 25.06 |
| 410837 | BE145698   |           | gb:IL0-HT0205-231199-145-a07 HT0205 Homo | 3.05  | 24.43 |
| 425121 | AI797511   | Hs.154679 | synaptotagmin 1                          | 6.92  | 23.67 |
| 456763 | AJ271351   | Hs.128180 | B-cell translocation gene 4              | 3.29  | 23.32 |
| 429656 | X05608     | Hs.211584 | neurofilament, light polypeptide (68kD)  | 8.03  | 22.56 |
| 451892 | AI821302   | Hs.167834 | ESTs                                     | 4.12  | 21.82 |

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|    |        |            |           |  |      |       |
|----|--------|------------|-----------|--|------|-------|
| 5  | 424922 | BE386547   | Hs.217112 | ESTs, Weakly similar to Similarity to Ye | 4.41 | 21.28 |
|    | 411666 | AF106564   | Hs.71346  | neurofilament 3 (150kD medium)           | 5.27 | 21.20 |
|    | 432247 | AA531287   | Hs.105805 | ESTs                                     | 3.25 | 21.14 |
|    | 436812 | AW298067   |           | gb:UL-H-BW0-ajp-g-09-0-UL.s1 NCL_CGAP_Su | 3.02 | 21.12 |
|    | 422234 | AF119818   | Hs.113287 | discs, large (Drosophila) homolog-associ | 3.38 | 20.50 |
| 10 | 435708 | AI362949   | Hs.75169  | ESTs                                     | 8.79 | 20.45 |
|    | 423135 | N67655     | Hs.26411  | ESTs                                     | 6.82 | 20.28 |
|    | 440600 | AI807691   | Hs.126351 | ESTs                                     | 3.56 | 20.09 |
|    | 405230 | cNp1_7656  |           | exon                                     | 3.31 | 19.95 |
|    | 456915 | N55540     | Hs.78026  | ESTs, Weakly similar to similar to ankyr | 3.14 | 19.40 |
| 15 | 425130 | AA448208   | Hs.99163  | ESTs                                     | 3.53 | 19.20 |
|    | 416812 | H91010     | Hs.44940  | ESTs                                     | 3.54 | 19.08 |
|    | 454171 | AW854832   |           | gb:QV2-CT0261-201099-011-f05 CT0261 Homo | 3.78 | 19.04 |
|    | 457463 | AW877031   | Hs.272321 | Homo sapiens cDNA FLJ12571 fis, clone NT | 3.13 | 18.91 |
|    | 454599 | AW809699   |           | gb:MR4-ST0124-241199-02G-e12 ST0124 Homo | 4.10 | 18.60 |
| 20 | 418104 | T05726     | Hs.177130 | ESTs                                     | 3.17 | 18.41 |
|    | 416357 | T82050     | Hs.268907 | ESTs                                     | 3.11 | 18.13 |
|    | 414583 | S78296     | Hs.76888  | internexin neuronal intermediate filamen | 5.55 | 18.13 |
|    | 447694 | AI420083   | Hs.170303 | ESTs                                     | 3.56 | 17.79 |
|    | 427627 | R87582     | Hs.179915 | guanine nucleotide binding protein (G pr | 4.63 | 17.65 |
| 25 | 428010 | AA806554   | Hs.185375 | ESTs                                     | 3.03 | 17.40 |
|    | 417159 | R01761     |           | gb:ye81f10.s1 Soares fetal liver spleen  | 3.23 | 17.38 |
|    | 435788 | AA766908   | Hs.259047 | ESTs                                     | 3.16 | 17.21 |
|    | 459349 | AW749381   |           | gb:QV3-BT0381-170100-060-c02 BT0381 Homo | 3.26 | 17.10 |
|    | 450214 | BE439763   | Hs.227571 | regulator of G-protein signalling 4      | 3.86 | 17.04 |
| 30 | 438068 | AI927209   | Hs.263069 | HMT1 (hnRNP methyltransferase, S. cerevi | 3.54 | 16.48 |
|    | 437268 | AI754847   | Hs.227571 | regulator of G-protein signalling 4      | 5.63 | 16.32 |
|    | 435315 | AA700240   | Hs.165402 | ESTs                                     | 4.06 | 16.12 |
|    | 424240 | AB023185   | Hs.143535 | calcium/calmodulin-dependent protein kin | 4.69 | 15.92 |
|    | 412446 | AI768015   | Hs.92127  | ESTs                                     | 5.44 | 15.75 |
| 35 | 449714 | AB033015   | Hs.23941  | KIAA1189 protein                         | 4.59 | 15.43 |
|    | 435832 | AA425688   | Hs.41641  | Bruno (Drosophila) -like 4, RNA binding  | 4.63 | 14.97 |
|    | 437397 | AA349847   | Hs.4221   | hypothetical protein DKFZp761H039        | 5.93 | 14.81 |
|    | 435502 | L13266     | Hs.105    | glutamate receptor, ionotropic, N-methyl | 3.29 | 14.61 |
|    | 414187 | BE312141   |           | gb:601145962F1 NIH_MGC_19 Homo sapiens c | 3.37 | 14.46 |
| 40 | 417868 | AI078534   | Hs.122592 | ESTs                                     | 7.57 | 14.22 |
|    | 428536 | AI143139   | Hs.2288   | visinin-like 1                           | 5.16 | 13.98 |
|    | 402125 | c18p3_155  |           | exon                                     | 3.11 | 13.94 |
|    | 440503 | NM_006539  | Hs.7235   | calcium channel, voltage-dependent, gamm | 3.49 | 13.92 |
|    | 419090 | T85201     | Hs.188468 | ESTs                                     | 3.25 | 13.79 |
| 45 | 437665 | AA765417   | Hs.292053 | ESTs                                     | 3.07 | 13.79 |
|    | 457113 | AI734016   | Hs.270508 | ESTs                                     | 3.50 | 13.69 |
|    | 424933 | AW999974   | Hs.5181   | proliferation-associated 2G4, 38kD       | 3.59 | 13.48 |
|    | 443489 | AI073512   | Hs.133916 | ESTs                                     | 3.24 | 13.20 |
|    | 404289 | c6p3_5821  |           | exon                                     | 3.99 | 13.12 |
| 50 | 406534 | ph2_4616   |           | exon                                     | 3.89 | 13.10 |
|    | 423260 | AA324037   |           | gb:EST26901 Cerebellum II Homo sapiens c | 3.38 | 13.03 |
|    | 455421 | AW937661   | Hs.288324 | Homo sapiens cDNA FLJ13283 fis, clone OV | 3.04 | 12.93 |
|    | 433725 | AF063659   | Hs.283919 | Homo sapiens clone HQ0117 PRO0117 mRNA,  | 3.71 | 12.85 |
|    | 416660 | R98905     | Hs.35992  | ESTs                                     | 3.92 | 12.74 |
| 55 | 407593 | AW044083   | Hs.237008 | ESTs                                     | 3.85 | 12.67 |
|    | 451734 | NM_006176  | Hs.26944  | neurogranin (protein kinase C substrate, | 7.41 | 12.59 |
|    | 410366 | AI267589   | Hs.25214  | hypothetical protein                     | 7.89 | 12.50 |
|    | 405348 | cNp3_13716 |           | exon                                     | 3.45 | 12.42 |
|    | 442338 | AI761976   | Hs.156080 | ESTs                                     | 3.69 | 12.35 |
| 60 | 424458 | M29273     | Hs.1780   | myelin associated glycoprotein           | 4.72 | 12.31 |
|    | 431400 | AA504607   |           | gb:aa63a02.s1 NCL_CGAP_GCB1 Homo sapiens | 3.42 | 12.29 |
|    | 417754 | R13027     | Hs.268703 | ESTs                                     | 3.35 | 12.18 |
|    | 440184 | AB002297   | Hs.7022   | dedicator of cyto-kinesis 3              | 6.15 | 12.11 |
|    | 431339 | AA506294   | Hs.257266 | ESTs                                     | 3.50 | 11.97 |
| 65 | 452265 | BE501516   | Hs.114772 | ESTs                                     | 3.62 | 11.96 |
|    | 419297 | AA446040   | Hs.98640  | Homo sapiens cDNA: FLJ21069 fis, clone C | 3.16 | 11.86 |
|    | 424991 | AA775471   | Hs.241467 | ESTs                                     | 3.03 | 11.64 |
|    | 431988 | AC002302   | Hs.77202  | protein kinase C, beta 1                 | 3.78 | 11.62 |
|    | 450987 | AA017202   | Hs.32794  | ESTs                                     | 3.28 | 11.61 |
| 70 | 440607 | AA894559   | Hs.192097 | ESTs                                     | 3.11 | 11.60 |
|    | 454566 | AW807605   |           | gb:MR4-ST0098-120100-001-b06 ST0098 Homo | 3.26 | 11.54 |
|    | 442000 | H38671     | Hs.8071   | KIAA0735 gene product; synaptic vesicle  | 3.44 | 11.51 |
|    | 437948 | AA772920   |           | gb:ae73c09.s1 Stratagene schizo brain S1 | 3.16 | 11.46 |
|    | 401081 | c11p3_921  |           | exon                                     | 3.18 | 11.35 |
| 75 | 438919 | AW979114   |           | gb:EST391224 MAGE resequences, MAGP Homo | 4.16 | 11.35 |
|    | 454578 | AW809178   |           | gb:MR4-ST0118-251099-012-c07 ST0118 Homo | 3.02 | 11.27 |
|    | 422279 | H69644     | Hs.114231 | C-type lectin-like receptor-2            | 3.35 | 11.13 |
|    | 453101 | AW952776   | Hs.94943  | ESTs                                     | 3.21 | 11.07 |
|    | 455836 | BE145795   |           | gb:MR0-HT0208-101299-103-a12 HT0208 Homo | 3.61 | 10.83 |
| 80 | 413324 | V00571     | Hs.75294  | corticotropin releasing hormone          | 3.72 | 10.71 |
|    | 412256 | N59006     | Hs.26133  | ESTs                                     | 3.80 | 10.60 |
|    | 436887 | AW953157   | Hs.193235 | ESTs                                     | 7.24 | 10.56 |
|    | 454968 | AW849046   |           | gb:IL3-CT0214-150300-085-H06 CT0214 Homo | 3.05 | 10.53 |
|    | 418162 | T11958     |           | gb:A802R Heart Homo sapiens cDNA clone A | 3.07 | 10.50 |
|    | 425537 | AB007913   | Hs.158291 | KIAA0444 protein                         | 3.07 | 10.46 |
|    | 436230 | AI248723   | Hs.17711  | ESTs                                     | 3.09 | 10.45 |
|    | 431169 | AW971240   |           | gb:EST383329 MAGE resequences, MAGL Homo | 3.02 | 10.43 |

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|    |        |            |           |   |      |       |
|----|--------|------------|-----------|---|------|-------|
|    | 447359 | NM_012093  | Hs.18268  | adenylate kinase 5                        | 5.91 | 10.40 |
|    | 457187 | AA443927   | Hs.144360 | EST                                       | 3.30 | 10.39 |
|    | 407539 | X91103     |           | gb:H.sapiens mRNA for Hr44 protein.       | 3.02 | 10.36 |
| 5  | 452855 | R17746     | Hs.84469  | ESTs                                      | 3.02 | 10.26 |
|    | 440352 | A1692322   | Hs.65373  | ESTs                                      | 3.03 | 10.20 |
|    | 456116 | Z28528     | Hs.172004 | titin                                     | 3.11 | 10.17 |
|    | 458172 | BE007237   |           | gb:PM0-BN0139-050500-003-g09 BN0139 Homo  | 3.32 | 10.14 |
|    | 445881 | A1263029   | Hs.210689 | ESTs                                      | 3.04 | 10.11 |
| 10 | 454059 | NM_003154  | Hs.37048  | statherin                                 | 3.27 | 9.97  |
|    | 402624 | c1p1_2660  |           | exon                                      | 3.05 | 9.94  |
|    | 441539 | AA937200   | Hs.192939 | ESTs                                      | 3.27 | 9.82  |
|    | 412172 | N76794     |           | gb:yv45g07.r1 Soares fetal liver spleen   | 3.03 | 9.78  |
|    | 427942 | AA417856   |           | gb:zv01d05.r1 NCLCGAP_GCB1 Homo sapiens   | 4.09 | 9.73  |
| 15 | 436867 | BE041837   | Hs.120316 | ESTs                                      | 3.25 | 9.73  |
|    | 454688 | AW614472   |           | gb:MR3-ST0203-010200-109-b06 ST0203 Homo  | 3.41 | 9.73  |
|    | 446122 | A1362790   | Hs.181801 | ESTs                                      | 3.40 | 9.71  |
|    | 420480 | AL137361   | Hs.98173  | hypothetical protein                      | 3.03 | 9.56  |
|    | 433447 | U29195     | Hs.3281   | neuronal pentraxin II                     | 3.72 | 9.54  |
| 20 | 407178 | AA195651   | Hs.104106 | ESTs                                      | 3.89 | 9.47  |
|    | 415614 | F12926     | Hs.165998 | DKFZP564M2423 protein                     | 3.06 | 9.45  |
|    | 450518 | BE245175   | Hs.270893 | ESTs                                      | 3.99 | 9.39  |
|    | 455675 | BE065984   |           | gb:RC3-BT0319-120200-014-a06 BT0319 Homo  | 3.46 | 9.32  |
|    | 456459 | AA253074   | Hs.146261 | ESTs                                      | 4.08 | 9.30  |
| 25 | 423420 | A1571364   | Hs.128382 | Homo sapiens mRNA; cDNA DKFZp76111224 (f  | 5.18 | 9.23  |
|    | 455644 | BE064521   |           | gb:RC4-BT0311-250200-014-d02 BT0311 Homo  | 3.02 | 9.20  |
|    | 419800 | AA282392   | Hs.191525 | ESTs                                      | 3.28 | 9.16  |
|    | 430964 | Y10929     | Hs.248167 | zinc finger protein 186 (Kruppel type)    | 3.04 | 9.00  |
|    | 409716 | AL117454   | Hs.56027  | Homo sapiens mRNA; cDNA DKFZp586J1717 (f  | 3.02 | 9.00  |
| 30 | 412962 | AW839578   | Hs.18160  | Homo sapiens cDNA FLJ11550 fis, clone HE  | 3.33 | 8.99  |
|    | 445040 | AW444934   | Hs.195929 | ESTs, Weakly similar to pre-serum amyloid | 3.50 | 8.96  |
|    | 451496 | AW503407   |           | gb:UI-HF-BN0-akw-d-11-0-UI.r1 NIH_MGC_50  | 3.17 | 8.94  |
|    | 424617 | AA344151   |           | gb:EST50059 Gall bladder I Homo sapiens   | 3.25 | 8.91  |
|    | 441914 | AA971496   | Hs.128465 | ESTs                                      | 3.42 | 8.88  |
| 35 | 405320 | cNp3_12168 |           | exon                                      | 3.30 | 8.84  |
|    | 449179 | A1633785   | Hs.196561 | ESTs                                      | 3.43 | 8.84  |
|    | 400335 | Y13187     | Hs.248066 | Homo sapiens dmd gene, intron 11          | 3.13 | 8.78  |
|    | 454962 | AW847645   |           | gb:IL3-CT0213-280100-056-A04 CT0213 Homo  | 4.16 | 8.74  |
|    | 407803 | AW081681   | Hs.269064 | ESTs                                      | 3.09 | 8.73  |
| 40 | 455260 | AW878317   |           | gb:MR3-OT0007-260300-206-e09 OT0007 Homo  | 3.78 | 8.70  |
|    | 431096 | AA324358   | Hs.249227 | Homo sapiens DNA, cosmid clones TN62 and  | 4.01 | 8.67  |
|    | 424481 | R19453     | Hs.1787   | proteolipid protein (Pelizaeus-Merzbache  | 8.12 | 8.63  |
|    | 407616 | AW054849   | Hs.246831 | ESTs, Weakly similar to CIKG_HUMAN VOLTA  | 3.08 | 8.53  |
|    | 434589 | AF147363   |           | gb:Homo sapiens full length insert cDNA   | 3.26 | 8.51  |
| 45 | 439239 | A1031540   | Hs.235331 | ESTs                                      | 5.78 | 8.48  |
|    | 410926 | AW810708   |           | gb:MR2-ST0129-051099-007-g07 ST0129 Homo  | 3.34 | 8.47  |
|    | 430004 | U27768     | Hs.227571 | regulator of G-protein signalling 4       | 4.26 | 8.45  |
|    | 409623 | AW449185   |           | gb:UI-H-BI3-akg-e-05-0-UI.s1 NCLCGAP_Su   | 3.32 | 8.43  |
|    | 420156 | AW449258   | Hs.6187   | ESTs                                      | 3.40 | 8.38  |
| 50 | 411555 | AF113537   | Hs.70669  | HMP19 protein                             | 5.85 | 8.34  |
|    | 408509 | AA497035   | Hs.110502 | ESTs                                      | 3.17 | 8.34  |
|    | 442368 | A1698577   | Hs.202481 | ESTs                                      | 3.02 | 8.33  |
|    | 457870 | AA732217   | Hs.294054 | ESTs                                      | 3.04 | 8.32  |
| 55 | 437254 | AA831258   |           | gb:xcc73f04.s1 NCLCGAP_GCB1 Homo sapiens  | 3.35 | 8.24  |
|    | 415508 | R39236     |           | gb:yc91d03.s1 Soares infant brain 1NIB H  | 3.07 | 8.22  |
|    | 409483 | U49379     | Hs.54506  | diacylglycerol kinase, epsilon (64kD)     | 3.31 | 8.20  |
|    | 435229 | AA676556   | Hs.269515 | ESTs, Moderately similar to ALU6_HUMAN !  | 3.21 | 8.19  |
|    | 458120 | W21398     | Hs.54523  | ESTs, Weakly similar to cytochrome P-450  | 3.22 | 8.17  |
|    | 444613 | H29627     | Hs.79092  | ESTs                                      | 3.78 | 8.16  |
| 60 | 417050 | N39540     | Hs.108029 | ESTs                                      | 4.06 | 8.14  |
|    | 425607 | U09860     | Hs.158333 | protease, serine, 7 (enterokinase)        | 3.68 | 8.06  |
|    | 413263 | BE075131   |           | gb:PM1-BT0585-110200-003-g03 BT0585 Homo  | 3.40 | 8.04  |
|    | 424549 | A1873205   | Hs.183114 | Homo sapiens cDNA FLJ14236 fis, clone NT  | 3.27 | 8.03  |
|    | 452699 | F33868     | Hs.284176 | transferrin                               | 3.03 | 8.01  |
| 65 | 405476 | cNp3_19940 |           | exon                                      | 3.28 | 8.00  |
|    | 403932 | c5p1_533   |           | exon                                      | 3.58 | 7.99  |
|    | 407095 | AF011757   | Hs.105937 | RAGE binding protein                      | 3.32 | 7.96  |
|    | 415967 | H11124     |           | gb:ym14h07.s1 Soares infant brain 1NIB H  | 3.10 | 7.96  |
|    | 417555 | H65366     |           | gb:yr67c10.r1 Soares fetal liver spleen   | 3.05 | 7.95  |
| 70 | 448985 | AA324885   | Hs.22777  | carbonic anhydrase XI                     | 5.30 | 7.79  |
|    | 428689 | NM_014351  | Hs.189810 | sulfoltransferase-related protein         | 3.87 | 7.74  |
|    | 424140 | Z48051     | Hs.141308 | myelin oligodendrocyte glycoprotein       | 4.68 | 7.74  |
|    | 441099 | AW339393   | Hs.126573 | ESTs                                      | 3.08 | 7.74  |
|    | 448589 | AF017090   | Hs.21554  | KIAA1107 protein                          | 3.10 | 7.73  |
| 75 | 406112 | ph0_24243  |           | exon                                      | 3.22 | 7.70  |
|    | 458439 | AV647220   | Hs.282889 | ESTs, Weakly similar to strong similarit  | 3.22 | 7.69  |
|    | 429859 | NM_007050  | Hs.225952 | protein tyrosine phosphatase, receptor t  | 3.15 | 7.68  |
|    | 412090 | AW955825   | Hs.12396  | ESTs, Weakly similar to ALU6_HUMAN ALU S  | 3.01 | 7.67  |
|    | 413547 | BE147440   |           | gb:RC1-HT0229-080100-015-f09 HT0229 Homo  | 3.01 | 7.66  |
|    | 447772 | A1924558   | Hs.161399 | ESTs                                      | 3.04 | 7.63  |
| 80 | 411132 | AW619191   |           | gb:CM1-ST0283-071299-061-d08 ST0283 Homo  | 3.72 | 7.61  |
|    | 425490 | NM_002248  | Hs.158173 | potassium intermediate/small conductance  | 3.15 | 7.60  |
|    | 454568 | BE141434   |           | gb:MR0-HT0079-051099-002-d01 HT0079 Homo  | 3.16 | 7.59  |
|    | 439099 | AB037800   | Hs.6462   | KIAA1379 protein                          | 3.40 | 7.57  |

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|    |        |            |           |   |      |      |
|----|--------|------------|-----------|---|------|------|
|    | 415669 | NM_005025  | Hs.78589  | serine (or cysteine) proteinase inhibito  | 5.71 | 7.57 |
|    | 428175 | AI810774   | Hs.98376  | ESTs                                      | 3.04 | 7.55 |
|    | 413162 | BE068115   |           | gb:CM1-BT0368-061299-060-g07 BT0368 Homo  | 3.43 | 7.54 |
| 5  | 451361 | AA053854   | Hs.235390 | Homo sapiens mRNA; cDNA DKFZp761B101 (fr  | 3.11 | 7.53 |
|    | 442527 | AF150289   | Hs.205436 | ESTs                                      | 3.31 | 7.53 |
|    | 450407 | NM_000810  | Hs.24969  | gamma-aminobutyric acid (GABA) A recepto  | 5.24 | 7.53 |
|    | 456966 | AI589569   | Hs.190082 | ESTs                                      | 3.13 | 7.47 |
|    | 441799 | AW292276   | Hs.127872 | ESTs                                      | 3.38 | 7.41 |
| 10 | 424185 | AA279752   | Hs.142570 | Homo sapiens clone 24629 mRNA sequence    | 3.16 | 7.40 |
|    | 429783 | AA811987   | Hs.125779 | ESTs                                      | 3.13 | 7.38 |
|    | 429268 | AA205386   | Hs.198481 | RAR-related orphan receptor B             | 3.48 | 7.38 |
|    | 400708 | c11p1_1292 |           | exon                                      | 3.33 | 7.35 |
|    | 402598 | BE314624   | Hs.3128   | polymerase (RNA) II (DNA directed) polyp  | 3.04 | 7.33 |
| 15 | 455377 | AW905347   |           | gb:QV2-NN1073-220400-159-f06 NN1073 Homo  | 3.03 | 7.33 |
|    | 435070 | AI821270   | Hs.116930 | ESTs                                      | 3.03 | 7.33 |
|    | 405427 | cNp3_17682 |           | exon                                      | 3.03 | 7.25 |
|    | 455149 | AW861879   |           | gb:CM0-CT0341-260100-160-h12 CT0341 Homo  | 3.56 | 7.24 |
|    | 402816 | c1p3_2531  |           | exon                                      | 3.13 | 7.21 |
| 20 | 422890 | Z43784     | Hs.78713  | solute carrier family 25 (mitochondrial   | 3.40 | 7.15 |
|    | 422297 | AW961290   | Hs.155615 | ESTs                                      | 3.44 | 7.10 |
|    | 412686 | AW984068   |           | gb:RC0-HN0006-160300-011-e06 HN0006 Homo  | 3.91 | 7.09 |
|    | 436383 | BE065178   |           | gb:RC1-BT0314-020200-012-h01 BT0314 Homo  | 3.09 | 7.09 |
|    | 412290 | BE069037   |           | gb:QV3-BT0379-161299-040-e12 BT0379 Homo  | 3.04 | 7.08 |
| 25 | 415486 | H12214     | Hs.13284  | ESTs                                      | 4.22 | 7.07 |
|    | 407728 | AW071502   | Hs.175931 | ESTs                                      | 3.05 | 7.06 |
|    | 448548 | R13209     | Hs.21413  | solute carrier family 12, (potassium-chl  | 5.93 | 7.05 |
|    | 417275 | X63578     | Hs.81849  | parvalbumin                               | 4.08 | 7.04 |
|    | 418425 | AI871247   | Hs.6262   | ESTs                                      | 4.10 | 7.04 |
| 30 | 440558 | AA889574   | Hs.177511 | ESTs                                      | 3.28 | 7.04 |
|    | 411427 | AW846030   |           | gb:MR3-CT0176-081099-002-b09 CT0176 Homo  | 3.11 | 7.03 |
|    | 422272 | AI452421   | Hs.77965  | Clk-associating RS-cyclophilin            | 3.39 | 7.03 |
|    | 410816 | AW806175   |           | gb:MR1-UM0108-130400-003-a06 UM0108 Homo  | 3.30 | 7.02 |
|    | 418375 | NM_003081  | Hs.84389  | synaposomal-associated protein, 25kD      | 9.93 | 7.01 |
| 35 | 421627 | AI138551   | Hs.97318  | ESTs                                      | 3.10 | 7.01 |
|    | 447258 | BE047911   |           | gb:tz44a05.y1 NCLCGAP_Bm52 Homo sapien    | 3.09 | 6.99 |
|    | 455547 | AW994078   |           | gb:RC3-BN0036-090200-011-h02 BN0036 Homo  | 3.35 | 6.98 |
|    | 432209 | AW971278   |           | gb:EST383367 MAGE resequences, MAGL Homo  | 3.49 | 6.92 |
|    | 404541 | c8p1_6409  |           | exon                                      | 4.62 | 6.89 |
| 40 | 451539 | AA059467   | Hs.218933 | ESTs                                      | 3.01 | 6.88 |
|    | 429954 | AI918130   | Hs.21374  | ESTs                                      | 3.82 | 6.87 |
|    | 411138 | AW819500   |           | gb:RC5-ST0293-180100-012-C07 ST0293 Homo  | 3.08 | 6.87 |
|    | 447464 | AW444957   | Hs.201897 | ESTs, Weakly similar to ALU4_HUMAN ALU S  | 3.33 | 6.85 |
|    | 454713 | AW815111   |           | gb:QV4-ST0212-091199-023-c09 ST0212 Homo  | 3.16 | 6.84 |
| 45 | 415734 | NM_014747  | Hs.78748  | KIAA0237 gene product                     | 5.00 | 6.84 |
|    | 429667 | AA456275   | Hs.44841  | ESTs                                      | 3.09 | 6.80 |
|    | 403008 | c21p3_2374 |           | exon                                      | 3.04 | 6.78 |
|    | 446079 | T56522     | Hs.154030 | ESTs                                      | 3.11 | 6.75 |
|    | 441869 | NM_003947  | Hs.8004   | huntingtin-associated protein interactin  | 4.49 | 6.75 |
| 50 | 437804 | AA828257   | Hs.124324 | ESTs                                      | 3.42 | 6.73 |
|    | 436454 | AA757615   | Hs.291509 | ESTs                                      | 3.01 | 6.72 |
|    | 416334 | H53139     | Hs.36271  | ESTs                                      | 3.12 | 6.70 |
|    | 455965 | BE167014   |           | gb:CM2-HT0502-140200-088-d08 HT0502 Homo  | 3.05 | 6.68 |
|    | 445085 | AI569295   | Hs.179285 | ESTs                                      | 3.19 | 6.68 |
| 55 | 445611 | AW418497   | Hs.145583 | ESTs                                      | 3.61 | 6.68 |
|    | 437762 | T78028     | Hs.154679 | synaptotagmin 1                           | 7.21 | 6.68 |
|    | 416268 | H49111     |           | gb:yo21c07.r1 Soares adult brain N2b5HB5  | 3.02 | 6.67 |
|    | 449766 | AI668690   | Hs.54773  | ESTs                                      | 3.25 | 6.64 |
|    | 443100 | AI033188   |           | gb:ow94e08.s1 Soares_fetal_liver_spleen_  | 3.07 | 6.64 |
| 60 | 408070 | AW148852   |           | gb:x105d05.x1 NCLCGAP_Bm35 Homo sapien    | 3.12 | 6.60 |
|    | 451602 | AW008846   | Hs.60857  | ESTs                                      | 3.05 | 6.59 |
|    | 441447 | AA934077   | Hs.126980 | ESTs                                      | 4.06 | 6.59 |
|    | 445078 | AI869975   | Hs.4775   | junclophilin 3                            | 4.25 | 6.59 |
|    | 434501 | AF143878   | Hs.194152 | Homo sapiens clone IMAGE:115304 mRNA seq  | 3.25 | 6.58 |
| 65 | 415960 | R49020     | Hs.24974  | ESTs                                      | 3.34 | 6.58 |
|    | 403395 | c3p1_11541 |           | exon                                      | 3.59 | 6.57 |
|    | 403061 | c2p1_10450 |           | exon                                      | 3.06 | 6.56 |
|    | 419232 | AI382037   | Hs.87421  | ESTs                                      | 3.28 | 6.56 |
|    | 425984 | AW836277   | Hs.165636 | hypothetical protein DKFZp761C07121       | 6.50 | 6.56 |
| 70 | 403717 | c4p1_3133  |           | exon                                      | 3.52 | 6.53 |
|    | 452178 | AW043576   | Hs.171929 | ESTs                                      | 3.38 | 6.53 |
|    | 455759 | R15709     | Hs.284231 | Novel human gene mapping to chromosome 22 | 4.42 | 6.52 |
|    | 433858 | N69243     | Hs.192974 | Homo sapiens cDNA FLJ12735 fis, clone NT  | 3.58 | 6.52 |
|    | 425440 | AA357518   |           | gb:EST66256 LNCAP cells 1 Homo sapiens c  | 3.15 | 6.49 |
| 75 | 419412 | AW161058   | Hs.90297  | synuclein, beta                           | 5.60 | 6.47 |
|    | 423678 | AW963357   | Hs.7847   | ESTs                                      | 3.47 | 6.47 |
|    | 416625 | R97839     | Hs.35758  | ESTs                                      | 3.10 | 6.46 |
|    | 451854 | T92536     | Hs.194096 | ESTs                                      | 3.28 | 6.46 |
|    | 406732 | AA487229   | Hs.2064   | vimentin                                  | 3.71 | 6.44 |
|    | 434619 | H43163     | Hs.32810  | ESTs                                      | 3.05 | 6.44 |
| 80 | 413797 | BE167274   | Hs.5996   | ESTs                                      | 3.23 | 6.44 |
|    | 438612 | AW977980   | Hs.292129 | ESTs                                      | 3.39 | 6.42 |
|    | 412317 | AW991979   |           | gb:RC1-BN0014-210100-012-r05 BN0014 Homo  | 3.46 | 6.42 |
|    | 422159 | N76767     | Hs.153406 | ESTs                                      | 3.03 | 6.41 |

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|    |        |            |           |   |      |      |
|----|--------|------------|-----------|---|------|------|
|    | 429290 | AF203032   | Hs.198760 | neurofilament, heavy polypeptide (200kD)  | 3.46 | 6.35 |
|    | 427334 | R44789     | Hs.119486 | ESTs, Weakly similar to transmembrane re  | 3.93 | 6.35 |
|    | 453839 | AL138417   |           | gb:DKFZp434B1729_r1 434 (synonym: htes3)  | 3.06 | 6.34 |
| 5  | 429096 | AB011106   | Hs.196012 | KIAA0534 protein                          | 3.12 | 6.33 |
|    | 444609 | AW571659   | Hs.278081 | ESTs                                      | 3.30 | 6.33 |
|    | 419515 | S81944     | Hs.90791  | gamma-aminobutyric acid (GABA) A recepto  | 3.11 | 6.33 |
|    | 418900 | BE207357   | Hs.301709 | ESTs                                      | 3.14 | 6.30 |
|    | 437979 | AA774318   | Hs.121708 | ESTs                                      | 3.25 | 6.29 |
| 10 | 410359 | R38624     | Hs.106313 | ESTs                                      | 4.74 | 6.28 |
|    | 415990 | R76929     | Hs.29633  | ESTs                                      | 3.39 | 6.28 |
|    | 419392 | W28573     |           | gb:51f10 Human retina cDNA randomly prim  | 3.00 | 6.28 |
|    | 424312 | AB013452   | Hs.144931 | ATPase, aminophospholipid transporter (A  | 3.06 | 6.26 |
|    | 444762 | AI733700   | Hs.143883 | ESTs                                      | 3.09 | 6.25 |
| 15 | 447785 | AL041765   | Hs.161423 | ESTs                                      | 3.05 | 6.22 |
|    | 418199 | AA884555   | Hs.86603  | ESTs                                      | 3.55 | 6.22 |
|    | 440582 | AA993337   | Hs.129082 | ESTs                                      | 3.73 | 6.21 |
|    | 457766 | AL119470   | Hs.145631 | ESTs                                      | 3.69 | 6.21 |
|    | 426814 | AF036943   | Hs.172619 | KIAA1106 protein                          | 4.71 | 6.21 |
| 20 | 412018 | BE148152   |           | gb:RC4-HT0231-041199-012-b04 HT0231 Homo  | 3.35 | 6.21 |
|    | 414699 | AI815523   | Hs.76930  | synuclein, alpha (non A4 component of am  | 3.68 | 6.19 |
|    | 420127 | AA360399   | Hs.44011  | ESTs                                      | 3.54 | 6.18 |
|    | 418833 | AW974899   | Hs.292776 | ESTs                                      | 3.08 | 6.18 |
|    | 441265 | AA927180   | Hs.153261 | ESTs                                      | 3.21 | 6.17 |
| 25 | 413408 | R51793     | Hs.21745  | ESTs                                      | 3.56 | 6.15 |
|    | 434512 | AW139932   | Hs.188941 | ESTs                                      | 3.56 | 6.15 |
|    | 422253 | W81526     | Hs.118329 | ESTs                                      | 5.04 | 6.10 |
|    | 439950 | AW937417   | Hs.293561 | ESTs                                      | 3.24 | 6.10 |
|    | 417210 | N99228     | Hs.49162  | ESTs                                      | 3.54 | 6.10 |
| 30 | 414306 | BE272198   | Hs.283869 | Human DNA sequence from clone RP5-1013A2  | 3.35 | 6.10 |
|    | 411265 | AW834695   |           | gb:RC0-LT0001-261199-031-D05 LT0001 Homo  | 3.07 | 6.10 |
|    | 412734 | AW993498   |           | gb:RC2-BN0033-170300-019-b08 BN0033 Homo  | 3.36 | 6.09 |
|    | 425172 | AA447729   | Hs.12714  | ESTs                                      | 5.40 | 6.06 |
|    | 451759 | W23161     | Hs.32886  | ESTs                                      | 3.21 | 6.02 |
| 35 | 432154 | AI701523   | Hs.112577 | ESTs                                      | 3.50 | 6.02 |
|    | 401313 | c13p1_435  |           | exon                                      | 3.92 | 5.96 |
|    | 446951 | AI350575   | Hs.156730 | ESTs                                      | 3.20 | 5.95 |
|    | 440917 | AA909651   | Hs.160025 | ESTs                                      | 3.06 | 5.94 |
|    | 405961 | ph0_14521  |           | exon                                      | 3.12 | 5.91 |
| 40 | 428737 | AA984728   | Hs.192760 | kinesin family member 5A                  | 3.05 | 5.90 |
|    | 417292 | N69197     | Hs.191361 | ESTs                                      | 3.62 | 5.89 |
|    | 448681 | AL109781   | Hs.21754  | Homo sapiens mRNA, full length insert cDN | 3.52 | 5.88 |
|    | 452524 | AW136499   | Hs.29796  | Homo sapiens mRNA; cDNA DKFZp434D1319 (f  | 3.07 | 5.88 |
|    | 426575 | W74826     | Hs.170808 | glutamate decarboxylase 2 (pancreatic is  | 4.08 | 5.87 |
| 45 | 423641 | AL137256   | Hs.130489 | Homo sapiens mRNA; cDNA DKFZp761K0912 (f  | 3.28 | 5.87 |
|    | 420755 | AI699437   | Hs.165268 | ESTs                                      | 3.17 | 5.86 |
|    | 448116 | AW352276   | Hs.170700 | ESTs                                      | 3.28 | 5.86 |
|    | 412694 | AW984373   |           | gb:PM3-HN0011-200300-001-f01 HN0011 Homo  | 3.00 | 5.83 |
|    | 437612 | AA827715   | Hs.105153 | Homo sapiens cDNA FLJ14230 fis, clone NT  | 3.09 | 5.82 |
| 50 | 411522 | AW850266   |           | gb:IL3-CT0219-161199-031-H11 CT0219 Homo  | 3.26 | 5.81 |
|    | 456910 | BE185921   | Hs.98073  | ESTs                                      | 3.20 | 5.80 |
|    | 439915 | AI521791   | Hs.252358 | ESTs                                      | 3.55 | 5.80 |
|    | 404403 | c8p1_1094  |           | exon                                      | 3.23 | 5.80 |
|    | 405332 | cNp3_13017 |           | exon                                      | 3.51 | 5.78 |
| 55 | 411167 | AW820204   |           | gb:CV2-ST0296-190100-029-c11 ST0296 Homo  | 3.04 | 5.78 |
|    | 416139 | H21109     | Hs.172853 | ESTs                                      | 3.63 | 5.77 |
|    | 434222 | AF119886   | Hs.283941 | Homo sapiens PRO2591 mRNA, complete cds   | 3.65 | 5.77 |
|    | 415247 | F02431     | Hs.6581   | ESTs                                      | 3.08 | 5.75 |
|    | 446037 | AI076806   | Hs.282965 | ESTs                                      | 3.42 | 5.75 |
| 60 | 450478 | AW451709   | Hs.271200 | ESTs                                      | 3.80 | 5.72 |
|    | 446588 | AV659343   | Hs.282954 | ESTs                                      | 3.29 | 5.72 |
|    | 413118 | BE065939   |           | gb:RC3-BT0319-100100-012-c11 BT0319 Homo  | 3.03 | 5.72 |
|    | 416946 | NM_012324  | Hs.80545  | mitogen-activated protein kinase 8 inter  | 3.91 | 5.72 |
|    | 454751 | AW819132   |           | gb:RC3-ST0281-240400-015-c10 ST0281 Homo  | 3.06 | 5.72 |
| 65 | 457194 | H20669     | Hs.35406  | ESTs, Highly similar to unnamed protein   | 3.54 | 5.71 |
|    | 438601 | AA811713   | Hs.163222 | ESTs                                      | 3.26 | 5.71 |
|    | 439032 | AA829487   | Hs.274412 | similar to yeast Upf3, variant A          | 3.10 | 5.67 |
|    | 408940 | M58583     | Hs.662    | cerebellin 1 precursor                    | 3.32 | 5.67 |
|    | 437700 | AA766060   | Hs.122848 | ESTs                                      | 3.23 | 5.66 |
| 70 | 416061 | R45516     | Hs.26119  | ESTs                                      | 3.85 | 5.65 |
|    | 452861 | BE177663   |           | gb:RC1-HT0598-020300-011-h11 HT0598 Homo  | 3.04 | 5.64 |
|    | 430330 | AA476583   | Hs.132981 | ESTs                                      | 3.51 | 5.63 |
|    | 435312 | AJ243396   | Hs.4865   | voltage-gated sodium channel beta-3 subu  | 5.67 | 5.62 |
|    | 400710 | c11p1_1297 |           | exon                                      | 3.04 | 5.61 |
| 75 | 457130 | NM_005651  | Hs.183671 | tryptophan 2,3-dioxygenase                | 3.31 | 5.60 |
|    | 434513 | AF143888   | Hs.18213  | Homo sapiens clone IMAGE:121736 mRNA seq  | 3.93 | 5.60 |
|    | 434277 | X77748     | Hs.3786   | glutamate receptor, metabotropic 3        | 3.67 | 5.58 |
|    | 440854 | AW444900   | Hs.246715 | ESTs                                      | 3.30 | 5.58 |
|    | 457086 | AA412591   | Hs.204685 | ESTs                                      | 3.37 | 5.57 |
| 80 | 431883 | AA731404   | Hs.105510 | ESTs                                      | 3.67 | 5.56 |
|    | 400758 | AA158742   | Hs.225084 | Homo sapiens cDNA FLJ14280 fis, clone PL  | 3.43 | 5.55 |
|    | 455374 | AW904039   |           | gb:CM3-NN1040-200400-156-d03 NN1040 Homo  | 3.36 | 5.52 |
|    | 440750 | AW105131   | Hs.245405 | ESTs                                      | 3.10 | 5.50 |
|    | 451865 | H43737     | Hs.33186  | ESTs, Weakly similar to unknown protein   | 3.38 | 5.50 |

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|    |        |            |           |  |      |      |
|----|--------|------------|-----------|--|------|------|
|    | 453100 | AW806871   | Hs.224786 | ESTs                                     | 3.30 | 5.49 |
|    | 433940 | H05129     | Hs.7459   | cyclic AMP-regulated phosphoprotein, 21  | 3.24 | 5.49 |
|    | 454935 | AW846075   |           | gb:MR3-CT0176-081099-002-b02 CT0176 Homo | 3.26 | 5.48 |
| 5  | 435447 | A1872932   | Hs.142442 | HP1-BP74                                 | 3.89 | 5.47 |
|    | 402953 | c20p3_3451 |           | exon                                     | 3.28 | 5.47 |
|    | 456233 | AA203339   |           | gb:zx56a01.r1 Soares_fetal_liver_spleen_ | 3.02 | 5.47 |
|    | 407718 | AW070784   | Hs.243243 | EST                                      | 3.30 | 5.45 |
|    | 417429 | A1950629   | Hs.286237 | Homo sapiens cDNA FLJ11841 fis, clone HE | 3.31 | 5.38 |
| 10 | 446408 | A1797169   | Hs.208486 | ESTs                                     | 3.07 | 5.37 |
|    | 441792 | AW873635   | Hs.143962 | ESTs                                     | 3.19 | 5.35 |
|    | 450661 | AW952160   | Hs.32916  | ESTs                                     | 3.70 | 5.35 |
|    | 433932 | AW954599   | Hs.169330 | neuronal protein                         | 6.78 | 5.33 |
|    | 427002 | AA524093   | Hs.23158  | ESTs                                     | 4.00 | 5.32 |
| 15 | 428741 | AA461386   |           | gb:zx70h05.r1 Soares_talal_fetus_Nb2HF8_ | 3.10 | 5.32 |
|    | 446383 | T05816     | Hs.92511  | EST                                      | 3.39 | 5.30 |
|    | 442988 | A1026130   | Hs.131683 | ESTs                                     | 3.07 | 5.29 |
|    | 426713 | A1655299   | Hs.130055 | ESTs                                     | 3.33 | 5.29 |
|    | 421294 | AA713486   | Hs.180291 | ESTs                                     | 3.44 | 5.28 |
| 20 | 406452 | ph2_21981  |           | exon                                     | 3.20 | 5.28 |
|    | 423508 | AW604297   | Hs.129711 | hepatitis A virus cellular receptor 1    | 3.26 | 5.27 |
|    | 442114 | BE217975   | Hs.157021 | ESTs                                     | 3.32 | 5.26 |
|    | 432508 | A1808915   | Hs.190201 | ESTs                                     | 3.46 | 5.26 |
|    | 425604 | U94320     | Hs.158330 | neuropeptide Y receptor Y5               | 3.26 | 5.23 |
| 25 | 417925 | R26789     | Hs.23995  | ESTs                                     | 3.08 | 5.23 |
|    | 444448 | H66317     | Hs.143660 | ESTs                                     | 3.81 | 5.22 |
|    | 413024 | AF036268   | Hs.75149  | SH3-domain GRB2-like 2                   | 3.71 | 5.22 |
|    | 437911 | AA848010   | Hs.124250 | ESTs                                     | 3.11 | 5.18 |
|    | 435406 | F26698     | Hs.4384   | calcium/calmodulin-dependent protein kin | 4.95 | 5.17 |
| 30 | 407131 | R98679     |           | gb:yr31c03.s1 Soares fetal liver spleen  | 3.30 | 5.16 |
|    | 435776 | A1537162   | Hs.263988 | ESTs                                     | 3.14 | 5.13 |
|    | 455532 | AW984828   |           | gb:RC1-HN0015-120400-021-h11 HN0015 Homo | 3.14 | 5.13 |
|    | 457352 | AA489099   |           | gb:aa56h09.s1 NCI_CGAP_GCB1 Homo sapiens | 3.48 | 5.12 |
|    | 428670 | AA431682   | Hs.134832 | ESTs                                     | 3.17 | 5.12 |
| 35 | 445962 | A1268410   | Hs.201386 | ESTs                                     | 3.14 | 5.12 |
|    | 418153 | R13696     | Hs.112830 | ESTs                                     | 3.16 | 5.10 |
|    | 440565 | AW103823   | Hs.131586 | ESTs                                     | 3.08 | 5.10 |
|    | 431446 | AW294929   | Hs.255369 | Homo sapiens cDNA FLJ10265 fis, clone HE | 3.42 | 5.09 |
|    | 456036 | BE536554   | Hs.75839  | zinc finger protein 6 (CMPX1)            | 3.21 | 5.09 |
| 40 | 420883 | A1735488   | Hs.111436 | ESTs                                     | 3.17 | 5.08 |
|    | 455528 | AW984757   |           | gb:RC1-HN0015-040400-011-g10 HN0015 Homo | 3.35 | 5.08 |
|    | 408442 | R59608     | Hs.21435  | ESTs                                     | 3.10 | 5.07 |
|    | 446093 | A1346849   | Hs.145896 | ESTs                                     | 3.30 | 5.06 |
|    | 403489 | c3p1_2255  |           | exon                                     | 3.43 | 5.05 |
| 45 | 405278 | cNp3_1070  |           | exon                                     | 3.05 | 5.03 |
|    | 412804 | H18857     | Hs.22547  | ESTs                                     | 3.63 | 5.03 |
|    | 458407 | W90022     | Hs.186809 | ESTs, Highly similar to LECT2 precursor  | 3.52 | 5.03 |
|    | 407367 | AA130773   |           | gb:zo13d01.r1 Stratogene colon (937204)  | 3.51 | 5.02 |
|    | 439108 | AW163034   | Hs.6467   | synaptogyrin 3                           | 5.63 | 5.01 |
| 50 | 445335 | A1220339   | Hs.166775 | ESTs                                     | 3.21 | 5.01 |
|    | 435404 | A1240661   | Hs.124995 | ESTs                                     | 3.99 | 5.00 |

TABLE 6B:

Pkey: Unique Eos probeset identifier number  
CAT number: Gene cluster number  
Accession: Genbank accession numbers

|    |        |            |  |
|----|--------|------------|--|
|    | Pkey   | CAT Number | Accession  |
|    | 410837 | 282574_1   | AW806917 AW866469 BF898475 BF898476 AW866540 AW866614 BE145696 AW8666575   |
|    | 436812 | 659779_1   | AW978773 AW298067 AA810101 AW194180 AA731645 A1690673  |
| 60 | 454171 | 1049240_1  | AW854832 AW854798 AW854857 AW854816 AW854834 AW854817  |
|    | 454589 | 28039_6    | BG574750 BF374578 AW810080 AW810106 AW810084 BF374755 AW809621 BF374734 BF374590 BF374594 AW809699 BF374588 AW810437 |
|    |        |            | AW810161 AW809662 AW810151   |
|    | 417159 | 2075888_1  | R01760 N49787 R01761   |
| 65 | 459349 | 1027822_1  | AW749381 H93337  |
|    | 414187 | 315279_1   | BE259777 BE312141 BF942980   |
|    | 423280 | 881045_1   | AW955178 H86636 AA324037   |
|    | 431400 | 1233916_1  | AW969094 AA504607 AA504705   |
| 70 | 454566 | 164604_1   | AW807605 AW807690 AW807677 AW807752 AW807673 AW807900 AW807955 AW807679 AW807615 AW807917 AW807849 AW807832 AW807821 |
|    |        |            | AW807842 AW807827 AW807754 AW807830 AW807829 AW807825 AW807819 AW807769 AW807685 AW807603 AW807763 AW807612 AW807840 |
|    |        |            | AW807908 AW807684 AW807609 AW807596 AW807595 AW807593 AW807907 AW807902 AW807846 AW807756 AW807687 AW807836 AW807835 |
|    |        |            | AW807770 AW807753 AW807669 AW807678 AW807686 AW807680 AW807688 AW807847 AW807957 AW807674 AW807602 AW807617 AW807921 |
|    |        |            | AW807667 AW807952 AW807918 AW807670 AW807760 AW807956 AW807608 AW807683 AW807839 AW807601 AW807822 AW807898          |
|    |        |            | AA772920 D59870 D61151 A1591331 BF960996   |
| 75 | 438919 | 1242618_1  | AW979114 AA828060 AA837606 AA829203  |
|    | 454578 | 1670_3     | BE150647 AW971143 AW809224 AW809221 BF753820 AW809220 AW809178 AW809150 AW809195 AW809175                            |
|    | 455836 | 1518824_1  | BE145800 BE145921 BE145873 BE145871 BE145930 BE145797 BE145795   |
|    | 454968 | 1085677_1  | AW848279 AW849039 AW847956 AW847957 AW849046 AW848696 AW849034 AW849033  |
|    | 418162 | 2189291_1  | T11756 T20135 T19729 T11958 T11816 R45874  |
| 80 | 431169 | 1235760_1  | AW971240 AA493723 AA493843   |
|    | 458172 | 363900_1   | BE007237 BE546311 AA984819 B1256810 W19919 BE007263 BG000322 BF327011 AA890198 BE007496                              |
|    | 412172 | 709034_1   | W04158 AW897535 N94221   |
|    | 427942 | 465847_1   | BE543651 AA417856 AV756446 BG505084 B1460307 B1460993 BG613293   |
|    | 454688 | 1066481_1  | BF375123 AW814472 AW814474 AW813343 AW816161 AW813380 AW813300   |

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|    |        |           |  |
|----|--------|-----------|--|
| 5  | 455675 | 1490763_1 | BE065984 BE066085 BE065942 BE065955  |
|    | 455644 | 1489581_1 | BE064521 BE064441 BE064426 BE064285 BE064286   |
|    | 451496 | 85420_1   | AA046879 BF327988 AW503407 AA018131  |
|    | 424617 | 895912_1  | AW963059 AA344151 AA344472   |
|    | 454962 | 323094_1  | AW853945 AW854083 BF962818 AW847791 BI035483 AW847645 BF961514 BF963484 BF952264 BF963521                            |
|    | 455260 | 231032_1  | BE161805 AW878317 BE161759 BF870032 BF869588   |
|    | 434589 | 14676_1   | AF147363 T47219 T47218   |
|    | 410926 | 1064369_1 | AW810708 AW810808 AW810771 AW810924  |
| 10 | 409623 | 830636_1  | AW449665 BE220971 AW449185   |
|    | 437254 | 1239876_1 | AW976161 AA831258 AA765857 AA747712 AI784019   |
|    | 415508 | 1874742_1 | R45579 F10822 R39236   |
|    | 413263 | 1497122_1 | BE075132 BE075131 BE075130 D60395 BF688035   |
|    | 415967 | 1899490_1 | H49130 H11230 BF363165 H49061 H11124   |
|    | 417555 | 1978200_1 | AA203678 AL597143 H65366   |
| 15 | 413547 | 1520005_1 | BE147456 BE147563 BE147708 BE147440  |
|    | 411132 | 1070974_1 | AW819177 AW819242 AW819191 AW819175 AW819252 AW819244 AW819265 AW819269 AW819190 AW819268 AW819183 AW819246 AW819194 |
|    |        |           | AW819249 AW819186 AW819180 AW819188 BE158470 AW819251 BE152602 AW819263  |
|    | 454568 | 1061859_1 | AW807909 AW807824 AW807826 AW807903 AW807766 AW807750 AW807911 BE141434 AW807611 AW807837 AW807699 BF374481          |
| 20 | 413162 | 1492355_1 | BE068104 BE068096 BE068198 BE068115 BE068102 BE068154 BE068103   |
|    | 455377 | 154707_1  | BF947516 AW905291 BF947512 BF952606 BF952706 BF952525 BF952524 BF952619 BF947500 BF952608 BF952523 BF952532 BF952344 |
|    |        |           | BF746516 BF947614 BF746511 BF952358 AW905400 AW905300 BF947617 AW905349 BF952531 AW905403 BF952528 BE081655 BF746513 |
|    |        |           | AW905286 BF952868 BF947513 BF947510 BF947618 BF947619 AW905347   |
|    | 455149 | 1099453_1 | AW861879 AW861948 AW858447 AW861873 AW858418 AW861871  |
| 25 | 412686 | 1243154_1 | AW984068 AW984077 AW984072   |
|    | 436383 | 46767_1   | AJ227879 BE065178 BE065329   |
|    | 412290 | 1163352_1 | BE069037 BE069178 AW936034 AW936025  |
|    | 411427 | 1063097_1 | AW846080 AW846074 AW846118 AW846130  |
|    | 410816 | 1060611_1 | AW806175 AW806176 AW806170 AW806156  |
| 30 | 447258 | 1485710_1 | BE617316 BE047911 AA984167   |
|    | 455547 | 1245954_1 | AW994078 BE176183  |
|    | 432209 | 1235790_1 | AW971278 AA528270 AA553447 AW971281  |
|    | 411138 | 1071173_1 | AW819500 AW819503 AW819481 AW819459 BF375618   |
|    | 454713 | 1067889_1 | AW815111 AW815094 AW815218   |
|    | 455965 | 1555935_1 | BE167014 BE167058 BE167062   |
| 35 | 416268 | 1958926_1 | H41854 H49111 H46317   |
|    | 443100 | 416959_1  | BE004743 AW804074 BE089437 BE089439 BE089378 BE089438 BE004795 W02375 AI033188 BF332422 BF332418 BE178660            |
|    | 406070 | 632273_1  | AW146852 BG994152  |
|    | 425440 | 1228191_1 | AW962960 AA357518 AA360531   |
| 40 | 412317 | 1164038_1 | AW991979 AW991981 AW991983 AW936856 AW991977 AW991971 AW936852   |
|    | 453839 | 3209657_1 | AL138417 AL138418  |
|    | 419392 | 215562_2  | W28573 W27418  |
|    | 412018 | 147109_1  | BE148133 BE148132 BF736564 BE148152 BE148159 BF893700  |
|    | 411265 | 1074383_1 | AW834695 AW834717 AW834714   |
| 45 | 412734 | 1245451_1 | AW993498 AW993484 AW993490 BF512974  |
|    | 412694 | 1243393_1 | AW984388 AW984392 AW984379 AW984351 AW984381 AW984377 AW984366 AW984348 AW984391 AW984373 AW984372 AW984353 AW984362 |
|    | 411522 | 1089092_1 | BE143505 BF374194 BF374190 AW850286  |
|    | 411167 | 1071740_1 | AW820323 AW820314 AW820321   |
|    | 413118 | 1490760_1 | BE066079 BE065939 BE065956   |
| 50 | 454751 | 1070838_1 | AW819132 AW819122 AW819018 AW819135 AW819126 AW819024 AW819012 AW819141  |
|    | 452861 | 319757_1  | BE177663 AW994738 AI923735 BF948431 BF948329   |
|    | 455374 | 1161013_1 | AW904029 AW904030 AW904039 AW904031 AW904032 AW904046  |
|    | 454935 | 1083098_1 | AW846075 AW846103 BF333976 AW846077 AW846122 AW846129 AW846095 AW846076 BF333979 BF333978 AW846092                   |
|    | 456233 | 2635744_1 | AA203339 AA906160 AA929005   |
| 55 | 428741 | 1384399_1 | AA461386 AA433841 AA433845   |
|    | 455532 | 1243692_1 | AW984828 AW984787 AW984806 AW984817 AW984826 AW984822 AW984773 AW984786 AW984803 AW984796                            |
|    | 457352 | 1233795_1 | AW968968 AA489099 N72933 AA489184  |
|    | 455528 | 1243660_1 | AW984734 AW984757 AW984797 AW984745  |
|    | 407367 | 4907_1    | AF085963 H72550 H72951 AA130773  |

|    |              |   |
|----|--------------|---|
| 60 | TABLE 6C:    |   |
|    | Pkey:        | Unique number corresponding to an Eos probeset  |
|    | Ref:         | Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <u>Nature</u> 402:489-495. |
|    | Strand:      | Indicates DNA strand from which exons were predicted.   |
| 65 | Nt_position: | Indicates nucleotide positions of predicted exons.  |

|    |        |         |        |  |
|----|--------|---------|--------|--|
|    | Pkey   | Ref     | Strand | Nt_position                              |
|    | 401412 | 7940103 | Minus  | 43347-45776                              |
| 70 | 405230 | 7249032 | Minus  | 97493-97682                              |
|    | 402125 | 4033680 | Plus   | 172732-172868                            |
|    | 404289 | 2769644 | Plus   | 15049-15286,30267-30457                  |
|    | 405534 | 7711477 | Plus   | 40463-40586,41191-41336,41856-41986,4300 |
|    | 405348 | 2914717 | Minus  | 43310-43462                              |
| 75 | 401081 | 3478647 | Plus   | 105163-105305                            |
|    | 402624 | 7885063 | Minus  | 31308-31439                              |
|    | 405320 | 3478667 | Minus  | 118511-118926,119175-119331              |
|    | 405476 | 2121229 | Plus   | 69890-70883                              |
|    | 403932 | 7454203 | Minus  | 8142-8753                                |
|    | 406112 | 9133145 | Plus   | 61863-62028                              |
| 80 | 400708 | 7249204 | Plus   | 118115-119445                            |
|    | 405427 | 7243901 | Minus  | 6509-6729                                |
|    | 402816 | 6723302 | Minus  | 25104-25291                              |
|    | 404541 | 8318559 | Plus   | 103456-103664                            |



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|        |         |       |   |
|--------|---------|-------|---|
| 403008 | 6070396 | Plus  | 94608-94785,95096-95233                 |
| 403395 | 9438353 | Minus | 144947-145075                           |
| 403061 | 8954192 | Plus  | 142875-143008                           |
| 403717 | 7259747 | Minus | 79166-79758                             |
| 401313 | 9212516 | Minus | 190842-191090                           |
| 405961 | 8190197 | Plus  | 45132-45254                             |
| 404403 | 7272157 | Minus | 72053-72238                             |
| 405332 | 3169141 | Minus | 70483-71207                             |
| 400710 | 7249204 | Plus  | 156753-157120                           |
| 402953 | 9408724 | Minus | 122603-122743                           |
| 406452 | 9568380 | Minus | 76322-76427                             |
| 403489 | 7331314 | Minus | 38897-39212                             |
| 405278 | 6139075 | Minus | 3863-3965,4823-4891,5439-5529,6043-6170 |

TABLE 7A: EXTENDED GLIOBLASTOMA SEQUENCES: This table includes sequence information for 21 DNA and protein sequences

DNA sequence 1

Gene name: Protein tyrosine phosphatase, receptor-type, Z polypeptide 1

Unigene number: Hs.78867

Probeset Accession #: M93426

Nucleic Acid Accession #: NM\_002851

Coding sequence: 148-7092

| 1           | 11          | 21          | 31          | 41          | 51          |      |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| 1           | 11          | 21          | 31          | 41          | 51          |      |
| CACACATACG  | CACGCACGAT  | CTCACTTCGA  | TCTATACACT  | GGAGGATTAA  | AACAAACAAA  | 60   |
| CAAAAAAAGC  | ATTTCCCTTG  | CTCCCCCTCC  | CTCTCCACTC  | TGAGAAGCAG  | AGGAGCCGCA  | 120  |
| CGCGCAGGGG  | CCGCAGACCG  | TCTGGAAATG  | CGAATCCTAA  | AGCGTTTCCT  | CGCTTGCATT  | 180  |
| CAGCTCCTCT  | GTGTTTGCCG  | CCTGGATTGG  | GCTAATGGAT  | ACTACAGACA  | ACAGAGAAAA  | 240  |
| CTTGTTGAAG  | AGATTGGCTG  | GTCCCTATACA | GGAGCACTGA  | ATCAAAAAAA  | TTGGGGAAAG  | 300  |
| AAATATCCAA  | CATGTAATAG  | CCCAAAACAA  | TCTCCTATCA  | ATATTGATGA  | AGATCTTIACA | 360  |
| CAAGTAAATG  | TGAATCTTAA  | GAAACTTAAA  | TTTCAGGGTT  | GGGATAAAAC  | ATCATTGGAA  | 420  |
| AACACATTCA  | TTCATAACAC  | TGGGAAAACA  | GTGGAAATTA  | ATCTCACTAA  | TGACTACCGT  | 480  |
| GTGACGGGAG  | GAGTTTCAGA  | AATGGTGTIT  | AAAGCAAACA  | AGATAACTTT  | TCACCTGGGA  | 540  |
| AAATGCAATA  | TGTATCTCTG  | TGGATCAGAG  | CATAGTTTAG  | AAGGACAAAA  | ATTCCACTT   | 600  |
| GAGATGCAAA  | TCTACTGCTT  | TGATGCGGAC  | CGATTTTCAA  | GTTTGGAGGA  | AGCAGTCAAA  | 660  |
| GGAAAAGGGA  | AGTTAAGAGC  | TTTATCCATT  | TTGTTTGAGG  | TTGGGACAGA  | AGAAAAATTG  | 720  |
| GATTTCAAAG  | CGATTATTGA  | TGGAGTCGAA  | AGTCTTAGTC  | GTTTGGGAA   | GCAGGCTGCT  | 780  |
| TTAGATCCAT  | TCATACTGTT  | GAACTTCTG   | CCAACTCAA   | CTGACAAAGT  | TTACATTAC   | 840  |
| AAATGGCTCAT | TGACATCTCC  | TCCCTGCACA  | GACACAGTTG  | ACTGGATTGT  | TTTTAAAGAT  | 900  |
| ACAGTTAGCA  | TCTCTGAAAG  | CCAGTTGGCT  | GTTTGTGTG   | AAGTCTTAC   | AATGCAACAA  | 960  |
| TCTGGTTATG  | TCATGCTGAT  | GGACTACTTA  | CAAAACAATT  | TTGAGAGACA  | ACAGTACAAG  | 1020 |
| TTCTCTAGAC  | AGGTGTTTTC  | CTCATACACT  | GGAAAGGAAG  | AGATTTCATGA | AGCAGTTTGT  | 1080 |
| AGTTTCAGAAC | CAGAAATAGT  | TCAGGCTGAC  | CCAGAGAATT  | ATACCAAGCT  | TCTTGTGTACA | 1140 |
| TGGGAAAGAC  | CTCCGATCGT  | TTATGATACC  | ATGATTGAGA  | AGTTTGACAGT | TTTGTACCAG  | 1200 |
| CAGTTGGATG  | GAGAGGACCA  | AACCAAGCAT  | GAATTTTGA   | CAGATGGCTA  | TCAAGACTTG  | 1260 |
| GGTGCTAATC  | TCAATAATTT  | GCTACCCAAAT | ATGAGTTATG  | TTCTTCAGAT  | AGTAGCCATA  | 1320 |
| TGCACATAAG  | GCTTATATGG  | AAAATACAGC  | GACCAACTGA  | TTGTGACAT   | GCCTACTGAT  | 1380 |
| AATCCTGAAC  | TTGATCTTTT  | CCCTGAAATTA | ATTGGAACGT  | AAGAAATAAT  | CAAGGAGGAG  | 1440 |
| GAAGAGGGAA  | AAGACATTGA  | AGAAGGCGCT  | ATTGTGAATC  | CTGGTAGAGA  | CAGTGTCTACA | 1500 |
| AACCAAAATG  | GGAAAAAGGA  | ACCCAGATT   | TCTACCAACA  | CACACTACAA  | TCGCATAGGG  | 1560 |
| ACGAAATACA  | ATGAAGCCAA  | GACTAACCGA  | TCCCAACAA   | GAGGAAGTGA  | ATTCTCTGGA  | 1620 |
| AAGGGTAGAG  | TGCCCAATTA  | ATCTTTAAAT  | TCCACTTCCC  | AACCAAGTCA  | TAAATTAGCC  | 1680 |
| ACAGAAAAAG  | ATATTCTCTT  | GACTTCTCAG  | ACTGTGACTG  | AACGTCCACC  | TCACACTGTG  | 1740 |
| GAAGGTACTT  | CAGCCTCTTT  | AAATGATGGC  | TCTAAAACTG  | TTCTTAGATC  | TCCCATATG   | 1800 |
| AACTTGTTCG  | GGACTGTCAGA | ATCCTTAAAT  | ACAGTTTCTA  | TAAACAGAATA | TGAGGAGGAG  | 1860 |
| AGTTTATTGA  | CAGTTTCTAA  | GCTTGATAGT  | GGAGCTGAAG  | ATTCTTCAGG  | CTCCAGTCCC  | 1920 |
| GCAACTTCTG  | CTATCCCTAT  | CATCTCTGAG  | AACATATCCC  | AAGGTATAT   | ATTTTCTCTC  | 1980 |
| GAAAACCCAG  | AGACAATAAC  | ATATGATGTC  | CTTATACCAG  | AATCTGCTAG  | AAATGCTTCC  | 2040 |
| GAAAGATCAA  | CTTCATCAGG  | TTCAGAAAG   | TCACTAAAGG  | ATCCTTCTAT  | GGAGGGAAAT  | 2100 |
| GTGTGGTTGC  | CCATGCTTAC  | AGACATAACA  | GCACAGCCCG  | ATGTTGGATC  | AGGCAGAGAG  | 2160 |
| AGCTTTCTCC  | AGACTAAATTA | CACTGAGATA  | CGTGTGATG   | AATCTGAGAA  | GACAAACCAAG | 2220 |
| TCCCTTTCTG  | CAGGCCCAAT  | GATGTACAG   | GGTCCCTCAG  | TTACAGATCT  | GGAAATGCCA  | 2280 |
| CATTATTCTA  | CCTTTGCCTA  | CTTCCCAACT  | GAGGTAACAC  | CTCATGCTTT  | TACCCCATCC  | 2340 |
| TCCAGACAAC  | AGGATTTGGT  | CTCCACGGTC  | AACGTGGTAT  | ACTCGCAGAC  | AACCCAACCG  | 2400 |
| GTATACAATG  | GTGAGACACC  | TCTTCAACCT  | TCTTACAGTA  | GTGAAGTCTT  | TCCCTTAGTC  | 2460 |
| ACCCCTTTGT  | TGCTTGACAA  | TCAGATCTCT  | AACACTACCC  | CTGCTGCTTC  | AAGTAGTGAT  | 2520 |
| TCGGCCTTGC  | ATGCTACGCC  | TGTATTTCCT  | AGTGTGATG   | TGTCATTGTA  | ATCCATCCTG  | 2580 |
| TCTTCCCTAT  | ATGGTGCACC  | TTTGCTTCCA  | TTTCTCTCTG  | CTTCTTTCAG  | TAGTGAATTG  | 2640 |
| TTTGCCCATC  | TGCATACAGT  | TTCTCAAAAT  | CTTCCACAAG  | TTACTTTCAGC | TACCCAGAGT  | 2700 |
| GATAAGGTGC  | CCTTGCATGC  | TTCTCTGCCA  | GTGGCTGGGG  | GTGATTGTCT  | ATTAGAGCCC  | 2760 |
| AGCCTTGCTC  | AGTATTCTGA  | TGTGCTGTCC  | ACTACTCATG  | CTGCTTCAGA  | GACGCTGGAA  | 2820 |
| TTTGTTAGTG  | AATCTGGTGT  | TCTTTATAAA  | ACGCTTATGT  | TTTCTCAAGT  | TGAACCAACC  | 2880 |
| AGCAGTGATG  | CCATGATGCA  | TGCACGTTCT  | TCAGGGCCCTG | AACCTTCTTA  | TGCCTTGCTC  | 2940 |
| GATAATGAGG  | GCTCCCAACA  | CATCTTCACT  | GTTTCTTACA  | GTTCTGCAAT  | ACCTGTGCTAT | 3000 |
| GATTCTGTGG  | GTGTAACATTA | TCAGGGTTCC  | TTATTTAGCG  | GCCCTAGCCA  | TATACCAATA  | 3060 |
| CCTAAGTCTT  | CGTTAATAAC  | CCCAACTGCA  | TCATTACTGC  | AGCCTACTCA  | TGCCCTCTCT  | 3120 |
| GGTGATGGGG  | AATGGTCTGG  | AGCCTCTTCT  | GATAGTGAAT  | TTCTTTTACC  | TGACACAGAT  | 3180 |
| GGGCTGACAG  | CTTGTCAACAT | TTCTTCACTT  | GTTTCTGTAG  | CTGAATTATC  | ATATACAACA  | 3240 |
| TCTGTGTTTG  | GTGATGATAA  | TAAGGCGCTT  | TCTAAAAGTG  | AAATAATATA  | TGGAATGAG   | 3300 |
| ACTGAACATG  | AAATTCCTTC  | TTTCAATGAG  | ATGTTTATAC  | CTTCTGAAAG  | CACAGTCATG  | 3360 |
| CCCAACATGT  | ATGATAATGT  | AAATAAGTTG  | AATGCGTCTT  | TACAAGAAAC  | CTCTGTTTCC  | 3420 |
| ATTCTAGACA  | CCAAGGGCAT  | GTTTCCAGGG  | TCCCTTGTCT  | ATACCAACCAC | TAAGGTTTTC  | 3480 |
| GATCATGAGA  | TGATGCAAGT  | TCCAGAAAAAT | AACCTTTTCA  | TTCAACCTAC  | ATCACTGTCT  | 3540 |
| TCTCAAGCAT  | CTGGTGACAC  | TTCCGTTAAA  | CCTGTGCTTA  | GTGCAAACTC  | AGAGCCAGCA  | 3600 |

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TCCTCTGACC CTGCTTCTAG TGAAATGTGA TCTCCTTCAA CTCAGCTCTT ATTTTATGAG 3660  
ACCTCAGCTT CTTTTAGTAC TGAAGTATTG CIACAACCTT CCITTCAGGC TTCTGATGAT 3720  
GACACCTTGC TTAAACTGT TCTTCCAGCT GIGCCCAGTG ATCCAATATT GGTGGAACCC 3780  
CCCAAAGTTG ATAAAATTAG TTCTACAATG TTGCATCTCA TTGATACAAA TTCTGCTTCA 3840  
AGTGAAACCA TGGCTGCACTC TACATCTGTA CCAGTTTTTG ATGTGTGCCC TACTTCTCAT 3900  
ATGCACTCTG CTTCACCTCA AGGTTTGACC ATTTCTCTATG CAAGTGAGAA ATATGAACCA 3960  
GTTTTGTAA AAAGTGAAG TTCCCACCAA GTGGTACCTT CTTTGTACAG TAATGATGAG 4020  
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TTTGCTACAC CTGTTTTATC AATTGATGAA CCATTAAATA CACTAATAAA TAAGCTTATA 4140  
CATTCGATG AMATTTTTAA CTTCCACCAA AGTTCTGTTA CTGGTAAGGT ATTTGCTGGT 4200  
ATTCCAACAG TTGCTTCTGA TACATTTGTA TCTACTGATC ATTCTGTGCC TATAGGAAAT 4260  
GGGCATGTTG CCATTACAGC TGTTTTCTCC CACAGAGATG GTTCTGTAAC CTCAACAAAG 4320  
TTGCTGTTTC CTCTAAGGC AACTTCTGAG CTGAGTCATA GTGCCAAATC TGATGCOGCT 4380  
TTAGTGGGTG GTGGTGAAGA TGGTGACACT GATGATGATG GTGATGATGA TGATGACAGA 4440  
GATAGTGATG GCATTATCCAT TCATAAGTGT ATGTCTGTCT CATCCTATAG AGAATCACAG 4500  
GAAAAGGTAA TGAATGATTG AGACACCCAC GAAAACAGTC TTATGGATCA GAATAATCCA 4560  
ATCTCATACT CACTATCTGA GAATTCCTGAA GAGTACAAG TGATCCTCA 4620  
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CAAAAGCACA ATGATGGAAA AGAGGAAAAT GACATTGAGA CTGGTAGTGC TCTGCTTCTC 4740  
CTCAGCCCTG AATCTAAAGC ATGGGCAGTT CTGACAAAGT ATGAAGAAAG TGGATCAGGG 4800  
CAAGGTACCT CAGATAGCCT TAATGAGAA GAGACTTCCA CAGATTTCAG TTTTGACAG 4860  
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CTGGTCACTC AGAAGAGTGT GCAAGTGCTT GCCTATTATA CTGTGAGGAA TTACTCTTA 5760  
AGAAACACAA AATAAAAAA GGGCTCCAG AAAGGAAGAC CCAAGTGAGC TGTGCTACA 5820  
CAGTATCACT ACACGAGTG GCCTGACATG GGAGTACCAG AGTACTCCCT GCCAGTGCTG 5880  
ACCTTTGTGA GGAAGGCAGC CTATGCCAAG CGCCATGCAG TGGGGCCTGT TGTGCTCCAC 5940  
TGCAAGTCTG GAGTTGAAG AACAGGCACA TATATTGTGC TAGACAGTAT GTTGACAGCAG 6000  
ATTCAACACG AAGGAACCTG CAACATATTT GGCTTCTTAA AACACATCCG TTCACAAAGA 6060  
AATTATTG TGACAACTGA GGAGCAATAT GTCTTCATTC ATGATACACT GGTGAGGCC 6120  
ATACTTAGTA AAGAACTGA GGTGCTGGAC AGTCATATTC ATGCCTATGT TAATGCACTC 6180  
CTCATTCTCG GACCAAGCAG CAACACAAAG CTAGAGAAAC AATTCCAGCT CCGTAGCCAG 6240  
TCAAAATATC AGCAGAGTGA CTATTCTGCA GCCCTAAAGC AATGCAACAG GGAAGAAAT 6300  
CGAACTTCTT CTATCATCCC TGTGGAAGA TCAAGGGTTG GCATTTTCAT CCGAGTGGA 6360  
GAAGGCACAG AGTACATCAA TGCCCTCTAT ATCATGGGCT ATTACAGAG CAATGAATTC 6420  
ATCATTACCC AGCACCTCT CCTTCATACC ATCAAGGATT TCTGGAGGAT GATATGGGAC 6480  
CATAATGCC CACTGGTGGT TATGATTCTT GATGGCCAAA ACATGGCAGA AGATGAATTT 6540  
GTTTACTGCG CAAATAAAGA TGAGCCTATA AATTGTGAGA GCTTTAAGGT CACTCTTATG 6600  
GCTGAAGAAC ACAATGTCT ATCTAATGAG GAAAACTTA TAATTGAGGA CTTTATCTTA 6660  
GAAGCTACAC GAATGATGTA TGTACTTGAA GTGAGGCAGT TTCAGTGCC TAAATGGCCA 6720  
AATCCAGATA GCCCATTAG TAAACTTTT GAACCTATAA GTGTTATAAA AGAAGAGCT 6780  
GCCAATAGGG ATGGGCCCTAT GATTGTTTAT GATGAGCATG CAGGAGTGAC GGCAGGAAT 6840  
TTCTGTGCTC TGACAAACCTT TATGACCAA CTAGAAAAAG AAAATTCCTG GGTGTTTAC 6900  
CAGTATGCCA AGATGATCAA TCTGATGAGG CCAGGAGTCT TTGCTGACAT TGAGCAGTAT 6960  
CAGTTTCTCT ACAGAGTGAT CCTCAGCCTT GTGAGCACAA GGCAGGAAGA GAATCCATCC 7020  
ACCTCTCTGG ACAGTAATGG TGACGATTTG CCTGATGGAA ATATAGCTGA GAGCTTAGAG 7080  
CTTTTGTGT AACACAGAAA GGGGTGGGG GACTCACATC TGAGCATTGT TTTCTCTTC 7140  
CTAAAATTAG GCAGGAAAAAT CAGTCTAGTT CTGTTATCTG TTGATTTCCC ATCACTGAC 7200  
AGTAACCTTC ATGACATAGG ATTCTGCCGC CAAATTTATA TCATTAAACA TGTGTGCTT 7260  
TTTGACAGAC TTGAATTTA CTTATTATGT TTGAACATAA ATGATTGAAT TTTACAGTAT 7320  
TTCTAAGAA GGAATTGTGG TATTTTCTT TGTATTGATT TTAACAGAAA ATTTCAATTT 7380  
ATAGAGGTTA GGAATTCCAA ACTACAGAAA ATGTTTGTGT TTAGTGTCAA ATTTTATGCT 7440  
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TAAACACTC TTCCATATGA TATTCAACAT TTACAACTG CAGTATTCAC TAAAGTAGA 7560  
AATAACTCTG TACTTATTGT AAATACTGCC CTAGTGTCTC CATGGACCAA ATTTATATT 7620  
ATRAATGTAG ATTTTATAT TTTACTACTG AGTCAAGTTT TCTAGTTCTG TGTAAITGTT 7680  
TAGTTTAAAG ACGTAGTTCA TTAGCTGGTC TTAGCTTACC AGTTTCTG CATTGTATTG 7740  
TGTTACCTAA GTCAATTAAC TTGTTTCAGC ATGTAATTTT AACTTTTGTG GAAAATAGAA 7800  
ATACCTTCAT TTTGAAAGAA GTTTTATGA GAATAACACC TTACCAACA TGTTCAAAT 7860  
GGTTTTTATC CAAGGAATTG CAAAAATAAA TATAAATATT GCCATTAAAA AAAAAAAA 7920  
AAAAAAA AAAAAAAA A

Protein sequence 1

Gene name: Protein tyrosine phosphatase, receptor-type, Z polypeptide 1

Unigene number: Hs.78867

Protein Accession #: NP\_002842

Signal sequence: 1-20

Pfam domain: carb anhydrase [38-300]

Transmembrane domains: 1639-1661

Cellular Localization: plasma membrane

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MRILKRFLAC IQLLCVCRLD WANGYYRQQR KLVEEIGWSY TGALNQKNWG KKYPTCNSEPK 60  
QSPINIDEDL TQVNVNLKKL KFGQWDKTSL ENTFIHNTGK TVEINLTNDY RVGGGVSEMV 120  
FKASKITPHW GKNMSSDGS EHSLEGQKFP LEMQIYCFDA DRFSSFEEAV KGKGLRLALS 180  
ILFEVGTKEEN LDFKAIIDGV ESVSRFQKQA ALDPFILLNL LPNSTDKYYI YNGSLTSPPC 240  
TDIVDWIVFK DTVSISSEQL AVFCEVLTMQ QSGYVMLMDY LQNNFREQQY KFSRQVFSY 300  
TGKEEIHFAV CSSEPENVQA DPENYTSLLV TWERPRVVYD TMIEKFAVLY QQLDGEDQTK 360  
HEFLTDGVDQ LGAILNNLLP NMSYVLQIVA ICTNGLYGYKY SDQLIVDMPT DNPDLDFPE 420  
LIGTEEIIKE EEEGKDIEEG AIVNPGRDSA TNQIRKKEPQ ISTTTHYNRI GTKYNEAKIN 480  
RSPTRGSEFS GKGDPVNTSL NSTSQPVTKL ATEKDISLTS QTVTELPHPT VEGTSASLND 540  
GSKTVLRSEH MNLSGTAESL NTVSITEYEE ESSLTSFKLD TGAEDSSGSS PATSAIPFIS 600  
ENISQGYIFS SENPETITYD VLIPESARNA SEDSTSSESE ESKLDPSEMEG NVNFPSSTDI 660  
TAQPDVGSGR ESFLQNTYTE IRVDESEKTT KSFSACPVMS QGFSVTDLEM PHYSTFAYFP 720  
TEVTPHAFPT SSRQDLVST VNVVYSQTTQ PVYNGETPLQ PSYSSEVFPL VTPLLLDNQI 780  
LNTTPAASSS DSAALHATPVF PSVDVSFESI LSSYDGAPLL PFSSASFSE LFRHLHTVSQ 840  
ILPQVTSATE SDKVPLHASL PVAGGDLLE PSLAQYSDVL STTHAASETL EFGSESGVLY 900  
KTLMFSQVEP PSSDAMMHAR SSGPEPSYAL SDNEGSQHIF TVSYSSAIPV HDSVGVITYQG 960  
SLFSGFSHIP IPKSSLITPT ASLQPTHAL SGDGEWSGAS SDSEFLLPDT DGLTALNISS 1020  
PVSVAEFTYT TSVFGDDNKA LSKSEIIYGN ETELQIPSPN EMVYPESTV MPNMYDNVKN 1080  
NLASLQETSV SIGSTKGMFP GSLAHTTTKV FDHEISQVPE NNFSVQPTHT VSQASGDTSL 1140  
KPVLSANSEP ASSDPASSE LSPSTQLLFY ETSASFSTE LQPSFQASD VDTLLKTVP 1200  
AVPSDFILVE TPKVDKISST MLHLIVNSA SSENMLHSTS VPVFDVSPTS HMHSASLQGL 1260  
TISYASEKYE PVLLKSESSH QVVPSLYSND ELFQNTANLEI NOAHPPKGRH VFATPVLSID 1320  
EPLMTLINKL IHSDELLTST KSSVTGKVF GIPTVASDTF VSTDHVSFPG NGHVAITAVS 1380  
PHRDGSVTST KLLFPKSKATS ELSHSAKSDA GLVGGEGEDG DDDGDDDDDD RDSGLSIHK 1440  
CMSCSSYRES QEKVMNDSOT HENSIMDQNN PISYSLSENS EEDNRVTSVS SDSQTGMDSR 1500  
PGKSPSANGS SQKHNDGKEE NDIQTGSALL PLSPEKAWA VLTSDEESGS GQGTSDSLNE 1560  
NETSTDFSPA DTNEKDADGI LAAGDSIITP GFQPSPTSSV TSENSEVFHV SEAEASNSHH 1620  
ESRIGLAELG ESSEKKAIVPL VIVSALTFIC LVVLVGLIY WRKCFQTAHF YLEDSTSPRV 1680  
ISTPPTPIFF ISDDVGAIFI KHFPKHVADL HASSGFTEEF ETLKEFYQEV QSCVTDLGIT 1740  
ADSSNHPDNK HKNRYINIVA YDHSRVKLAQ LAEKDGKLT D YINANYVDGY NRPKAYIAAQ 1800  
GPLKSTAEFD HKNWBEHNV VIVMITNLVE KGRRKCDQYW PADGSEEEYGN FLVTKQSVQV 1860  
LAYYTVRNFT LRNTKKIKGS QKGRPSGRVV TQYHYTQWPD MGVPEYSLPV LTFVRKAAYA 1920  
KRHAVGPPVV HCSAGVGR TG TYIVLDSMLQ IQHEGSTVNI FGFLKHIRSQ RNYLVQTEEQ 1980  
YVFIHDTLVE AILSKETEVL DSHIHAYVNA LLIPGPAGKT KLEKQFQLLS QSNIQSDYS 2040  
AALKQCNREK NRTSSIIPEV RSRVGISSLS GEGTDYINAS YIMGYYSQNE FIITQHPLH 2100  
TKDFWIRMIW DHNAQLVMI PDGQNMADDE FVYWPKNDEP INCESFKVTL MAEEHKCLSN 2160  
EEKLIQDFI LEATQDDVYL EVRHFCQPKW PNPDSPISK FELISVKEE AANRDGPMIV 2220  
HDEHGGVTAG TFCALTLMH QLEKENSVDV YQVAKMINLM RPYGFADIEQ YQFLYKVLIS 2280  
LVSTRQENP STSLDSNGAA LPDGNIAESI ESLV

45

DNA SEQUENCE 2  
Gene name: tyrosylprotein sulfotransferase 1  
Unigene number: Hs.110903  
Probeset Accession #: D61594  
Nucleic Acid Accession #: NM\_003596  
Coding sequence: 82-1194

1 11 21 31 41 51  
| | | | |  
50  
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60  
65  
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75  
80

GTAGACTGTC CATGGCCTGA ACATTTTCCG AAAATCATTT TGAGCAAAAT ATCTGTTTAA 60  
TAACAAGATA ACCACATCAA GATGGTTGGA AAGCTGAAGC AGAACTTACT ATGGCATGT 120  
CTGGTGATTA GTTCTGTGAC TGTGTTTAC CTGGGCCAGC ATGCCATGGA ATGCCATCAC 180  
CGGATAGAGG AACGTAGCCA GCCAGTCAAA TTGGAGAGCA CAAGGACCAC TGTGAGAAC 240  
GGCCTGGACC TCAAGGCCAA CAAAACCTTT GCCTATCACA AAGATATGCC TTTAATATTT 300  
ATTGGRGGTG TGCTCGGAG TGGAAACCACA CTCATGAGGG CCATGCTGGA CGCACATCTC 360  
GACATTCGCT GTGGAGAGGA AACCAAGGTC ATTCCCGGAA TCCTGGCCCT GAAGCAGATG 420  
TGGTCACGGT CAAGTAAAG CAAGATCCGC CTGGATGAGG CTGGTGTTAC TGATGAAGTG 480  
CTGGATTCTG CCATGCAAGC CTTCTTACT GAAATTATCG TTAAGCATGG GGAGCCAGCC 540  
CCTTATTTAT GTAATAAAGA TCCTTTTGCC CTGAAATCTT TAACTTACCT TTCTAGGTTA 600  
TTCCCAATG CCAAATTTCT CCGATGGTCT CGAGATGGCC GGGCATCAGT ACATTCATG 660  
ATTTCTCGAA AAGTTACTAT AGCTGGATT GATCTGAACA GCTATAGGGA CTGTTTGACA 720  
AAGTGAATC GTGCTATAGA GACCATGTAT AACCATGTA TGGAGGTTGG TTATAAAAAG 780  
TGCACTGTTG TTCACTATGA ACAACTTGTC TTACATCCTG AACCGTGGAT GAGAACACTC 840  
TTAAAGTTCC TCCAGATTCC ATGGAACCAC TCAGTATTGC ACCATGAAGA GATGATTGGG 900  
AAAGCTGGGG GAGTGTCTCT GTCAAAAGTG GAGAGATCTA CAGACCAAGT AATCAAGCCA 960  
GTCAATGTAG GAGCTCTATC AAAATGGGTT GGAAGATAC CGCCAGATGT TTTACAAGAC 1020  
ATGGCAGTGA TTGCTCCTAT GCTTGCCAAG CTGGATATG ACCCATATGC CAACCCACAT 1080  
AACTACGGAA AACCTGATCC CAAAATTATT GAAAACACTC GAAGGGTCTA TAAGGGAGAA 1140  
TTCCAACCTAC CTGACTTTCT TAAAGRAAAA CCACAGACTG AGCAAGTGGG GTAGCAGAAC 1200  
CAGGAGCCTC TTCCATACAT GAGGAAAGAT TGCTGCCCTT TCAGCAGAAG GGAAATTCCT 1260  
AGGATTGCTC GTCCCTGCC AAGCITGGTG GAGCGTCTGC ACCTTGGCTG CGCCGCTGT 1320  
GCATTTGCCA GTTTCCTCCC ACTGAGAGGA TGGAGGTGTC CGCACAGCTT TGGGCTCGT 1380  
GAGGAGATG CCTCCTGAGC AAGAGACTCT TGATCCCGAT TTCTATGACA GCCCTGCACT 1440  
AAGGAGCCCA GAAGGAACAT GTGTTTCTGT TTAAGTCTC TCTTGTCTC TTTTCTTACA 1500  
TTATGACGTT TGTTCCTAAG GAGAGGGTTT AAAAATGGGA TCCTGTAAAG AGACTTGGGC 1560  
AGTCTCCTTT TGAATAGGT TGTCTGTACA TGTCTTAATG TTTGTAGAAA CAGCTGTGCC 1620  
TGTTTAAGTG TATTGATGTG AATAATATTA AATATCCTAA TTATTTAATT CATTGTATTG 1680  
TTTCTGAGAA GTTGGGAAAT TACCATTATA CATTTACAAC CTAATGACTT TTGTATTTTA 1740  
TTTTTCAAAA TAAAGCTTT CAATGTGA

Protein sequence 2  
Gene name: tyrosylprotein sulfotransferase 1  
Unigene number: Hs.110903  
Protein Accession #: NP\_003587  
Signal sequence: 1-21

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PCT/US02/29560

Transmembrane domains: none found

Cellular Localization: plasma membrane

1 11 21 31 41 51  
 5 MVGKLKQNL LACLIVSSVT VFYLGQHAME CHHRIERSQ PVKLESTRIT VRTGLDLKAN 60  
 KTFAYHKOMP LIFIGGVPRS GTTLMRAMLD AHPDIRCSEE TRVIPRILAL KQMWSRSSKE 120  
 KIRLDEAGVT DEVLDSAMQA FLLEIIVKHG EPAPYLCNKD PFALKSLTYL SRLFPNAKFL 180  
 LMVRDGRASV HSMISRKVTI AGFDLNSYRD CLTKWNRAIE TMYNQCMVEG YKKCMLVHYE 240  
 QLVLPHEPWW RTLLKFLQIP WNHSVLHHEE MIGKAGGVSL SKVERSTDQV IKPVNVGALS 300  
 10 KNVGKIPPDV LQDMAVIAPM LAKLGYDPYA NPPNYGKPD KIIENTRRVY KGEFQLPDLF 360  
 KEKPQTEQVE

DNA sequence 3

Gene name: interleukin 13 receptor, alpha 2

Unigene number: Hs.25954

Probeset Accession #: R52795

Nucleic Acid Accession #: NM\_000640

Coding sequence: 94-1236

1 11 21 31 41 51  
 20 CGGATGAAGG CTATTITGAAG TCGCCATAAC CTGGTCAGAA GTGTGCCTGT CGGCGGGGAG 60  
 AGAGGCAATA TCAAGGTTTT AAATCTCGGA GAAATGGCTT TCGTTTGCTT GGCTATCGGA 120  
 TGCTTATATA CCTTCTGAT AAGCACAACA TTGGCTGTA CTTCATCTTC AGACACCGAG 180  
 25 ATAAAAGTTA ACCCTCCTCA GGAATTTGAG ATAGTGGATC CCGGATACTT AGGTTATCTC 240  
 TATTTGCAAT GGCACACCCC ACTGTCTCTG GATCATTTTA AGGAATGCAC AGTGGAAATAT 300  
 GRACTAAAT ACCGAAACAT TGGTAGTGAA ACATGGAAGA CCATCATTAC TAAGAATCTA 360  
 CATTACAAAG ATGGGTTTGA TCTTAACAAG GGCATTGAAG CGAAGATACA CACGCTTTTA 420  
 CCATGGCAAT GCACAAATGG ATCAGAAGTT CAAAGTTCCT GGCAGAAAC TACTTATTGG 480  
 30 ATATCACCAT AAGGAATTCC AGAAACTAAA GTTCAGGATA TGGATTGCGT ATATTACAAT 540  
 TGGCAATATT TACTCTGTTT TTTGAAACCT GGCATAGGTG TACTTCTTGA TACCAATTAC 600  
 AACTTGTATT ACTGGTATGA GGGCTTGGAT CATGCATTAC AGTGTGTTGA TTACATCAAG 660  
 GCTGATGGAC AAAATAIAGG ATGCAGATT CCCTATTGG AGGCATCAGA CTATAAGAT 720  
 TTCTATATIT GTGTTAATGG ATCATCAGAG AACAGCCTA TCAGATCCAG TTATTTCCT 780  
 35 TTTCAGCTTC AAATAATAGT TAAACCTTTG CCGCCAGTCT ATCTTACTTT TACTCGGGAG 840  
 AGTTCATGTG AAATAAGCT GAAATGGAGC ATACCTTTGG GACCTATTCC AGCAAGGTGT 900  
 TTTGATTATG AAATTGAGAT CAGAGAAGAT GATACTACCT TGGTGACTGC TACAGTTGAA 960  
 AATGAAACAT ACACCTTGAA AACCAACAAAT GAAACCCGAC AATTATGCTT TGTAGTAAGA 1020  
 AGCAAGTGTA ATATTATTG CTCAGATGAC GGAATTTGGA GTGAGTGGAG TGATAAACAA 1080  
 40 TGCTGGGAAG GTGAAGACCT ATCGAAGAAA ACTTIGCTAC GTTTCGCTG ACCATTGCTT 1140  
 TTCTCTTAA TATTAGTTAT ATTTGTAACC GGTCTGCTTT TGCCTAAGCC AAACACCTAC 1200  
 CCAAAAAATG TTCCGAATT TTTCTGTGAT ACATGAAGAC TTTCCATATC AAGAGACATG 1260  
 GTATTGACTC AACAGTTTCC AGTCATGGCC AAATGTTCAA TATGAGTCTC AATAAATGTA 1320  
 ATTTTCTTGG CGAAAAAAA AAAAAAATAA AAAAAAATAA AAAAAAATAA 1380  
 AA

Protein sequence 3

Gene name: interleukin 13 receptor, alpha 2

Unigene number: Hs.25954

Probeset Accession #: R52795

Protein Accession # NP\_000631

Signal sequence: 1-23

FN3 domain: 155-322

Transmembrane domains: 340-362

Cellular Localization: plasma membrane

1 11 21 31 41 51  
 55 MAFVCLAIGC LYTFLISTTF GCTSSSDTEI KVNPPQDFEI VDPGYLGYLY LQWQPPLSLD 60  
 HFKECTVEYE LKYRNIGSET WKTIITKNLH YKDGFDLNGK IEAKIHTLLP WQCTINGSEVQ 120  
 60 SSWAETTYWI SPQGIPTKV QDMDCVYYNW QYLLCSWKPG IGVLLDTNIN LFYWYEGLDH 180  
 ALQCVDYIKA DQQNIQCRFP YLEASDYKDF YICVNGSSEN KPIRSSYTFP QLQNI VKPLP 240  
 PVYLTFTRES SCEIKLWFSI PLGPIPARCF DYEIEIREDD TTLVTATVEN ETLTLKTTNE 300  
 TRQLCFVVRV KVNIVCSDDG IWSEWSKQC WEGEDLSKKT LLRFWLFPFG ILLILVIEVTG 360  
 LLLRKPTNYP KMIPEFFCDT

DNA sequence 4

Gene name: chemokine (C-X3-C) receptor 1

Unigene number: Hs.78913

Probeset Accession #: U20350

Nucleic Acid Accession #: NM\_001337

Coding sequence: 46-1113

1 11 21 31 41 51  
 70 GGGGCAGATC CAGATTCCCT TTGCAGTCCA CGCCAGGCCT TCACCATGGA TCAGITCCCT 60  
 GAATCAGTGA CAGAAAACTT TGAGTACGAT GATTTGGCTG AGGCCTGTTA TATTGGGGAC 120  
 75 ATCGTGCTGT TTGGGACTGT GTTCCTGTCC ATATTCTACT CCGTCATCTT TGCCATTGGC 180  
 CTGGTGGGAA ATTTGTTGGT AGTGTTTGCC CTCACCAACA GCAAGAAGCC CAAGAGTGTC 240  
 ACCGACATTT ACCTCCTGAA CCTGGCCTTG TCTGATCTGC TGTTTGTAGC CACITTTGCC 300  
 TTCTGGAATC ACTATTGAT AAATGAAAAA GGCCTCCACA ATGCCATGTG CAAATTCCT 360  
 80 ACCGCTTCT TCTTCATCGG CTTTTTGGGA AGCATATTCT TCATCACCGT CATCAGCATT 420  
 GATAGGTACC TGGCCATCGT CCTGGCCGCC AACTCCATGA ACAACCCGAC CGTGAGCAT 480  
 GGCCTCACCA TCAGCCTAGG CGTCTGGGCA GCAGCCATTT TGGTGGCAGC ACCCCAGTTC 540  
 ATGTTCACAA AGCAGAAAGA AATGGAATGC TTTGGTGACT ACCCCGAGGT CCTTCAGGAA 600  
 85 ATCTGGCCCG TGCTCCGCAA TGTGGAAACA AATTTCTTGT GCTTCTTACT CCCCCTGCTC 660  
 ATTATGACTT ATTGCTACTT CAGAATCATC CAGACGCTGT TTTCTTGCAA GAACCAACAG 720

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AAAGCCAAAG CCATTAACT GATCCTTCIG GTGGTCATCG TGTTTTTCCT CTTCGGACA 780
CCTACAAAG TTATGATTTT CCTGGAGAGC CTTAAGCTCT ATGACTTCTT TCCAGTTGT 840
GACATGAGGA AGGATCTGAG GCTGGCCCTC AGTGTGACTG AGACGGTTGC ATTTAGCCAT 900
TGTTCGCTGA ATCCTCTCAT CTATGCATTT GCTGGGGAGA AGTTCAGAAG ATACCTTTAC 960
CACCTGTATG GGAATAGCCT GGCTGTCCCT TGTGGGGCGT CAGTCCACGT TCATTCTCC 1020
TCATCTGAAT CACAAAGGAG CAGGCATGGA AGTGTCTGA GCAGCAATT TACTTACCAC 1080
ACGAGTGATG GAGATGCATT GCTCCTTCTC TGAAGGGAAT CCCAAAGCCT TGTGTCTACA 1140
GAGAACCTGG AGTTCCTGAA CCTGATGCTG ACTAGTGAGG AAGATTTTGT TTGTTATTTC 1200
TTACAGGCAC AAAATGATGG ACCCAATGCA CACAAAACAA CCCTAGAGTG TTGTTAGAGAA 1260
TTGTGCTCAA AATTTGAAGA ATGAACAAAT TGAACCTTTT GAATGACAAA GAGTAGACAT 1320
TTCTCTTACT GCAAAATGTCA TCAGAACTTT TTGGTTTGCA GATGACAAA ATTCAACTCA 1380
GACTAGTTTA GTTAAATGAG GGTGGTGAAT ATTGTTTATA TTGTGGCACA AGCAAAAAGG 1440
GTGCTCTGAG CCTCAAAGTG AGGGGAACCA GGCCTGAGC CAAGCTA
```

## Protein sequence 4

Gene name: chemokine (C-X3-C) receptor 1

Unigene number: Hs.78913

Protein Accession #: NP\_001328

Signal sequence: 1-44

Pfam domain: 7tm\_1 [48-293]

Cellular Localization: plasma membrane

1 11 21 31 41 51  
| | | | |  
MDQFPESVTE NFEYDDLAEA CYIGDIVVFG TVFLSIFYSV IFAIGLVGNL LVVFALTNSK 60  
KPKSVIDIYL INLALSDDLFL VATLPFWTHY LINEKGLHNA MCKFTPTAFF IGFFGSIFFI 120  
TVISIDRYLA IVLAANSMNN RTVQHGVTIS LGVWAAAILV AAPQFMFFAQ KENECLGDYVP 180  
EVLQEIWPVL RNVETNIFLGF LLPLLIMSYC YFRIIQTLPFS CKNHKKAKAI KLILLVVIWF 240  
FLWFTEYNVM IFLETILKLYD FFPSCDMRKD LRLALSVTET VAFSHCCCLNP LIYAFAGEKF 300  
RRLYLHYLYGK CLAVLCGRSV HVDFSSSESQ RSRHGSVLSS NPTYHTSDGD ALLLL

## DNA sequence 5

Gene name: cannabinoid receptor 1 (brain)

Unigene number: Hs.75110

Probeset Accession #: 412986

Nucleic Acid Accession #: NM\_001840

Coding sequence: 92-1510

1 11 21 31 41 51  
| | | | |  
TCGGCTTATT TGTTTTCCCT CCTCTTAGGA TTGCCCCCTG TGGGTCACCT TCTCAGTCAT 60  
TTTGAGCTCA GCCTAATCAA AGACTGAGGT TATGAAGTCG ATCCTAGATG GCCTTGACAG 120  
TACCACCTTC CGCACCATCA CCACTGACCT CCTGTACGTG GGCTCAAATG ACATTTCAGTA 180  
CGAAGACATC AAAGGTGACA TGGCATCCAA ATTAGGGTAC TTCCCACAGA AATTCCTCTT 240  
AACTTCTCTT AGGGGAAGTC CCTTCCAAGA GAAGATGACT GCGGGAGACA ACCCCAGACT 300  
AGTCCACAGA GACCAGGTGA ACATTACAGA ATTTTACAAC AAGTCTCTCT CGTCCCTTCAA 360  
GGAGAATGAG GAGAAGATCC AGTGTGGGGA GAACCTCATG GACATAGAGT GTTTCATGGT 420  
CCTGAACCCC AGCCAGCAGC TGGCCATGTC AGTCTGTGCC CTCACGCTGG GCACCTTCAC 480  
GGTCTGGGAG AACCTCCTGG TGCTGTGCGT CATCCTCCAC TCCCGCAGCC TCCGCTGCAG 540  
GCCTTCTTAC CACTTCATCG GCACGCTGGC GGTGGCAGAC CTCTGTGGGA GTGTCTATTT 600  
TGTTCTACAGC TTCAATTGACT TCCACGTGTT CCAACGCAAA GATAGCCGCA ACGTGTCTCT 660  
GTTCAAACCTG GGTGGGTCRA GGCCTCCTT CACTGCCTCC GTGGGCAGCC TGTTCTCTAC 720  
AGCCATCGAC AGGTACATAT CCATTACAG GCCCTGGGCC TATAAGAGGA TTGTCACCCAG 780  
GCCCAAGGCC GTGGTGGCGT TTGCGCTGAT GTGGACCATA GCCATTGTGA TCCGCGTGCT 840  
GCCTCTCCTG ACCTGGAACT GCGAGAAACT GCAATCTGTT TGCTCAGACA TTTTCCACA 900  
CATTGATGAA ACCTACCTGA TGTCTGGAT CGGGGTCAAC AGCGTACTGC TCTGTTCAT 960  
CGTGTATGCG TACATGTATA TTCTCTGAA GGCTCACAGC CACGCGCTCC GCATGATTCA 1020  
GCGTGGCACC CAGAAGAGCA TCATCATCCA CACGTCTGAG GATGGGAAGG TACAGGTGAC 1080  
CGGGCCAGAG CAAGCCCGCA TGACATTAAG ACCCTGGTCC TGATCCTGCT 1140  
GGTGTGATC ATCTGCTGGG GCCTCTGCTT TGCAATCATG GTGTATGATG TCTTTGGGAA 1200  
GATGAACAAG CTCATTAGA CGGTGTTTGC ATTCTGCAGT ATGCTCTGCC TGCTGAATCT 1260  
CACCGTGAAC CCCATCATCT ATGCTCTGAG GAGTAAGGAC CTGCGACAGC CTTTCCGAG 1320  
CATGTTTCCC TCTTGTGAAG GCACTGCGCA GCCTCTGGAT AACAGCATGG GGGACTCGGA 1380  
CTGCCTGCAC AAACACGCAA CCAATGCAAG CAGTGTTCAC AGGGCCGAG AAAGCTGCAT 1440  
CAAGAGCACA GTCAAGATTG CCAAGGTAAC CATGCTGTG TCCACAGACA CGTCTGCCGA 1500  
GGCTCTGTGA GCCTGATGCC TCCCTGGCAG CACAGAAAAA GAATTTTTTT TTTTAAGCTC 1560  
AAAAATCTAGA AGAGTCTATT GTCTCCTTGG TTATATTTTT TTAACTTTAC CATGCTCAAT 1620  
GAAAAGGTGA TTGTCACCAT GATCACTTAT CAGTTTGCTA ATGTTTCCAT AGTTTAGGTA 1680  
CTCAAACTCC ATTCTCCAGG GGTTTACAGT GAAGAAAGCC TGTGTGTTAA GTGACTGAAC 1740  
GATCCTTCAA AGTCTCAATG AAATAGGAGG GAACCTTTG GCTACACAA TGAAGTCTA 1800  
AGAACCCTATG GAAAAATGCC ATCAAATGAA TAATGCCTTT GTAACCACAA CTTTCACTAT 1860  
AATGTGAAT GTAACTGTCC GTAGTATCAG AGATGTCCAT TTTTACAAGT TATAGTACTA 1920  
GAGATATTTT GTAAATGTGA TTATGTCCTG TGAGATGIGT ATCAGTGTIT ATGTGCTATT 1980  
AATATTGTT TAGTTTACGCC AAACGTGAAAG GTAGACTTTT ATGAGAACCA TGGACAAGCA 2040  
GTGCATACGT GTCAATGTGT GCACCTTTTT TCTATATTAT TGCCCATGAT ATAACCTTAG 2100  
AAATAAACCT TAATATTCT TCCCAAAAAA AAAAA

## Protein sequence 5

Gene name: cannabinoid receptor 1 (brain)

Unigene number: Hs.75110

Protein Accession #: NP\_001831

Signal sequence: none found

Pfam domain: 7tm\_1 [133-397]

Transmembrane domains: 121-143, 156-178, 195-217, 237-259, 276-298, 344-366, 378-400

Cellular Localization: plasma membrane

1 11 21 31 41 51

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PCT/US02/29560

|    |                                       |             |             |            |             |             |      |
|----|---------------------------------------|-------------|-------------|------------|-------------|-------------|------|
|    | MKSILDGLAD                            | TFRTITITDL  | LYVGSNDIQY  | EDIKGDMSK  | LGYPPOKFPPL | TSFRGSPFOE  | 60   |
|    | KMTAGDNPQL                            | VPADQVNITE  | FYNKLSSEFK  | ENEENIQCGE | NFMDIECFMV  | LNPSQQLAIA  | 120  |
| 5  | VLSLTLGTFT                            | VLENLLVLVC  | ILHSRSLRCR  | PSYHFIGSLA | VADLLGSVIF  | VYSFIDFHFV  | 180  |
|    | HRKDSRNVFL                            | FKLGGVTASF  | TASVGSLEFLT | AIDRYISIH  | PLAYKRIVTR  | PKAVVAFCLM  | 240  |
|    | WTIAIVIAVL                            | PLLGWNCLEK  | QSVCSDFPH   | IDETYLFWI  | GVTSVLLLF   | VYAYMYILWK  | 300  |
|    | AHSHAVRMIQ                            | RGTQKSIIH   | TSEDGKVQVT  | RPDQARMDIR | LAKTLVLILV  | VLIICWGPLL  | 360  |
|    | AIMVDYDFGK                            | MNKLKTVFA   | FCSMLCLLNS  | TVNPIYALR  | SKDLRHAFRS  | MFPSCEGTAQ  | 420  |
| 10 | PLDMSMGDS                             | CLRHANNAA   | SVHRAAESC   | KSTVKIAKVT | MSVSTDTSAE  | AL          |      |
|    | DNA sequence 6                        |             |             |            |             |             |      |
|    | Gene name: endothelin receptor type B |             |             |            |             |             |      |
|    | Unigene number: Hs.82002              |             |             |            |             |             |      |
|    | Probeset Accession #: D13168          |             |             |            |             |             |      |
| 15 | Nucleic Acid Accession #: NM_000115   |             |             |            |             |             |      |
|    | Coding sequence: 238-1566             |             |             |            |             |             |      |
|    | 1                                     | 11          | 21          | 31         | 41          | 51          |      |
| 20 | GAGACATTCC                            | GGTGGGGGAC  | TCTGGCCAGC  | CCGAGCAACG | TGGATCCTGA  | GAGCACTCCC  | 60   |
|    | AGGTAGGCAT                            | TTGCCCCGGT  | GGGACGCGCT  | GCCAGAGCAG | TGTGTGGCAG  | GCCCCCGTGG  | 120  |
|    | AGGATCAACA                            | CAGTGGCTGA  | ACACTGGGAA  | GGAACTGGTA | CTTGGAGTCT  | GGACATCTGA  | 180  |
|    | AACCTGGCTC                            | TGAAACTGCG  | CAGCGGCCAC  | CGGACGCGCT | CTGGAGCAGG  | TAGCAGCATG  | 240  |
|    | CAGCCGCGCT                            | CAAGTCTGTG  | CAGACGCGCC  | CTGGTTGCGC | TGGTCTTGCC  | CTCGCGCGCTG | 300  |
| 25 | TGCGGGATCT                            | GGGGAGAGGA  | GAGAGGCTTC  | CCGCGTGACA | GGGCCACTGC  | GCTTTTGCAA  | 360  |
|    | ACCGCAGAGA                            | TAATGACGCC  | ACCCACTAAG  | ACCTTATGGC | CCAAGGGTTC  | CAACGCCAGT  | 420  |
|    | CTGGCGCGGT                            | CGTTGGCACC  | TGCGGAGGTG  | CCTAAAGGAG | ACAGGACGGC  | AGGATCTCCG  | 480  |
|    | CCACGCACCA                            | TCTCCCTCC   | CCCGTGCCAA  | GGACCCATCG | AGATCAAGGA  | GACTTTCAAA  | 540  |
|    | TACATCAACA                            | CGGTGTGTGC  | CTGCCCTGTG  | TTCGTGCTGG | GGATCATCGG  | GAACCTCCACA | 600  |
| 30 | CTTCTGAGAA                            | TTATCTACAA  | GAACAAGTGC  | ATCGGAAACG | GTCCCAATAT  | CTTGATCGCC  | 660  |
|    | AGCTTGGCTC                            | TGGAGACCT   | GCTGCACATC  | GTCATTGACA | TCCTTATCAA  | TGCTTACAAG  | 720  |
|    | CTGCTGGCAG                            | AGGACTGGCC  | ATTGGAGCT   | GAGATGTGTA | AGCTGGTGCC  | TTTCATACAG  | 780  |
|    | AAAGCCTCCG                            | TGGGAATCAC  | TGTGCTGAGT  | CTATGTGCTC | TGAGTATTGA  | CAGATATCGA  | 840  |
|    | GCTGTGCTT                             | CTTGGAGTAG  | AATTAAGGGA  | ATTGGGGTTC | CAAAATGGAC  | AGCAGTAGAA  | 900  |
| 35 | ATTGTTTGA                             | TTTGGGTGGT  | CTCTGTGGTT  | CTGGCTGTCC | CTGAAGCCAT  | AGGTTTGTAT  | 960  |
|    | ATAATTACGA                            | TGGACTACAA  | AGGAAGTTAT  | CTGCGAATCT | GCTTGCTTCA  | TCCCGTTTCA  | 1020 |
|    | AGAAGCAGTT                            | TCATGCGAGT  | TTACAAGACA  | GCAAAAGATT | GGTGGCTGTT  | CAGTTTCTAT  | 1080 |
|    | TTCTGCTTGC                            | CATTGGCCAT  | CACCTGCATT  | TTTTATACAC | TAATGACCTG  | TGAAATGTTG  | 1140 |
|    | AGAAAGAAAA                            | GTGGCATGCA  | GATTGCTTTA  | AATGATCACC | TAAAGCAGAG  | ACGGGAAGTG  | 1200 |
| 40 | GCCAAAACCG                            | TCCTTTGCGT  | GGTCTTGTCT  | TTTGCCCTCT | GCTGGCTTCC  | CCTTCACCTC  | 1260 |
|    | AGCAGGATTC                            | TGAAGCTCAC  | TCTTTATAAT  | CAGAATGATC | CCAATAGATG  | TGAACCTTTG  | 1320 |
|    | AGCTTTCTCT                            | TGCTATTGTA  | CTATATTGGT  | ATCAACATGG | CTTCACTGAA  | TTCTTGCATT  | 1380 |
|    | AAACCAATTG                            | CTCTGTATTT  | GGTGAGCAAA  | AGATTCAAAA | ACTGCTTTAA  | GTCACTGTTA  | 1440 |
|    | TGCTGCTGGT                            | GCCAGTCATT  | TGAAGAAAAA  | CAGTCTTGG  | AGGAAAAACA  | GTGCTGCTTA  | 1500 |
|    | AAGTTCAAAG                            | CTAATGATCA  | CGGATATGAC  | AACTTCCGTT | CCAGTAATAA  | ATACAGCTCA  | 1560 |
| 45 | TCTTGAAGA                             | AGAACTATTC  | ACTGTATTTT  | ATTTTCTTTA | TATTGGACCG  | AAGTCATTAA  | 1620 |
|    | AACAAAATGA                            | AACATTTGCC  | AAAAACAAAC  | AAAAAACTAT | GTATTTGCAC  | AGCACACTAT  | 1680 |
|    | TAAATATATTA                           | AGTGTAAATTA | TTTTAAACAT  | CACAGCTACA | TATGACATTT  | TATGAGCTGT  | 1740 |
|    | TTACGGCATG                            | GAAAGAAAAA  | CAGTGGGAAT  | TAAGAAAGCC | TCGTCGTGAA  | AGCACTTAAT  | 1800 |
|    | TTTTTACAGT                            | TAGCACTTCA  | ACATAGCTCT  | TAACAACCTT | CAGGATATTC  | ACACAACACT  | 1860 |
| 50 | TAGGCTTAAA                            | AATGAGCTCA  | CTCAGAATTT  | CTATTCCTTC | TAAAAAGAGA  | TTTATTTTTA  | 1920 |
|    | AATCAATGGG                            | ACTCTGATAT  | AAAGGAAGAA  | TAAGTCACTG | TAAAAACAGAA | CTTTTAAATG  | 1980 |
|    | AAAGCTTAAAT                           | TACTCAATTT  | AAAATTTTAA  | AATCCTTTAA | AACAACCTTT  | CAATTAAATAT | 2040 |
|    | TATCACACTA                            | TTATCAGATT  | GTAATTAGAT  | GCAAAATGAG | GAGCAGTTTA  | GTGTTTGCGT  | 2100 |
| 55 | TTTTCGGACA                            | CTGGAAACAT  | TTAAATCATC  | AGGAGGGAGT | AACAGAAAGA  | GCAAGGCTGT  | 2160 |
|    | TTTTGAAAAA                            | CATTACACTT  | TCACTAGAAG  | CCCAAACTCT | AGCATTCTGC  | AATATGTAAC  | 2220 |
|    | CAACATGTCA                            | CAAAACAGCA  | GCACTGTAAAC | GACTGGCACA | TGTGCCAGCT  | GAAATTAATA  | 2280 |
|    | TATAATACTT                            | TTAAAAAGAA  | AATTATTACA  | TCCTTTACAT | TCAGTTAAGA  | CAAAACCTCA  | 2340 |
|    | CMAAGAGAAA                            | TAGAAATGTT  | GAAAGGCTAT  | CCCAAAAGAC | TTTTTTGAAT  | CTGTCTTTCA  | 2400 |
| 60 | CATACCCCTG                            | GAAGACAATA  | CTATCTACAA  | TTTTTTCAGG | ATTATTAATA  | TCITCTTTTT  | 2460 |
|    | TCACATTCCT                            | ATGCTAAACT  | CTGTTTGGTT  | TTGTCTCTGT | TAAATACTTA  | CCTACATACA  | 2520 |
|    | CTGCATGTAG                            | ATGATTAAAT  | GAGGGCAGGC  | CCTGTGCTCA | TAGCTTTACG  | ATCGAGAGAT  | 2580 |
|    | GCCAGTGACC                            | TCATAATAAA  | GACTGTGAAC  | TGCTGTGGTC | AGTGTCCACA  | TGACAAAGGG  | 2640 |
|    | GCAGGTAGCA                            | CCCTCTCTCA  | CCCATGCTGT  | GGTTAAATG  | GTTTCTAGCA  | TATGTATAAT  | 2700 |
| 65 | GCTATAGTTA                            | AAATACTATT  | TTTCAAAATC  | ATACAGATTA | GTACATTTAA  | CAGCTACCTG  | 2760 |
|    | TAAAGCTTAT                            | TACTAATTTT  | TGTATTATTT  | TTGTAATAG  | CCAATAGAAA  | AGTTTGCTTG  | 2820 |
|    | ACATGGTGCT                            | TTTCTTTTAT  | CTAGAGGCAA  | AACTGCTTTT | TGAGACCGTA  | AGAACCTCTT  | 2880 |
|    | AGCTTTGTGC                            | GTTCTGCTCT  | AATTTTTTATA | TCTTCTAAGC | AAAGTGCTTT  | AGGATAGCTT  | 2940 |
|    | GGGATGAGAT                            | GTGTGTGAAA  | GTATGTACAA  | GAGAAAACGG | AAGAGAGAGG  | AAATGAGGTG  | 3000 |
| 70 | GGGTTGGAGG                            | AAACCCATGG  | GGACAGATTC  | CCATTCTTAG | CCTAACGTTT  | GTCATTGCGT  | 3060 |
|    | CGTCAATCA                             | ATGCAAAAGG  | TCCTGATTTT  | GTTCACAGCA | AACACAGTGC  | AATGTTCTCA  | 3120 |
|    | GAGTGACTTT                            | CGAAATAAAT  | TGGGCCCAAG  | AGCTTTAACT | CGGTCTTAAA  | ATATGCCCAA  | 3180 |
|    | ATTTTACTTT                            | TGTTTTTCTT  | TTAATAGGCT  | GGGCCACATG | TTGGAAATAA  | GCTAGTAATG  | 3240 |
|    | TTGTTTTCTG                            | TCAATATTGA  | ATGTGATGGT  | ACAGTAAACC | AAAACCCAAC  | AATGTGGCCA  | 3300 |
|    | GAAAGAAAG                             | GCAATAATAA  | TTAATTACAA  | CACCATATGG | ATTCTATTTA  | TAAATCACCC  | 3360 |
| 75 | ACAAACTTGT                            | TCTTTTATTT  | CATCCCAATC  | ACTTTTTCAG | AGGCCTGTTA  | TCATAGAAGT  | 3420 |
|    | CATTTTAGAC                            | TCTCAATTTT  | AAATTAATTT  | TGAATCACTA | ATATTTTCAC  | AGTTTATTAA  | 3480 |
|    | TATATTTAAT                            | TTCTATTATA  | ATTTTAGATT  | ATTTTATATA | CCATGTAAGT  | AATTTTATCA  | 3540 |
|    | TCCTGATACC                            | CTTTCCCTCT  | CCATGTGAGT  | ATCATGTTCT | CTAATTATCT  | TGCCAAATTT  | 3600 |
|    | TGAAACTACA                            | CACAAAAGGC  | ATACTTGCAAT | TATTTATAAT | AAAATTGCAT  | TCAGTGGCTT  | 3660 |
| 80 | TTTAAAAAAA                            | ATGTTTGATT  | CAAAACTTTA  | ACATACTGAT | AAGTAAGAAA  | CAATTATAAT  | 3720 |
|    | TTCTTTACAT                            | ACICAAAACC  | AAGATAGAAA  | AAGGTGCTAT | CGTTCAACTT  | CAAAACATGT  | 3780 |
|    | TTCCTAGTAT                            | TAAGGACTTT  | AATATAGCAA  | CAGACAAAAT | TATTGTTAAT  | ATGGATGTTA  | 3840 |
|    | CAGCTCAAAA                            | GATTTATAAA  | AGATTTTAA   | CTATTTTCTC | CCTTATTATC  | CAGCTCTAAT  | 3900 |
|    | GTGGATGTAT                            | GTTCAAAACAC | CTTTTAGTAT  | TGATAGCTTA | CATATGGCCA  | AAGGAATACA  | 3960 |

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5 GTTTATAGCA AAACATGGGT ATGCTGTAGC TAACTTTATA AAAGIGTAAT ATAACAATGT 4020  
AAAAAATTAT ATATCTGGGA GGATTTTTTG GTTGCCTAAA GTGGCTATAG TTAAGTATT 4080  
TTTATTATGT AAGCAAAACC AATAAAAATT TAAGTTTTTT TAACAACTAC CTATTTTTTT 4140  
ACTGTACAGA CACTAATTCA TTAATACTA ATTGATTGTT TAAAGAAAT ATAAATGIGA 4200  
CAAGTGGACA TTTATTATCT TAAATATACA ATTATCAAGC AAGTATGAAG TTATTCATTT 4260  
AAAATGCCAC ATTTCTGGTC TCTGGG

## Protein sequence 6

10 Gene name: endothelin receptor type B  
Unigene number: Hs.82002  
Protein Accession #: NP\_000106  
Signal sequence: 1-27  
Pfam domain: 7tm\_1 [118-385]  
15 Transmembrane domains: 100-122, 138-160, 173-195, 221-243, 277-299, 325-347, 358-380  
Cellular Localization: plasma membrane  
1 11 21 31 41 51  
MQPPPSLCCR ALVALVLACC LSRWGEERG FPPDRATPLL QTAEIMTPPT KTLWPKGSNA 60  
20 SLARSLAFAE VPKGDRTAGS PPRTISPPPC QGPIEIKETF KYINTVVSCL VFVLGIIGNS 120  
TLRLRIIYNK CMRNGENILI ASLALGDLHL IVIDIPINIV KLLAEDWPFQ AEMCKLVFFI 180  
QKASVGIITVL SLCALSIDRY RAVASWSRIK GIGVPKWTAV EIVLIWVSV VLAVPEAIGF 240  
DIITMDYKGS YLRICLLHPV QKTAFMQFYK TAKDWWLFSF YFCLPLAITA FFYTLMTCEM 300  
LRKKSQMGIA LNDHLKQRRE VAKTVFCLVL VFALCNLPLH LSRILKLTLY NQNDENRCEL 360  
25 LSFLLVLDYI GNMASLNSC INFIALYLVS KRFKNCFKSC LCCWCQSFEK KQSLEEKQSC 420  
LKFKANDHGY DNFRRSSNKYS SS

## DNA sequence 7

30 Gene name: G protein-coupled receptor 34  
Unigene number: Hs.29202  
Probeset Accession #: N54926  
Nucleic Acid Accession #: AF039686  
Coding sequence: 79-1224  
1 11 21 31 41 51  
35 AAAAACTGA AGACATAAGA ACTACACATG AGGAATATGT CATTTAGCAC TTTCACTTTT 60  
TGATCTCCAC AGAAGACAAT GAGAAGTCAT ACCATAACAA TGACGACAAC TTCAGTCAGC 120  
AGCTGGGCTT ACTCCTCCCA CAGAATGCGC TTTATAACCA ATCATAGCGA CCAACCGCCA 180  
CAAAACTTCT CAGCAACACC AAATGTTACT ACCTGTCCCA TGGATGAAAA ATTGCTATCT 240  
40 ACTGTGTAA CCACATCCTA CTCTGTATT TTCATCGTGG GACTGGTTGG GAACATAATC 300  
GCCCTCTATG TATTTCTGGG TATTCACCGT AAAAGAAATT CCATTCAAAT TTATCTACTT 360  
AACGTAGCCA TGCAGACCT CCTACTCATC TTCTGCCTCC CTTTCCGAAT CATGTATCAT 420  
ATTAACCAAA ACAAGTGGAC ACTAGGTGTG ATTCTGTGCA AGGTGTGGG AACACTGTTT 480  
TATATGAACA TGTACATAG CATTATTTTG CTGGATTCA TCAGTTTGA TCGCTATATA 540  
45 AAAATTAATC GGTCTATACA GCAACGGAAG GCAATAACAA CCAACAAAG TATTTATGTC 600  
TGTTGTATAG TATGGATGGT TGCTCTTGGT GGATTCCTAA CTATGATTAT TTTAACACTT 660  
AAGAAAGGAG GGCATAATTC CACAATGTGT TTCCATTACA GAGATAAGCA TAACGCAAAA 720  
GGAGAAGCCA TTTTAACTT CATTCCTGTG GTAATGTTCT GGCTAATTTT CTTACTAATA 780  
ATCCTTTCAT ATATTAAGAT TGGGAAGAAT CTATTGAGGA TTTCTAAAAG GAGGTCAAAA 840  
50 TTTCTAATT CTGTAATAA TGCCACTACA GTCGTAACT CCTTATTTGT ACTATCATT 900  
TTTACTATAT GTTTTGTTC CTATCATGCC TTTCGATTCA TCTACATTTC TTCACAGCTA 960  
AATGTATCAT CTGTCTACTG GAAAGAAATT GTTCACAAA CCAATGAGAT CATGCTGGTT 1020  
CTCTCATCTT TCAATAGTTG CTAGATCCA GTCATGTATT TCCTGATGTC CAGTAACATT 1080  
CGCAAAATAA TGTGCCAATT TCTTTTGA CGATTTCAG GTGAACCAAG TAGGAGTGAA 1140  
55 AGCACTTCAG AATTATAACC AGGATACTCC CTGCATGATA CATCTGTGGC AGTGAAAATA 1200  
CAGTCTAGTT CTAAAGTAC TTGAGGTAAA CATACTAAA TGAATTATAT AATGCACCTT 1260  
CTTAATCTCT TGAAGAACTA AAAAAATTAGG AAACAAAGTT CTAGCATTTA CAAACTCAG 1320  
ATCTCAAAGC TCTGCTGTGA TTTGTGATAT TTCATTGCTT TAACTGTAAA CCAT

## Protein sequence 7

60 Gene name: G protein-coupled receptor 34  
Unigene number: Hs.29202  
Protein Accession #: AAD50531  
Signal sequence: none found  
Pfam domain: 7tm\_1 [71-327]  
65 Transmembrane domains: 90-112, 126-148, 171-193, 217-239, 263-285  
Cellular Localization: plasma membrane  
1 11 21 31 41 51  
70 MRSHTIIMTT TSVSSWFYSS HRMRFITNHS DQPPQNFSAT PNVTTCPMDE KLLSTVLTTT 60  
YSVIFIVGLV GNIIALYVEL GIHRKRNSIQ IYLLNVAIAD LLLIFCLPFR IMYHINQNKW 120  
TLGVILCKVV GTLFYMMYI SIILLGFISL DRYIKINRSI QQRKAITTKQ SIYVCCIVWM 180  
VALGGFLTMI ILTLKGGHN STMCFHYRDK HNAKGAEIFN FILVVMFWLI FLLIILSYIK 240  
IGKNLLRISK RRSKFPNSGK YATTARNFSI VLIIFTICFV PYHAFRFYIY SSQNLVSSCY 300  
75 WKEIVHKINE IMLVLSSFNS CLDPVMYFLM SSNIRKIMCQ LLFRRFQGEF SRSESTSEFK 360  
PGYSLHDTSV AVKIQSSSKS T

## DNA SEQUENCE 8

80 Gene name: exostoses (multiple)-like 2  
Unigene number: Hs.61152  
Nucleic Acid Accession #: NM\_001439  
Coding sequence: 288-1280  
1 11 21 31 41 51  
CACTTTGCCG CGGCACCTTT TTCCAGGTG TTAATCCAGC TAATGGAGAA GGATAGATGC 60

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ACGCTACTTG GTTTAGAAAA AAAAAACAAA ATGAGCAAAC GAGACGCCCC TTCCTTTTA 120  
TGATAACTAA GCTGCAGGGA AATAAATCGG CTGGCCCTAC TGCAATCTAC TGCACCTGAG 180  
AAACATCACA GAAAATCTCT TGAATTATCT TAATAGTGAC AAGTGAGCCT GCTTCTGTCA 240  
ATTACTGAAG CTATAAGGAG ATTTTTTAAA AATTAAACTT CAACACAATG AGGTCTTGCC 300  
ACACTCTCAA ACTTCTCTGG AGAGTAATGG GGATTTCGAGT GCTTCGATTA TCTTTGGTGG 360  
TCATCCTCGT ATTATTACTG GTAGCTGGTG CTTTGACTGC CTTACTTCCC AGTGTATAAG 420  
AAGACAAGAT GCTCATGTTG CGTAGGGAAA TAAATCCCA GGGCAAGTCC ACCATGGACT 480  
CCTTTACTCT CATAATGCAG ACGTACAACA GAACAGATCT CTTATTGAAA CTTTAAATC 540  
ATTATCAGGC TGTACCAAAAT CTGCACAAG TGATTGTGGT ATGGAACAAT ATTGGAGAGA 600  
10 AGGCACCAGA TGAATTATGG AATTCTCTAG GCCCCACCC TATCCCTGTG ATCTTCAAAC 660  
AACAGACAGC AAACAGGATG AGAAATCGAC TCCAGGTCTT TCCTGAACTG GAAACCAATG 720  
CAGTGTGAT GGTAGATGAT GACACACTCA TCAGCACCCC AGACCTTGTT TTTGCTTCT 780  
CAGTTTGGCA GCAATTTCTT GATCAAATG TAGGATTGTG TCCTAGAAAG CACGTCTCTA 840  
CTTCATCAGG TATCTACAGT TATGGAAGTT TTGAAATGCA AGCACCAGGG TCTGGAAATG 900  
15 GTGACCAAGT CTCTATGGTG CTGATTGGAG CCTCATTCTT CAATAGCAAA TATCTGAAT 960  
TATTTCAAGG GCAACCTGCA GCTGTCCATG CTTTGATAGA TGATACTCAA AACTGTGATG 1020  
ATATTGCTAT GAATTTTATC AITGCCAAGC ATATTGGCAA GACTTCAGGG ATATTGTGTA 1080  
AGCCTGTAAA CATGACAAAT TTGGAATAAG AAACCAACAG TGGCTATTCT GGAATGTGGC 1140  
20 ATCGAGCTGA GCACGCTCTG CAGAGGTCTT ATTCTATAAA TAAGCTTGTT AATATCTATG 1200  
ATAGCATGCC CTTAAGATAC TCCAACATTA TGATTTCCCA GTTTGGTTTT CCATATGCCA 1260  
ACTACAAAAG AAGTAAAAACA AACAATAACA AACCTGAAAA CTGCTTGGCA 1320  
TTTGAGTAGC TTCTCCATGC TATGTATTTT TTTAAGCAAC ATCATGAAT TATCTACTC 1380  
CAGAAGTCTC TACAATAGAA AAAAAAGTGC AGTGCTTCTA GGATATAAAA TTCACATTAC 1440  
25 TTTTGAAGC CAAGAAGTTG GTCTTATCCA GTTAGGTCTT CTTATGAAGA GTTTTCATCC 1500  
AGGGATATAA CTCCCTGGTC AGTGATTTTA TGTTTTACAT CCTGAGACTG TTCTACAGTT 1560  
TCTTTGATC CTGGCATTTG CCTTAAGGAC TTATAGCAAG CTGTTTCTAG GATCAGAAAC 1620  
TCAGAGAGG CATTTCTCTG CTTTTTCACT AAAGGTCACT TGTTTTAATT TGAAACCTGA 1680  
AATGCCTCTT TAGCAAAGCC TGTGGTATGG GGTAAAGCCA TGTAAGAAGA GAATAGTCTC 1740  
30 AGTCACATAT GAAGAGGAAA ATTTGCAGCT GCCAGTGCTT TCCTTGTGGC CCTGCCAAC 1800  
AGCTCTTCCA GGAAGAACTC AGTCCAGCAT GGTTTTGATG TAACCATCCA TGCTTTTATT 1860  
TTGTTTAAGT CTTTGTGAC TGGGACAGTT AATTTTAGTA GCTGAAGAAC CTGACTGTTG 1920  
35 TTGCTTGATA TTTGTGAACA TTTACTGCAT GGATCACAAA ACAATATACC CTGTATTTCT 1980  
TACACGCCAC TTATATGCAG CAAGGAGTAA AITGTGTTACT AGATTCCGGT AGTGCAATTT 2040  
GTCACTGAAT CTGACCTTGA GAATGTACAT TAATTCTTAT ATTTTACATA ATGTATGTGT 2100  
TGTTTAAGAA ATGTATAAAA AACCTGAAAA AAATGAGTAA GAACCTGGCAG AAGTTAAAC 2160  
40 CCTTTGTATC AAAAGATCTT TATTGGTAGA GCACTGGTTA TCTTCTGGAT ACTAAAAAGT 2220  
TGTATTACAA AGCCAAACAC TTGCATTCAC AACTTTAAAA AAAGATCCAA GGAACATATC 2280  
ATAATGATGA AATTTCAACT ACATACAAGG AGGAGAAAAA AAGAACCAG TCATAACAGA 2340  
GGAAATCTAT AGGAGCTGCG ATCAATTCAT TCTTAAGGTT GCCTACTCTC TGTATGTGA 2400  
ATTAGGCTCT GTGTTTCAAC CATGTCTGT GTTTAGTCTT TGTTCACCAC TAAGGCAAGG 2460  
AATTCCTAAC TAGGCCCTG TTTACCAACT TCTCTTCTC CTCCTTTCCC TCTTATTCCT 2520  
45 CTTTCTCCTC TTCTCTCTTA TATAATGCTA GTATATTCTC AAAATTGCAA AGCTGTGAGA 2580  
ATATTAATAA AATCATGGCT AATGTTCCAA TAATGAGGTC TTTGTGCATT TAGTCCGCA 2640  
TATGATGGTT TTTTTTTTAC ATTAAGAAGT ATATGTGTCT TAATGCAGTC AGATTGTAAA 2700  
50 AAACAAAAC AAAGAACTA AGAATCTTAC TAAAATCGA TAATGTCAGT TATCTGTTT 2760  
GTCCAATATT GGTAGTACTT TTTGCTCTCT TATGATTCCT CTAGCAGATA AATAAAGAA 2820  
ACTTTGCCA TCC

## Protein sequence 8

Gene name: exostoses (multiple)-like 2

Unigene number: Hs.61152

Protein Accession #: NP\_001430

Signal sequence: 1-38

Transmembrane domains: none found

Cellular Localization: plasma membrane

1 11 21 31 41 51  
| | | | |  
MRCCHICKLP GRVMGIRVLR LSLVVLVLL LVAGALTALL PSVKEDKMLM LRREIKSQGK 60  
60 STMDSTLIM QTYNRTDLLL KLNHYQAVP NLHKVIVVWN NIGEKAPDEL WNSLGPPIPI  
VIFKQQTANR MRNRLQVFPF LETNAVLMD DDTLISTPDL VFAFSVWQF PDQIVGFVPR 180  
KHSVSSGIY SYGSFEMQAP GSGNGDQYSM VLIASFFNS KYLELFRQP AAVHALIDDT 240  
QNCDDIAMNF IIAKHIGKTS GIFVKPVNMD NLEKETNSGY SGMWHAETHA LQSYCINKL 300  
VNIYDSMLPR YSNIMISQFG FPYANYKRKI

## DNA SEQUENCE 9

Gene name: Homo sapiens growth differentiation factor 1 (GDF1)

Unigene number: Hs.92614

Probeset Accession #: AL120193

Nucleic Acid Accession #: NM\_021267

Coding sequence: 73-1125

1 11 21 31 41 51  
| | | | |  
ACGCGGGGCG CGCGGCTCCG TCGGCTACCG CGGGCGGGCG CAGGCGACGG GCACGCGGGG 60  
75 CGAGCGGGCG GTATGGCGGC GCGGGGCCCC GCGGCGGGCG CGACGGGGCC CGAGCCCATG 120  
CGAGCTACG CGACCTAGT GCAGCGCGCG TGGGCGAGCG CGCTGGCGGC GGCGCGGGGC 180  
TGCACGGACT GCGGCTGGG GCTGGCGCGT CGCGCGCTGG CTGAGCACGC GCACCTGCGC 240  
CGCGCCGAGC TGCTGCTGCT GCGGCTGGCG GCGCTGGGCT GGACCGCGCT GCGCTCCGCG 300  
GCCACTGCGC GCTCTTTTGG GCGGCTGGCG AAGCGGTGCT GCCTCCAGCC CAGAGATGCC 360  
GCCAGATGC CCGAGAGCGC TTGGAAGTTT CTCTTCTACC TGGGCGAGCT GAGCTACAGT 420  
80 GCCTACCTGC TGTTTGGCAC CCACTACCCC TTCTTCCATG ACCCAACATC TGTCTTCTAC 480  
GACTGGACGC CGGGCATGGC AGTGCCACGG GACATTGCAG CCGCTACCT GCTCCAGGGA 540  
AGCTTCTATG GCCACTCCAT CTACGCTACG CTATACATGG ACACCTGGCG CAAGGACTCG 600  
GTGGTCAAGC TGCTCCACCA CTGCGTACG CTATCCTCA TCGCTCTCTC CTACGCTTTC 660  
CGGTACCACA ATGTGGGCAT CCTTGTGCTC TTCCTGCACG ATATCAGTGA CGTGCAGCTT 720



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10  
15  
20  
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GAGTTTACCA AGCTCAACAT TTA CTTCAAG TCCCGCGGCG GCTCCTACCA TCGGCTGCAT 780
GCCTTGGCAG CAGACTTGGG CTGCCTCAGC TTGGGCTTCA GCTGGTCTCG GTTCCCGCCTC 840
TACTGGTTCC CGCTCAAGGT CCTGTATGCC ACCAGTCACT GCAGTCTGGC CACGGTGCCT 900
GACATCCCCT TCTACTTCTT CTTCATATGG CTCCCTGTGC TGCTCACCTT TATGAACCTC 960
TACTGGTTCC TGTACATCGT GGCGTTTGCA GCCAAGGTGT TGACAGGCCA GGTGCACGAG 1020
CTGAAGGACC TGCGGGAGTA TGACACAGCC GAGGCCCAGA GCCTGAAGCC CAGCAAAGCC 1080
GAGAAGCCAC TGAGGAACGG CCTGGTGAAG GACAAGCGCT TCTGAACCCC TCGGCCCCCGC 1140
CCCCGTGGAC CCGGCCCCAC CCCGAATACC CCGGCCACGC TCCCCGTCTT TGGCCGCCCC 1200
TCCACCCCCC CCAACTCTGC TCCTCTAGGG CCGCCGCCAC CTCCCCGTGG ACCCCGCCCC 1260
CTCATCTGCG CTCATTTCG CCGCCACGCC CCCAGGACC CCTGCCCTC CCGGGACACC 1320
GGCCCCGCCC TCAGCCCACT GGTCCCCGGC CCGCCCGGAC CCTGCCACT CTCTGGTCAT 1380
CGCCTGGGAG GAAGATGCCA CCGCCGCAGC AAGGTCCTTG CCGCCACCAC CTCCTCTCTC 1440
TCCTGGCCCT GCTGCTGCC TCCTGTCCCC TGACCCCGGC CCCCCTGCC CCAGGCCAG 1500
CCGCCGCCCT GCTCCAGGCT CTAGGACTGC GCGATGAGCC CCAGGGTGCC CCCAGGCTCC 1560
GGCCGGTTCC CCCGGTCTG TGGCGCTGT TTGACGCGG GACCCCCAG GAGACCAGT 1620
CTGGCTCGCG GCGGACGTCC CCAGGGGTCA CCCTGCAACC GTGCCACGTG GAGGAGCTGG 1680
GGGTGCGCCG AAACATCGTG CGCCACATCC CGGACCGCGG TGGCCACCAC CGGCCTCTCG 1740
AGCCTGTCTC AGCCGCGGGG CATTGCCCTG AGTGACAGT CGCTTTCGAC CTGTGCGCTG 1800
TGGAAACCCG TGAGCGCGCG AGCCGGGCCG GCCTGGAGCT GCGTTTCGCG GCGCGCGCGG 1860
CGGACCCCCG GAGGGGCGCG TGGGAGCTGA GCGTGGGCA AGCGGCCAG GGC CGCGCGG 1920
CGGACCCCCG GCGGTGCTG CTCGCCAGT TGGTGGCCGC CCTGGGGCGG CCACTGCGCG 1980
CGGAGGTGCT GGGCGCGCT TGGGCTCGCA ACGCTCATG SCCCGCGAGC CTCGCGCTGG 2040
CGCTGGCGCT ACGCCGCCG GCCCCTGCCG CCGTGGCGCG CCTGGCGGAG GCCTGCTGCG 2100
TGCTGTGAC CCTCGACCG CCGCTGTGCC ACCCCTGGC CCGCCCGCGG CCGCAGCGCG 2160
AACCCTGTT GGGCGGCGG CCGGGGGCG CTGTGCGCG CCGCGCGCTG TACGTGAGCT 2220
TCGCGGAGT GGGCTGGCAC CGCTGGGTCA TCGCGCCGCG CGGCTTCTCT GCCAACTACT 2280
CGCAGGTGCA GTGCGCGCT CCGCTCGCGC TGTGCGGGTC CCGGGGGCGG CCGCGCTCA 2340
ACCAACGCTC GTGCGCGCG CTCATGCAGC CGCGCGCCC GGGAGCCGCC GACTGCGCT 2400
GCTGCGTGCC CGCGCGCTG TCGCCCATCT CCGTGCTCTT CTTTGACAAC AGCGACAACG 2460
TGCTGCTGCG CAGTATGAG GACATGGTG TGGACGAGTG CCGCTGCCG TAACCCGGGG

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Protein sequence 9
Gene name: Homo sapiens growth differentiation factor 1 (GDF1)
Unigene number: Hs.92614
Protein Accession #: NP_067090
Signal sequence: none found
Transmembrane domains: 106-128, 148-169, 184-206, 244-266, 285-307
Cellular Localization: plasma membrane
40
1 11 21 31 41 51
| | | | |
MAAAGPAAG TGPEEMPSYA QLVQRGWGSA LAAARGCTDC GWGLARRGLA EHAHLAPPEL 60
LLLALGALGW TALRSAATAR LFRPLAKRCC LQPRDAAKMP ESAWKFLFYL GSWSYSAYLL 120
FGTDYPPFFHD PPSVFYDWTG GMAYPRDIAA AYLLQGSFYG HSIYATLYMD TWRKDSVVML 180
LHHVVTLILI VSSYAFRYHN VGILVLFLLD ISDVQLEFTK LNIYFKSRGG SYHRLHALAA 240
45 DLGCLSGFGS WFWFRLYWF LKVLVATSHC SLRTVPDIPF YFFFNALLLL LTLNMLYWFL 300
YIVAFPAKVL TQVHELKDL REYDTAAQS LKPSKA EKPL RNLVKDKRF

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DNA SEQUENCE 10
Gene name: epidermal growth factor receptor (avian erythroblastic leukemia)
Unigene number: Hs.77432
Nucleic Acid Accession #: NM_005228
Coding sequence: 187-3819
55
1 11 21 31 41 51
| | | | |
GCCGCGCTGC GCCGAGTCC CGAGCTAGCC CCGGCGCGCG GCGCGCCAG ACCGACGAC 60
AGGCCACCTC GTCGGCGTCC GCCCGAGTCC CCGCCTCGCC GCCAACGCCA CAACACCCG 120
GCACGCGCCC CTGACTCCGT CCAGTATTGA TCGGGAGAGC CGGAGCGAGC TCTTCGGGGA 180
GCAGCGATGC GACCTCCCGT GACGCGCGGG GACGCGCTCC TGGCGCTGCT TAATCGCTC 240
TGCCCGGCGA TCGGCGCTGT GGAGGAAAG AAAGTTTGCC AAGGCACGAG GAACRAGCTC 300
60 AGGCAGTTGG GCACTTTTGA AGATCATTTT CTCAGCCTCC AGAGGATGTT CAATAACTGT 360
GAGGTGGTCC TTGGGAATTT GGAATTACC TATGTGCAGA GGAATTATGA TCTTTCCTTC 420
TTAAAGACCA TCCAGGAGGT GGCTGTTTAT GTCTCATTC CCCTCAACAC AGTGGAGCGA 480
ATTCTTTTGG AAAACCTGCA GATCATCAGA GGAATATGT ACTACGAAA TCTCTATGCC 540
TATGCACTCT TATCTAACTA TGATGCAAT AAAACCGGAC TGAAGGAGCT GCCCATGAGA 600
65 AATTACAGG AAATCCTGCA TGGCGCCGTG CGGTTAGCA ACAACCTGC CCGTGCAAC 660
GTGGAGAGCA TCCAGTGGCG GGACATAGTC AGCAGTGACT TTCTCAGCA CATGTGATG 720
GACTTCCAGA ACCACCTGGG CAGCTGCCAA AAGTGTGATC CAAGCTGTCC CAATGGGAGC 780
TGCTGGGGTG CAGGAGAGGA GAACTGCCAG AAATGACCA AAATCATCTG TGCCAGCAG 840
70 TGCTCCGGGG GCTGCCGTGG CAAGTCCCCC AGTGACTGCT GCCACAACCA GTGTGCTGCA 900
GGCTGACAG GCCCCCGGGA GAGCGACATG CTGGTCTGCC GCAAAATCCG AGACGAAGCC 960
ACGTGCAAGG AACCTCGCCC CCCACTCATG CTCTACAACC CCACCAAGTA CCAGATGGAT 1020
GTGAACCCCG AGGGCAATA CAGCTTTGGT GCCACCTGCG TGAAGAAGTG TCCCGTAA 1080
TATGTGTGTA CAGATCACGG CTCGTGCGTC CGAGCCTGTG GGGCCGACAG CTATGAGATG 1140
GAGGAAGACG CGGTCCGCAA GTGTAAAGAG TCGGAAGGGC CTTGCCGCAA AGTGTGTAAC 1200
75 GGAATAGGTA TTGGTGAATT TAAAGACTCA CTCTCCATAA ATGCTACGAA TATTAACAC 1260
TTCAAAAAC TCACTTCCAT CAGTGGCGAT CTCACATAC TGCCGGTGGC ATTTAGGGGT 1320
GACTCCTTCA CACTACTCC TCCTCTGGAT CCACAGGAAC TGGATATTCT GAAAACCGTA 1380
AAGGAATCA CAGGGTTTTT GCTGATTGAG GCTTGGCCTG AAAACAGGAC GGACTTCCAT 1440
GCCTTTGAGA ACCTAGAAAT CATACGCGCG AGGACCAAGC AACATGCTCA GTTTTCTCT 1500
80 GCAGTCTGTA CCGTGAACAT AACATCCTTG GGATTACGCT CCCTCAAGGA GATAAGTGAT 1560
GGAGATGTA TAATTTCAGG AAACAAAAAT TTGTGCTATG CAAATACAAT AAATCGGAAA 1620
AAACTGTTTG GGAACCTCGG TCAGAAAAAC AAAATTATAA GCAACAGAGG TGAACACAGC 1680
TGCAAGGCCA CAGGCCAGGT CTGCCATGCC TGTGTCTCCC CCGAGGGCTG CTGGGGCCCG 1740
GAGCCAGGCG ACTCGCTCTC TTGCCGGAAT GTCAGCCGAG GCAGGGAATG CGTGACAA 1800

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|    |  |             |             |             |             |             |      |
|----|--|-------------|-------------|-------------|-------------|-------------|------|
|    | TGCAAGCTTC   | TGGAGGGTGA  | GCCAAGGGAG  | TTTGTGGAGA  | ACTCTGAGTG  | CATACAGTGC  | 1860 |
|    | CACCCAGAGT   | GCCTGCCTCA  | GGCCATGAAC  | ATCACCTGCA  | CAGGACGGGG  | ACCAGACAAC  | 1920 |
|    | TGTATCCAGT   | GTGCCCACTA  | CATTGACGGC  | CCCCACTGCG  | TCAAGACCTG  | CCCGGCAGGA  | 1980 |
|    | GTCAATGGAG   | AAAACAACAC  | CTTGGTCTGG  | AAGTACGCAG  | ACGCCGGCCA  | TGTGTGCCAC  | 2040 |
| 5  | CTGTGCCATC   | CAAACTGCAC  | CTACGGATGC  | ACTGGGCCAG  | GTCTTGAAGG  | CTGTCCAACG  | 2100 |
|    | AATGGGCTTA   | AGATCCCGTC  | CATCGCCACT  | GGGATGGTGG  | GGGCCCTCCT  | CTTGCTGCTG  | 2160 |
|    | GTGGTGGCCC   | TGGGATCGGG  | CCTCTTCATG  | CGAAGGCGCC  | ACATCGTTCG  | GAAGCGCACG  | 2220 |
|    | CTGCGGAGGC   | TGCTGCAGGA  | GAGGGAGCTT  | GTGGAGCCTC  | TTACACCCAG  | TGGAGAAGCT  | 2280 |
|    | CCCAACCAAG   | CTCTCTTGAG  | GATCTTGAAG  | GAAACTGAAT  | TCAAAAAGAT  | CAAAGTGCTG  | 2340 |
| 10 | GGCTCCGGTG   | CGTTCGGCAC  | GGTGATAAG   | GGACTCTGGA  | TCCCAGAAGG  | TGAGAAAGTT  | 2400 |
|    | AAAATTCCCG   | TGCTATCAA   | GGAAATAAGA  | GAAGCAACAT  | CTCCGAAAGC  | CAACAAGGAA  | 2460 |
|    | ATCCTCGATG   | AAGCCTACGT  | GATGGCCAGC  | GTGGACAACC  | CCCACGTGTG  | CCGCCTGCTG  | 2520 |
|    | GGCATCTGCC   | TCACCTCCAC  | CGTGCAACTC  | ATCACGCAGC  | TCATGCCCTT  | CGGCTGCCTC  | 2580 |
|    | CTGGACTATG   | TCCGGGAACA  | CAAGACRAT   | ATTGGCTCCC  | AGTACCTGCT  | CAACTGGTGT  | 2640 |
| 15 | GTGCAGATCG   | CAAGGGGATC  | GAACTACTTG  | GAGGACCGTC  | GCTTGGTGC   | CCGCGACCTG  | 2700 |
|    | GCAGCCAGGA   | AGCTACTGGT  | GAAAAACCCG  | CAGCATGTCA  | AGATCACAGA  | TTTGGGCTG   | 2760 |
|    | GCCAAACTGC   | TGGGTGCGGA  | AGAGAAAGAA  | TACCATGCAG  | AAGGAGGCAA  | AGTGCCTATC  | 2820 |
|    | AAGTGGATGG   | CATTGGAATC  | AAITTTACAC  | AGAATCTATA  | CCCACCAGAG  | TGATGTCTGG  | 2880 |
| 20 | AGCTACGGGG   | TGACCGTTTG  | GGAGTTGATG  | ACCTTTGGAT  | CCAAGCCATA  | TGACGGAAATC | 2940 |
|    | CCTGCCAGCG   | AGATCTCCTC  | CATCCTGGAG  | AAAGGAGAAC  | GCCTCCCTCA  | GCCACCCATA  | 3000 |
|    | TGTACCATCG   | ATGTCTACAT  | GATCATGGTC  | AAAGTCTGGA  | TGATAGACGC  | AGATAGTCGC  | 3060 |
|    | CCRAAGTTCC   | GTGAGTTGAT  | CATCGAATTC  | TCCAAAATGG  | CCCGAGACCC  | CCAGCGCTAC  | 3120 |
|    | CTTGTCAATC   | AGGGGGATGA  | AAGAAATGCAT | TTGCCAAGTC  | CTACAGACTC  | CAACTTCTAC  | 3180 |
|    | CGTGCCCTGA   | TGGATGAAGA  | AGACATGGAC  | GACGTGGTGG  | ATGCCGACGA  | GTACCTCATC  | 3240 |
| 25 | CACACAGCAG   | GCTTCTTCTG  | CAGCCCCCTC  | ACGTCAAGGA  | CTCCCCCTCT  | GAGCTCTCTG  | 3300 |
|    | AGTGCACCCA   | GCAACAATTC  | CACCGTGGCT  | TGCATTGATA  | GAAATGGGCT  | GCAAAGCTGT  | 3360 |
|    | CCCATCAAGG   | AAGACAGCTT  | CTTGACGCGA  | TACAGCTCAG  | ACCCACACAG  | CGCCTTGACT  | 3420 |
|    | GAGGACAGCA   | TAGACGACAC  | CTTCCTCCCA  | GTGCCTGAAT  | ACATAAAACA  | GTCCGTTCCC  | 3480 |
|    | AAAAGGCCCG   | CTGGCTCTGT  | GCAGAATCCT  | GTCTATCACA  | ATCAGCCTCT  | GAACCCCGCG  | 3540 |
| 30 | CCCGACAGAG   | ACCCACACTA  | CCAGGACCCC  | CACAGCACTG  | CAGTGGGCAA  | CCCCGAGTAT  | 3600 |
|    | CTCAACACTG   | TCCAGCCAC   | CTGTGTCAAC  | AGCACATTGC  | ACAGCCCTGC  | CCAATGGGCC  | 3660 |
|    | CAGAAAGGCA   | GCCACCAART  | TAGCCTGGAC  | AACCCCTGACT | ACCAGCAGGA  | CTTCTTTCCC  | 3720 |
|    | AAGGAAGCCA   | AGCCAAATGG  | CATCTTTAAG  | GGCTCCACAG  | CTGAAAATGC  | AGAATACCTA  | 3780 |
|    | AGGGTCGCGC   | CACAAAGCAG  | TGAATTTATT  | GGAGCATGAC  | CACGAGGAGT  | AGTATGAGCC  | 3840 |
| 35 | CTAAAAATCC   | AGACTCTTTC  | GATACCCAGG  | ACCAAGCCAC  | AGCAGGTCTC  | CCATCCCAAC  | 3900 |
|    | AGCCATGCCC   | GCATTAGCTC  | TTAGACCCAC  | AGACTGGTTT  | TGCAACGTTT  | ACACCGACTA  | 3960 |
|    | GCCAGGAAGT   | ACTTCCACCT  | CGGGCACATT  | TTGGGAAGTT  | GCATTCCCTT  | GTCTTCAAAC  | 4020 |
|    | TGTGAAGCAT   | TTACAGAAAC  | GCATCCAGCA  | AGAATATTGT  | CCCTTTGAGC  | AGAAATTTAT  | 4080 |
| 40 | CTTTCAAAAG   | GGTATATTTG  | AAAAAAAARA  | AAAAAGTATA  | TGTGAGGATT  | TTTATTGATT  | 4140 |
|    | GGGGATCTTG   | CACTTTTTC   | TTGTGCTAT   | TGATTTTAC   | TTCAATGGGC  | TCTTCCAACA  | 4200 |
|    | AGGAAGAAGC   | TTGCTGGTAG  | CACCTTGCTAC | CCTGAGTTCA  | TCCAGGCCCA  | ACTGTGAGCA  | 4260 |
|    | AGGAGACAAA   | GCCACAAGTC  | TTCCAGAGGA  | TGCTTGATTG  | CAGTGGTTCT  | GCTTCAAGGC  | 4320 |
|    | TTCCACTGCA   | AAACATAAG   | GATCCAAGAA  | GGCCTTCATG  | GCCCCAGCAG  | GCCGGATCGG  | 4380 |
|    | TACTGTATCA   | AGTCATGAAA  | GGTACAGTAG  | GATAAGCCAC  | TCTGTCCCTT  | CCTGGGCAAA  | 4440 |
| 45 | GAAGAAACGG   | AGGGGATGAA  | TTCTTCCITA  | GACTTACTTT  | TGTAAAATGT  | TCCCCACGGT  | 4500 |
|    | ACTTACTCCC   | CACCTGATGA  | CCAGTGGTTT  | CCAGTCATGA  | GGCTTAGACT  | GACTTGTTTG  | 4560 |
|    | TCTTCCATTG   | CARTGTTTTG  | AAACTCAGTA  | TGCCGCCCTT  | GTCTTGCTGT  | CATGAAATCA  | 4620 |
|    | GCAAGAGAGG   | ATGACACATC  | AAATAATAAC  | TCGGATTCCA  | GCCCACATIG  | GATTTCATCAG | 4680 |
|    | CATTTGGAAC   | AATAGCCAC   | AGCTGAGAAT  | GTGGAATACC  | TAAGGATAAC  | ACCGCTTTTG  | 4740 |
| 50 | TTCTCGCAAA   | AACGTATCTC  | CTAATTTGAG  | GCTCAGATGA  | AATGCATCAG  | GTCCCTTGGG  | 4800 |
|    | GCATAGATCA   | GAAGACTACA  | AAATGAAGC   | TGCTCTGAAA  | TCTCCTTTAG  | CCATCACCCC  | 4860 |
|    | AAOCCOCCAA   | CAATTAATGA  | AACTAGGTTT  | TGAAATTGAT  | AATGCTTTCA  | CAACATTTCG  | 4920 |
|    | CAAAAGCTTT   | TTACTCAAAG  | AGTATATGTT  | CCCTCCAGGT  | CAGCTGCCCC  | CAAAACCCCT  | 4980 |
|    | CCTTACGCTT   | TGTACACAA   | AAATGTCTC   | TGCCTTGAGT  | CATCTATTCA  | AGCACTTACA  | 5040 |
| 55 | GCTCTGCCCA   | CAACAGGGCA  | TTTTACAGGT  | GCGAATGACA  | GTAGCATTAT  | GAGTAGTGTG  | 5100 |
|    | AATTCAGTCA   | GAATAATGAA  | AACTAGGTTT  | TGAAATTGAT  | AATGCTTTCA  | CAACATTTCG  | 5160 |
|    | AGATTGTTTA   | GAAGGAAAAA  | AGTTCTCTCC  | TAAATAATT   | TCTCTACAT   | TGGAGATTG   | 5220 |
|    | GAAGATTGAG   | CTAGTTAGGA  | GCCCATTTTT  | TCCTAATCTG  | TGTGTGCCCT  | GTAACCTGAC  | 5280 |
| 60 | TGGTTAACAG   | CAGTCCTTTG  | TAAACAGTGT  | TTTAAACTCT  | CCTAGTCAAT  | ATCCACCCCA  | 5340 |
|    | TECAATTAT  | CAAGGAAGAA  | ATGGTTTACA  | AAATATTTTC  | AGCCTACAGT  | TATGTTTCACT | 5400 |
|    | CACACACACA   | TACAAATGT   | TCCTTTTGCT  | TTTAAAGTAA  | TTTTTGACTC  | CCAGATCAGT  | 5460 |
|    | CAGAGCCCTT   | ACAGCATTGT  | TAAGAAAGTA  | TTTGATTTTT  | GTCTCAATGA  | AAATAAAACT  | 5520 |
|    | ATATTCAATT   | CC          |             |             |             |             |      |
| 65 | Protein sequence 10  |             |             |             |             |             |      |
|    | Gene name: epidermal growth factor receptor (avian erythroblastic leukemia |             |             |             |             |             |      |
|    | Unigene number: Hs.77432   |             |             |             |             |             |      |
|    | Protein Accession #: NP_005219   |             |             |             |             |             |      |
|    | Signal sequence: 1-27  |             |             |             |             |             |      |
| 70 | Pfam domain: Recep_L_domain [57-190, 372-492]                              |             |             |             |             |             |      |
|    | Transmembrane domains: 646-668   |             |             |             |             |             |      |
|    | 1  | 11          | 21          | 31          | 41          | 51          |      |
|    |  |             |             |             |             |             |      |
| 75 | MRPSGTAGAA   | LLALLAALCP  | ASRALEEKKV  | CQGTSNKLTQ  | LGTFFEDHFLS | LQRMFNNECV  | 60   |
|    | VLGNLEITYV   | QRNYDLSFLK  | TIQEVAGYVL  | IALNTVERIP  | LENLQIIRGN  | MYEENSVALA  | 120  |
|    | VLSNYDANKT   | GLKELPMRNL  | QELLHGAVRF  | SNPFLCNVE   | SIQWRDIVSS  | DPLSNMSMDF  | 180  |
|    | QNHLSGQCKC   | DPSCPNWSCW  | GAGEENCQKL  | TKIICAQCCS  | GRCRGKSPSD  | CCHNQCAAGC  | 240  |
|    | TGPRSDCLV  | CRKFRDEATC  | KDTCPLMLY   | NPTYQMDVN   | PEGKYSFGAT  | CVKCKPRNYV  | 300  |
| 80 | VTDHSGCVRA   | CGADSYEMEE  | DGVRKCKKCE  | GPCRKVCNGI  | GIGBEFKDSL  | INATNIKHFK  | 360  |
|    | NCTSIISDLH   | ILPVAFRGDS  | FTHTPPLDPQ  | ELDILKTVE   | ITGFLLIQAW  | PENRTDLHAF  | 420  |
|    | ENLEIIRGRT   | KQHGGQPSLAV | VSLNITSLGL  | RLSKEISDGD  | VIIISGNKNLC | YANTINWKKL  | 480  |
|    | FGTSQKTKI  | ISNRGENSCK  | ATGOVCHALC  | SPEGCWGPEP  | RDCVSCRNV   | RGRECVDRCK  | 540  |
|    | LLEGEPRFV  | ENSECICQHP  | ECLPQAMNIT  | CTGRGPDNCI  | QCAHYIDGPH  | VKRCCTPAGVM | 600  |
|    | GENNTLVNWKY  | ADAGHVCHLC  | HPNCTYCGTG  | PGLRGCPNTG  | PKIPSIATGM  | VGALLLLLVV  | 660  |

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ALGIGLFMR RHIVRKRTLRLQLERELVE PLTPSGEAPN QALLRILKET EFKKIKVLGS 720  
GAFGTIVYKGL WIPEGEKVKI PVAIKELREA TSPKANKEIL DEAYVMASVD NPHVCRLLGI 780  
CLTSTVQLIT QLMPPGCLLD YVREHKDNIG SQYLLNWCQV IAKGMNYLED RRLVHRDLAA 840  
RNVLVKTFQH VKITDFGLAK LLGAEBEKYH AEGGKVPKWK MALESILHRI YTHQSDVMSY 900  
GVTVWELMTF GSKPYDGIPA SEISSILEKG ERLPQPPICT IDVYMIMVKC WMIDADSRPK 960  
FRELIIEFSK MARDPQRYLV IQGDERMHLF SPTDSNPFYRA LMDEEDMDVD VDADEYLIPQ 1020  
QGFSSPSTS RTPLLSSLSA TSNNSTVACI DRNGLQSCPI KEDSFLQRY S DPTGALTED 1080  
SIDDTFLEVP EYINQSVPKR PAGSVQNPVY HNQLNPAPS RDPHYQDPHS TAVCNPEYLN 1140  
TVQPTCVNST FDSPAHWQAK GSHQISLDNP DYQQDFFPKE AKPNGIFKGS TAENAEYLRV 1200  
APQSSEPIGA

## DNA sequence 11

Gene name: claudin 5 (transmembrane protein deleted in velocardiofacial syndrome)

Unigene number: Hs.110903

Probeset Accession #: AW245805

Nucleic Acid Accession #: NM\_003277

Coding sequence: 121-777

1 11 21 31 41 51  
AGGGGACTGG GGCCAAGAGC CGGGAGCGCG GGCGCAAAGG CACCAGGGCC GCGCCAGGGC 60  
GCCGCGCAGC ACGGCTTGG GGGTCTGCG GGCCTTCGGG TGCGCGTCTC GCCTCTAGCC 120  
ATGGGGTCCG CAGCGTGTGA GATCCTGGGC CTGGTGCTGT GCCTGGTGGG CTGGGGGGGT 180  
CTGATCCTGG CGTGCGGGCT GCCCATGTGG CAGGTGACCG CCTTCTCTGA CCACAACATC 240  
GTACACGGCC AGACACCTG GAAGGGCCTG TGGATGTGCT GCGTGGTGCA GAGCACCGGG 300  
CAGATGCAGT CCAAAGTGTA CGACTCGGTG CTGGCTCTGA GCACCGAGGT GCAGGCGGGG 360  
CGGGCGCTCA CGGTGAGCGC CGTGCTGCTG GCCTTCGTG CGCTCTTCTG GACCTTGGCG 420  
GGCGCGCAGT GCACCACTG CGTGSCCCCG GCGCCGCGCA AGGCGCGTGT GGCCTTACG 480  
GGAGGCGTGC TCTACCTGTT TTGCGGGCTG CTGGCGCTCG TGCCACTCTG CTGGTTCGCC 540  
AACATGTGCG TCGCGAGTT TTACGACCCG TCTGTGCCCG TGTGCGAGAA GTACGAGCTG 600  
GCCGCGCGCG GTACATCGG CTGGGCGGCC ACCGCGCTGC TCATGGTAGG CGGCTGCCTC 660  
TTGTGCTGCG GCGCTGGGT CTGCACCGGC CGTCCCGACC TCAGCTTCCC CGTGAAGTAC 720  
TCAGCGCGCG GCGCGCCAC GGCACCGCGC GACTACGACA AGAAGAATA CGTCTGAGGG 780  
CGCTCGGCAC GCGCGGCCCG CTCTGCCAG CCACGCTGCG GAGGCGTTGG ATAAGCCTGG 840  
GGAGCCCCCG ATGACCGCGC GCTTCCGCGG GGTAGCGCGG CGCGCAGGCT CCTCGGAAAG 900  
TCCGCGCTCG GCGCCCGAGC GGGCTCCTGG ATCCGCTCCT GCCTGCGGCC GCAGCTGACC 960  
TTCTCTGCGC ACTAGCCCGG CCTTGCCTTT AACAGACGSA ATGAAGTTTC CTTTCTCTGT 1020  
CGCGCGCTG TTTCCATAGG CAGAGCGGGT GTCAGACTGA GGATTTCTGCT TCCCTTCCAA 1080  
GACGCTGGGG GTCTTGGCTG CTGCCTTACT TCCCAGAGGC TCCTGCTGAC TTCGGAGGGG 1140  
CGGATGCAGA GCGCGGGGCC CCCACCGGAA GATGTGTACA GCTGTCTTT ACTCCATCGG 1200  
CAGGCCCCAG CCCAGGGACC AGTGACTTGG CCTGGACCTC CCGGTCTCAC TCCAGCATCT 1260  
CCCCAGGCAA GGTGTGGGG CACCGGAGCT TGAGAGAGGG CGGGAGTGGG AAGGCTAAGA 1320  
ATCTGCTTAG

## Protein sequence 11

Gene name: claudin 5 (transmembrane protein deleted in velocardiofacial syndrome)

Unigene number: Hs.110903

Protein Accession #: NP\_003268

Signal sequence: none found

Pfam domain: PMP22 Claudin [4-181]

Transmembrane domains: 5-27, 74-96, 123-145, 164-186

Cellular Localization: plasma membrane

1 11 21 31 41 51  
MGSAALEILG LVLCLVWGNG LILACGLPMW QVTAFLDHNI VTAQTWVWGL WMSCVVQSTG 60  
HMQCKVYDSV LALSTEVQAA RALTVSALL AFVALFVTLA GAQCTTCVAP GPAKARVALT 120  
GGVLYLFCGL LALVPLQWFA NIVVREFYDP SVFVSQKYEL GAALYIGWAA TALLMVGGCL 180  
LCCGAWVCTG RPDLSFPVKY SAPRRPTATG DYDKKNYV

## DNA sequence 12

Gene name: vascular endothelial junction-associated molecule

Unigene number: Hs.54650

Probeset Accession #: AA410345

Nucleic Acid Accession #: AF255910

Coding sequence: 241-1137

1 11 21 31 41 51  
TTACCATGT GTTGGGCTGC GAGAAGACGA CAGAAGGGGG ACCCGCCTCT TGGCAGCCAG 60  
CTGAGAAGGC GCGCCGGGGA GGGGGAAACT GACATCCCAT CTAGAGCCGT CCTCTCTCTT 120  
CCTCCCTTCC CGACTCTCTG CTCTTTTCCC GCGCCAGAAG TTCAAGGGCC CCGCGCTTCC 180  
TGCGCTCTCT CCGCGGGGAC CCTCGACCTC CTCAGAGCAG CCGGCTGCCG CCGCGGGAAG 240  
ATGGCGAGGA GGAGCCGCCA CCGCTCTCTC CTGCTGCTGC TGCGCTACCT GGTGGTGGCC 300  
CTGGGCTATC ATAAGGCTTA TGGGTTTTCT GCGCCAAAAG ACCAACAGGT AGTCACAGCA 360  
GTAGAGTACC AAGAGGCTAT TTTAGCCTGC AAAACCCCAA AGAAGACTGT TTCCTCCAGA 420  
TAGAGTGA AGAAATCGGG TCGGAGTGTC TCCTTTGTCT ACTATCAACA GACTCTTCAA 480  
GGTGATTTTA AAAATCGAGC TGAGATGATA GATTTCATA TCCGATCAA AAATGTGACA 540  
AGAAGTGATG CGGGGAAATA TCGTTGTGAA GTTAGTGCC CATCTGAGCA AGGCCAAAC 600  
CTGGAAGAGG ATACAGTCACT TCTGGAAGTA TTAGTGGCTC CAGCAGTTCC ATCATGTGAA 660  
GTACCTCTT CTGCTCTGAG TCGAACTGTG GTAGAGCTAC GATGTCAAGA CAAAGAAAGG 720  
AATCCAGCTC CTGAATACAC ATGGTTAAG GATGGCATCC GTTGTGAGA AAATCCAGA 780  
CTTGGCTCCC AAAGCACCAA CAGCTCATAC ACAATGAATA CAAAACCTGG AACTCTGCAA 840  
TTTAATCTGT TTTCAAACT GGACACTGGA GAATATTCT GTGAAGCCCG CAATTCTGTT 900  
GGATATCGCA GGTGTCTGAG GAAACGAATG CAAGTAGATG ATCTCAACT AAGTGGCATC 960  
ATAGCAGCCG TAGTAGTTGT GGCCTTAGTG ATTTCCGTTT GTGGCCTTGG TGTATGCTAT 1020

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5 GCTCAGAGGA AAGGCTACTT TTCAAAAGAA ACCTCCTTCC AGAAGAGTAA TTCTTCATCT 1080  
 AAAGCCACGA CAATGAGTGA AATGATTTT AAGCACACAA AATCCTTTAT AATTAAAGA 1140  
 CTCCACTTTA GAGATACACC AAAGCCACCG TTGTTACACA AGTTAATAAA CTATTATAAA 1200  
 ACTCTGCTTT GTCCGACATT TGCAAAGAGG TACACGAGGA AATGGAATTG GTATTTCATT 1260  
 TTAATTTTCA TGACTACTAA CTCACCTGAA CTTGCTATTT TAAAMAAATA GTTCTGTGCA 1320  
 CACCTAAAT ATAATCTGGC TTCTTGTGTC TGGACTAAGT TAAAGAATT AAAATACTTT 1380  
 GTAATGTCAA AAAAAA

10 Protein sequence 12  
 Gene name: vascular endothelial junction-associated molecule  
 Unigene number: Hs.54650  
 Protein Accession #: AAF81223  
 Signal sequence: 1-22  
 Igc2 domain: 41-116, 146-221  
 Transmembrane domains: 239-261  
 Cellular Localization: plasma membrane

15 1 11 21 31 41 51  
 | | | | |  
 20 MARRSRHRL LLLRLYLVA LGVHKAYGFS APKDOQVVTA VEYQEAILAC KTPKKTVSSR 60  
 LEWKKLGRSV SFVYYQQLTQ GDFKNRAEMI DFNIRIKNVT RSDAGKYRCE VSAPSEQGQN 120  
 LEEDTVTLEV LVAPAVPSCV VPSSALSGTV VELRCQDKEG NPAPEYTWFK DGIRLLENPR 180  
 LGSQSTNSSY TMTKTGTGLQ FNTVSKLDTG EYSCEARNSEV GYRRCPCGRM QVDDLNISGI 240  
 IAAVVVVALV ISVCGLGVCY AQRKGYFSKE TSFQKSNSSS KATTMSENDF KHTKSFFII

25 DNA sequence 13  
 Gene name: solute carrier family 11 (proton-coupled divalent metal ion  
 Unigene number: Hs.182611  
 Probeset Accession #: D50402  
 Nucleic Acid Accession #: NM\_000578  
 Coding sequence: 1-1653

30 1 11 21 31 41 51  
 | | | | |  
 35 ATGACAGGTG ACAAGGGTCC CCAAAGGCTA AGCGGGTCCA GCTATGGTTC CATCTCCAGC 60  
 CCGACCAGCC CGACCAGCCC AGGGCCACAG CAAGCACCTC CCAGAGAGAC CTACCTGAGT 120  
 GAGAAGATCC CCATCCCGA CACAAAACCG GGCACCTTCA GGCTGCGGAA GCTATGGGCC 180  
 TTCACGGGGC CTGGCTTCCT CATGAGCATT GCTTTCCTGG ACCCAGGAAA CATCGAGTCA 240  
 GATCTTCAGC TNGGNCNCT GCGGGGATTC AAACCTCTCT GGGTGTGCTCT CTGGGCCACC 300  
 GTGTGTGGCT TGCTCTGCCA GCGACTGGCT GCACGTCTGG GGTGTGTGAC AGGCAAGGAC 360  
 TTGGGCGAGG TCTGCCATCT CTAATACCTT AAGGTGCCCC GCACCGTCTCT CTGGCTGACC 420  
 ATCGAGCTAG CCATTGTGGG CTCCGACATG CAGGAAGTCA TCGGCACGCG CATTGCATTG 480  
 AATCTGTCTCT CAGCTGGACG AATCCCACTC TGGGGTGGCG TCCTCATCAC CATCGTGGAC 540  
 ACCTTCTTCT TCCTCTCTCT CGATAACTAC GGGCTCGCGA AGCTGGAAGC TTTTITTTGA 600  
 CTCCTTATAA CCATTATGGC CTTGACCTTT GGCTATGAGT ATGTGGTGGC GCGTCTTGAG 660  
 CAGGGAGCGC TTCTTCGGGG CTTGTTCCTG CCCTCGTGCC CGGGCTGCGG CCACCCCGAG 720  
 CTGCTGCGAG CGGTGGGCAT TGTGTGGGCC ATCATCATGC CCCACAACAT CTACCTGCAC 780  
 TCGGCCCTGG TCAAGTCTCG AGAGATAGAC CGGGCCCGCC GAGTCGACAT CAGAGAAGCC 840  
 AACATGTACT TCCTGATTGA GGCCACCATC GCCTCTGCCG TCTCTTTTAT CATCAACCTC 900  
 TTTGTATGCG CTGCATTGG GCAGGCCCTT TACCAGAAAA CCAAGCAGCG TCGCTTCAAC 960  
 ATCTGTGCCA ACAGCAGCCT CCAAGACTAC GCTAAGATCT TCCCCATGAA CAAGCCACCC 1020  
 50 GTGGCCGTGG ACATTTACCA GGGGGGCGTG ATCCTGGGCT GCCTGTTCGG CCCGCGGCC 1080  
 CTCTACATCT GGGCCATAGG TCTCCTGGCG GCTGGGCGAG GCTCCACCAT GACGGGCACC 1140  
 TACGCGGGAC AGTTCGTGAT GGAGGGCTTC CTGAGGCTGC GGTGTGCAAG CTTCGCCCGT 1200  
 GTCCCTCTCA CCGCTCTCTG CGCCATCCTG CCCACCGTGC TCGTGCGCTG CTTCGGGGAC 1260  
 CTGAGGCACT TGTCGGGCTT CAATGATCTG CTCAGCGTGC TGCAGAGCCT GCTGCTCCCG 1320  
 55 GTTGCCGTGC TGCCCATCTT CACGTTTACC AGCATGCCCA CCTCATGCA GAGGTTTGCC 1380  
 AATGGCCCTG TGAACAAGST CGTCACCTCT TCCATCATGG TGCTAGTCTG CACCATCAAC 1440  
 CTCTACTTGG TGGTCAGCTA TCTGCCCAGC CTGCCCCACC CTGCCTACTT CGGCCCTTGA 1500  
 GCCTTGCTGG CCGCAGCCTA CTTGGGCCTC AGCACCTACC TGGTCTGGAC CTGTTGCCTT 1560  
 60 GCCCACGGAG CCACCTTTCT GGCCACAGC TCCACACACC ACTTCTGTGA TGGGCTCCTT 1620  
 GAAGAGGACC ACAAGGGGA GACCTCTGGC TAG

Protein sequence 13  
 Gene name: solute carrier family 11 (proton-coupled divalent metal ion transporters), member 1  
 Unigene number: Hs.182611  
 Protein Accession #: NP\_000569  
 Signal sequence: none found  
 Pfam domain: Nramp [78-463]  
 Transmembrane domains: 58-80, 88-110, 159-181, 195-217, 284-306, 349-379, 394-416, 432-454, 468-490, 501-523  
 Cellular Localization: plasma membrane

70 1 11 21 31 41 51  
 | | | | |  
 75 MTGDKGPQRL SGSSYGSISS PTSPSPGPQ QAPPRETYLS EKIPIPDTKP GTFRLRLKWA 60  
 FTGGPFLMSI AFLDPGNIES DLQLGPFVAG KLLVLLWAT VLGLLCQRLA ARLGVVTGKD 120  
 LGEVCHLYYP KVPRTVLWLT IELAIVGSDM QEVIGTAIAF NLLSAGRIPL WGGVLITIVD 180  
 TFFFLFLDNY GLRKLEAFPG LLITIMALTF GYEYVVARPE QGALLRGLFL PSCPCCGHP 240  
 LLQAVGIVGA IIMPHNIYLH SALVKSREID RARRVDIREA NMYFLIEATI ALSVSPFIINL 300  
 FVMAAFGQAF YQKTKQAAPN ICANSSLHDY AKIFPMNNAT VAVDIYQGGV ILGCLFGPAA 360  
 LYIWAIGLLA AGQSSMTTCT YAGQFVMEGF LRLRWSSFAR VLLTRSCAIL PTVLVAVERD 420  
 80 LRDLSGLNDL LNVLSQLLLP VAVLPILTFT SMPTLMQEFN NGLLNKVVTS SIMVLVCTIN 480  
 LYFVVSYLPS LPHPAYFGLA ALLAAAYLGL STYLVWTCCL AHGATFLAHS SHHFLYGLL 540  
 EEDHKGETSG

DNA sequence 14  
 Gene name: solute carrier family 7 (cationic amino acid transporter, y+)

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PCT/US02/29560

Unigene number: Hs.184601

Probeset Accession #: AF104032

Nucleic Acid Accession #: NM\_003486

Coding sequence: 53-1576

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TGCGGGCCCC AAGCGGCGCG CGCTAGCGCG GCCGGCGGCC GAGGAGAAGG AAGAGGCGCG 120
GGAGAAGATG CTGGCCGCCA AGAGCGCGGA CGGCTCGGCG CGGCGAGGCG AGGGCGAGGG 180
CGTGACCCCTG CAGCGGAACA TCACGCTGCT CAACGGCGTG GCCATCATCG TGGGGACCAT 240
TATCGGCTCG GGCATCTTCG TGACGCCAC GGGCGTGCTC AAGGAGGCG GCTCGCGGG 300
GCTGGCGCTG GTGGTGTGGG CCGGTGCGG CGTCTTCTCC ATCGTGGGCG CGCTCTGCTA 360
CGCGGAGCTC GGCACCACTA TCTCCAAATC GGGCGGCGAC TACCCCTACA TGCTGGAGGT 420
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CTGCCCGGTG CCGGAGGAGG CAGCCAAGCT CGTGGCCTGC CTGTGCGTGC TGCTGCTCAC 600
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CRAAGTCTCTG GCCCTGGCCC TGATCATCCT GCTGGGCTTC GTCCAGATCG GAAAGGGTGA 720
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CACAGAGGAA ATGATCAACC CCTACAGAAA CCTGCCCTCG GCCATCATCA TCTCCCTGCC 900
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GTCTGTGATC ATCCCCGCTC TCGTGGCCCT GTCCGTGCTT GGCTCCGTCA ATGGGTCCCT 1080
GTTTCACATC TCCAGGCTCT TCTTCGTGGG GTCCCGGAA GGCCACCTGC CCTCCATCCT 1140
CTCCATGATC CACCCACAGC TCCTCACCCC CCGCCCGTCC CTCGTGTTC ACGTGTGTGAT 1200
GACGTGTCTC TAGCCTTCTC CCAAGGACAT CTCTCCGTG ATCAACTTCT TCAGCTTCTT 1260
CACTGGCTC TGCGTGGCCC TGGCCATCAT CGGCATGATC TGGCTGCGCC ACAGAAAGCC 1320
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CCTCTTCCTG ATCGCGTCTC CCTTCTGGA GACACCGGTG GAGTGTGGCA TCGGCTTCAC 1440
CATCATCCTC AGCGGGCTGC CCGTCTACTT CTTCGGGGTC TGGTGGAAAA ACAAGCCCAA 1500
TTGGCTCCTC CAGGGCATCT TCTCCACGAC CGTCTGTGT CAGAAGCTCA TCAGGTGGT 1560
CCCCAGGAG ACATAGCCAG GAGGCCGAGT GGCTGCCGGA GGAGCATGC

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Protein sequence 14

Gene name: solute carrier family 7 (cationic amino acid transporter, y+

Unigene number: Hs.184601

Protein Accession #: NP\_003477

Pfam domain: aa permeases [46-481]

Transmembrane domains: 52-74, 82-104, 120-142, 145-167, 169-191, 200-222, 237-259, 275-297, 323-345, 371-393, 398-419, 430-452, 455-476

Cellular Localization: plasma membrane

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50  
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1      11      21      31      41      51
|      |      |      |      |      |
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GTIIGSGIFV TPTGVLKEAG SPGLALVVWA ACGVFSIVGA LCYAE LGTTI SKSGGDYAYM 120
LEVYGS LPAF LKLGWIELLII RPSSQYIVAL VFATYLLKPL FPTCPVPEEA AKLVACLVL 180
LLTAVNYSV KAATRVQDAF AAKLLALAL IILLGFVQIG KGDSVNLDPK FSFEGTKLDV 240
GNIVLALYSG LFAYGWNLYL NFVTEEMINP YRNLPLALII SLPIVTLVYV LTNLAYFTTL 300
STRQMLSSRA VAVDFGNVHL GVMSWIIPVF VGLSCFGSVN GSLFTSSRLF FVGSREGHLP 360
SILSMIHPQL LTPVPSLVFT CVMTLTYAFS KDIFSVINFF SFFNWLCLVAL AIIGMIWLRH 420
RKPELERPIK VNLALPVFFI LACLFELIAVS FWKTPVBCGI GFTIILSLPL VYFFGVWWKN 480
KPKWLLQGIF STTVLQQLKM QVVPEQT

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DNA sequence 15

Gene name: Glutamate receptor subunit

Unigene number: Hs.249141

Nucleic Acid Accession #: S40369

Coding sequence: 1-2943

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65  
70  
75  
80

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CGTCTGGCCT TGGCCTTGGC CCGGAGCAG ATCAACGGGA TCATCGAGGT CCCAGCCAG 180
CGCCGAGTGG AAGTAGACAT CTTTGAGCTG CAGCGGGACA GCCAGTACGA GACCACGGAC 240
ACCATGTGTG AGATCTTACC CAAAGGGGTT GTGTCTGTCC TTGGGCCCTC CTCTAGCCCA 300
GCATCTGCCT CCACCGTGAG CCATATCTGT GGAGAGAAGG AGATCCCCCA CATCAAGGTG 360
GGTCCCGAGG AGACACCCCG CCTTCAGTAC CTTGCTTCG CGTCTGTGAG CTGTATACCC 420
AGTAACGAGG ACGTCAGCTT GGCGGTCTCC CGAATCCTCA AGTCCTTCAA CTACCCCTCG 480
GCCAGCCTCA TCTGCCCAA GGCTGACTGC CTGCTCCGAT TGGAGGAAGT GGTGCGTGGC 540
TTCTCATCT CCAAGGAGAC GCTGTCAGTG AGGATGTTGG ACGACAGCGG GGACCCCA 600
CCACTGCTCA AGGAGATCCG TGATGACAAG GTGTCCACCA TCATCATCGA CGCCACCGCC 660
TCCATCTCCC ACCTCATCCT CCGTAAGGCC TCGGAACCTG GAATGACCTC AGCGTTTAC 720
AAGTACATCC TCACCACCAT GGACTTCCCC ATCCTGCATC TGGACGGTAT TGTGGAGGAC 780
TCCTCCAACA TCCTGGGCTT CTCCATGTTT AACACGTCCC ACCCTTCTTA CCTGAGTTT 840
TTCGCGAGCC TCAACATGTC CTGAGGGAG AACTGTGAAG CCAGCACCTA CCTGGGCCCT 900
GCGCTGCTCA CGCCCTGAT GTTTGACGCC GTGCACGTGG TGGTGAAGCG TGTCGAGAG 960
CTGAACCGCA GCCAGGAGAT CGGTGTGAAG CTTCTGGCCT GTACATCCGC CAACATTTCC 1020
CCCAACGGGA CCAAGCCTCAT GAACTACCTG CGCATGCTAG AGTATGATGG GCTGACCGGG 1080
CGGGTCTGCT TCAACAGCAA AGGGCAGAGA ACCAACTACA CCTGCGCAT CCTAGAAAAG 1140
TCCGCGCAGG GCCACCGTGA GATTGGGGTG TGGTACTCTA ACCGCAACCT GGCCATGAAT 1200
GCCACCAACC TGACATCAA CCTGTGCGAG ACACTGGCCA ACAAGACCTT GGTGGTCA 1260
ACCATCCTGG AGAACCCATA CGTCATGCGC CGGCCCAACT TCCAGGGCCT GTCGGGGAAC 1320
GAACGCTTCG AGGGCTTCTG CGTGACATG CTGCGGGAGC TGGCCGAGCT GCTGCCGTT 1380

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 ACCATCACAG CTGAGGGGGA GAAGGTTCATC GACTTTTCCA AGCCCTTTAT GACCCCTGGGG 1560  
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 CCCTTCTCCC CTGCTGTGTC GCTCTTCATG CTCTTGCCT ACCTGGCTGT CAGCTGCGTC 1680  
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 GCACGCCCCC ACATCTTGA GAACCACTAC ACGCTGGGCA ACAGCTGTGT GTTCCCGTG 1800  
 GGGGGCTTCA TGCAGCAGGG CTCGGAGATC ATGCCCGGG CGCTGTCCAC GCGCTGTGTC 1860  
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 10 GCCTTCTCTA CCGTGCAGCG CATGGAGGTG CCTGTGGAGT CGGCCGATGA CCTGGCAGAT 1980  
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 TTGTCGAAGA GCACAGAAGA GGGCATTGCC GCCGTCTCA ACTCCCGCTA CGCCTTCTTG 2160  
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 20 GTGGCGGTCA TGGAAATTCAT ATGGTCCACA CGGAGGTGAG CTGAGTCCGA GGAGGTGTG 2520  
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 TCCCGCCGGC GCCGACGCCG GGGCGGCCCG AGCCGGGCCG TGCTGTCACT GCGCGCGGTC 2640  
 CGCGAGATGC GCTTCAGCAA CGGCAAGCTC TACTCGGCCG GCGCGGGCGG GGATGCGGGC 2700  
 AGCGCGCACG GGGGCCGCGA CGCCTCCTG GACGACCCGG GGCCCCCAG CGGAGCCCGA 2760  
 25 CCGCGCGGCC CCACCCCTG CACCCACGTG CGCGTCTGCC AGGAGTCCCG GCGCATCCAG 2820  
 GCGCTGCGGG CCTGCGGGG CGGCGCGGCT CCGCGTGGCC TGGGCGTCCC CGCCGAAGCC 2880  
 ACCAGCCCGC CCGGCCCGG GCCTGGCCCC GCCGGCCCCG GGGAGCTGGC GGAGCACGAG 2940

TGA

30 Protein sequence 15  
 Gene name: Glutamate receptor subunit  
 Unigene number: Hs.249141  
 Protein Accession #: AAB22591  
 Signal sequence: 1-27  
 Pfam domain: ANF receptor [343-400];PBPe domain [416-785, 799-838]  
 35 Transmembrane domains: 297-319, 544-566, 624-646, 803-825  
 Cellular Localization: plasma membrane  
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 40 MPAEILLLLI VAFASPSQV LSSLRMAIL DDQTVCGRGE RLALALAREQ INGIIEVPAK 60  
 ARVEVDIEEL QRDQSYETTD TMCQILPKGV VSVLGPSSSP ASASTVSHIC GEKEIPHIKV 120  
 GPEBTPRLQY LRFASVSLYP SNEDVSLAVS RILKSNYPY ASLCAKAEC LLRLEELVRG 180  
 FLISKETLSV RMLDDSRDPT PLLKEIRDK VSTIIDANA SISHLILRKA SELGMTSAFY 240  
 KYILTTMDFP ILHLGIVED SSNLLGFSMF NTHPPYPEF VRSLNMSWRE NCEASTYLP 300  
 45 ALSAALMFDA VHVVSAYRE LNRSQEIGVK PLACTSANIW PHGTSMLNLY RMVEYDGLTG 360  
 RVEFNSKQQR TNYTRILEK SRQHREIGV WYSNRTLAMN ATTLDLINLSQ TLANKTLVVT 420  
 TILNPYVMR RPNFQGLSGN ERFEGFCVDM LRELAELLFP PYRLRLVEDG LYGAPENGS 480  
 WTCMVGELIN RKADLAVAAF TITAEREKVI DFKSPFMTLG ISILYRVHM RKPGYFSPLD 540  
 PFSPAVALFM LLAYLAVSCV LFLAARLSPY EWYNPHPCLR ARPHILENQY TLGNSLWFPV 600  
 GGFMQGSSEI MPRALSTRCV SGVWNAFTLI IISYNTANLA AFLTVQRMV PVESADLLAD 660  
 50 QTNIEYGTIH AGSTMTFFQN SRVQTVQRM NMQSKQPSV FVKSTEEGIA AVLNSRYAFL 720  
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 KWEWGRCPK EEDHRAKGLG MENIGGIFTV LICGLIIAVF VAVMEFIWST RNSAESEVS 840  
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 55 SAHGGFQRLR DDPGPPSGAR PAAPTPTCHV RVCQECRRIQ ALRASGAGAP PRGLGVPAEA 960  
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DNA sequence 16  
 Gene name: adenosine A3 receptor  
 60 Unigene number: Hs.258  
 Probeset Accession #: NM\_000677  
 Nucleic Acid Accession #: NM\_000677  
 Coding sequence: 768-1724  
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 65 ATCTTTGCTG CAAAGGCTGG GTATCGGCTG TGCTCAGCAA AGCGTCAACT CGTGCAAGAA 60  
 CTTAGCAGGA ATAGTTCTGG CTAAGGTTAG GAGGCTGCCA CCAAAGTCTC TTTTGTGTC 120  
 CTCTGCTTCT CCGTTTGGC TCTTATCAT GAGATCTTTT TGCTAAGCTG GCAGAAAGAT 180  
 TGCTAGTCA GTGCTTCCAG CTCTGCTCCC ACCTGATCCT GCACTGTCTC CTGTCCTTG 240  
 70 AATGAATGAA CTCTGATACC CAATCTGTG TCGAGCCTTC TCTATGCCAC TCATGGCTCC 300  
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 AAAAGCTGCA GGCAGAGGCG TTGAGGACAT CTGTTTGGGG AACTAAGAGC AGCAGCACTT 480  
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 75 CATAAAGGGG CTGGAAGTGA CCCACCTGTG ATGAGCCCTT TCTAAGGAGA AGGTTTCCA 600  
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TGAGTAAATA AAAGCTAATA G
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Protein sequence 16  
Gene name: adenosine A3 receptor  
Unigene number: Hs.258  
Protein Accession #: NP\_000668  
Signal sequence: none found  
Pfam domain: 7tm\_1 [29-282]  
Transmembrane domains: 12-34, 50-72, 86-108, 120-150, 179-201, 229-251  
Cellular Localization: plasma membrane

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VTTHRRWLWA LGLCWLVSLF VGLTPMFGWN MKLTSEYHRN VTFLSCQFVS VMRMVMVYF 180  
SFLTWIPIPL VVMCAIYLDI FYIIRNKLSL NLSNSKETGA FYGREPKTAK SLFLVLFLFA 240  
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DNA sequence 17  
Gene name: glypican 1  
Unigene number: Hs.2699  
Probeset Accession #: X54232  
Nucleic Acid Accession #: NM\_002081  
Coding sequence: 222-1898

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CCTGCCCTGA CTATTGCGGA AATGTGCTCA AGGGCTGCCT TGCCAACCCG GCCGACCTGG 1080  
ACGCCGAGTG GAGGAACCTC CTGGACTCCA TGGTGTCTAT CACCGACAAG TTCTGGGGTA 1140  
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CTCCAGAGA AGCCCGCAC GGGCTGTCTG GGTCTCGCC ATCCAGGGTC TGCAGAGCC 2400

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 GGAGGCAGCG TGGGCTCTGC CAATGTGGGC TGCCCCCTGC ACACAGGGCT CACAGGGCAG 2700  
 GCCTTGCTGG GGTCCAGGGC TGTGAGGGA CCGCAGGGC TGAGGAGCAG CCAGGACCCG 2760  
 CCTGCTCCCA TCCTCACCCA GATCAGGAAC CAGGCGCTCC CTGTTCA CGG TGACACAGGT 2820  
 CAGGGCTCAG AGTGACCTC GCTGTACAGG GATGCTGGTG GCTGGTGAGA 2880  
 CCGCGCACAT CACACGGGAA TGCTAGGTG CCTTCCCGAC CCAGCCAGCT GCACTGCAGG 2940  
 10 GCACGGGAGC CTGGATAGTT AAGGGCTTTT CCAAACATGC ATCCATTAC TGACACTTCC 3000  
 TGTCTTGTT CATGGAGAGC TCTTCCCTCC TCCCAGATGG CTTCGGAGGC CCGCAGGGCC 3060  
 CACCTTGGAC CCTGGTGACC TCCTGTCACT CACTGAGGCC ATCAGGGCCC TGCCCCAGGC 3120  
 CTGGACGGGC CTTCTCTCCC TCCTGTGCCC CAGCTGCCAG GTGGCCCTGG GGAGGGGTGG 3180  
 TGTGGTGTG GGAAGGGGTC CTGCAGGGGG AGGAGGACTT GGAGGGTCTG GGGGCAGCTG 3240  
 15 TCCTGAACCG ACTGACCCCT AGGAGGCGC TTAGTGCTGC TTTGCTTTT ATCACCGTCC 3300  
 CCGACAGTGG ACGGAGGTCC CCGGTTGCTG GTCAGGTCCC CATGCTTTG TCTCTGGAAC 3360  
 CTGACTTTAG ATGTTTGGG ATCAGGAGCC CCAACACAG GCAAGTCCAC CCCATAATA 3420  
 CCCTGCCAGT GCCAGGGTGG GCTGGGACT CTGGCACAGT GATGCCGGC GCCAGGACAG 3480  
 CAGCACTCCC GCTGCACACA GACGCGCTAG GGTGCGCT CAGACCCAC CCTACGCTCA 3540  
 20 TCTCTGGAAG GGGCAGCCCT GAGTGGTCAC TGGTCAGGCG AGTGCCCAAG CTGCTGTGT 3600  
 CCTTCCTCCA CAGGTGCCC CCACCGCTCA GTGTCAGCGG GTGACGTGTG TTCCTTTGAG 3660  
 TCCTTGATG AATAAAGGC TGGAAACCTA AA

25 Protein sequence 17  
 Gene name: glypican 1  
 Unigene number: Hs.2699  
 Protein Accession #: NP\_002072  
 Signal sequence: none found  
 Pfam domain: Glypican protein [2-490]  
 30 Transmembrane domains: none found  
 Cellular Localization: plasma membrane  
 1 11 21 31 41 51  
 | | | | | |  
 35 MELRARGWWL LCAAAALVAC ARGDPASKSR SCGEVRQIYG AKGFSLSDVP QAEISGEHLR 60  
 ICPQGYTCT SEMEENLANR SHAELETALR DSSRVLQAML ATQLRSFDDH FOHLNDSE 120  
 TIQATFPFAG GELYTONARA FRDLYSELRL YYRGANLHLE ETLAEFWARL LERLFKQLHP 180  
 QLLLPDDYLD CLGKQAEALR PFGEAPREL RLRATRAVAA RSEVQGLGVA SDVVRKVAQV 240  
 PLGPBESRAV MKLVYCAHCL GVPGARPCPD YCRNVKGCCL ANQADLDAEW RNLLDSMVLI 300  
 TDKFWGTSGV ESIVGSVHTW LAEAINALQD NRDTLTAKVI QCGGNPKVNP QGPGPEEKRR 360  
 40 RGLAERERP PSGTLEKLVS EAKAQLRDVQ DFWISLPGTL CSEKMALSTA SDDRCWNGMA 420  
 RGRYLEPEVMS DGLANQINNP EVEVDITKPD MTIRQQIMQL KIMTNRLRSA YNGNDVDVFD 480  
 ASDDGSGSGS

45 DNA sequence 18  
 Gene name: NY-REN-24 antigen  
 Unigene number: Hs.128425  
 Nucleic Acid Accession #: AF155102  
 Coding sequence: 27-908  
 1 11 21 31 41 51  
 | | | | | |  
 50 GCGAGGGCGA GGGCGAGGCG GTGCTCATGG AGGAGGACCT GATCCAGCAG AGCCTGAGCG 60  
 ACTACGACGC CGGCAGGTAC AGCCCGCGGC TGCTCACGGC GCACGAGCTG CCCTGGAGCG 120  
 CGCAGCTGCT GGAACCGGAT GAGGACCTGC AGCGCCTGCA GCTCTCGGCC CAGCAGCTCC 180  
 AGGTACCGGG AGACGCCAGC GAGAGCGCCG AGGACATCTT CTTCGGCGCG GCCAAGGAGG 240  
 55 GCATGGGCCA GGACGAGGCG CAGTTCAGCG TGGAGATGCC ACTCACCGGC AAGGCTTACC 300  
 TGTGGGCCGA CAAGTACCGG CCACGCAAGC CGGCTTCTT CAACCGCGTG CACACGGGCT 360  
 TCGAGTGAAC CAAGTACAAC CAGACGCACT ACGACTTTGA CAACCCACCG CCCAAGATCG 420  
 TGCAGGGATA CAAGTTCAAC ATCTTCTACC CCGACCTCAT CGACAAGCGC TCCACGCGCG 480  
 AGTACTTCTT GGAGGCGCTG GCCACAACA AGGATTTCGC CATCTGCGC TTCACGCGCG 540  
 60 GCGCGCTACG AGGACATCGC TTTCAAGATC GTCACCGCG AGTGGGAATA CTCGCACCGC 600  
 CACGCGTTCC GCTGCCAGT TGCCACGGC ATCTTCCAGC TGTGCTTTCA CTTCAAGCGC 660  
 TACCGCTATC GCGGTGAGC GCCCTGGGGC ACGGAGGGCC AGGAGGGCCG AGGGCCACAC 720  
 GGGTGCCACA GCCCAGGTG GAGTGGCCCA GCGGCGAGGC TTGTTCTTCA GCATCCGACG 780  
 GGAACATCTC CAACAGAGC AAAACGGAAA GTGCCTCCCG GACCCCCAGA GGGCCACCCA 840  
 65 ACCTCACCAG TCACGAGCCC CAGACCACCC ACAGCCCTC CCAGACACCC CGCCTCATCT 900  
 GGAAATAGTT CCGTTTGTTT CTCTAAAAAG ACTTGTAGGT GGGAAAAAAA ATCTTTTGT 960  
 CTCATGGAAT TGGCTATTG GCAAGATCGC ATGTTTTTTT AATAAACGTT GTATTTTAGA 1020  
 ATAAAA

70 Protein sequence 18  
 Gene name: NY-REN-24 antigen  
 Unigene number: Hs.128425  
 Protein Accession #: AAD42868  
 Signal sequence: none found  
 75 Transmembrane domains: none found  
 Cellular Localization: plasma membrane  
 1 11 21 31 41 51  
 | | | | | |  
 80 GEGEAVLME EDLIQQSLDD YDAGRYSPLR LTAHELPLDA HVLEPDLDLQ RLQLSRQQLQ 60  
 TGDASESAE DIFFRRAKEG MQQDEAQFSV EMPLTGKAYL WADKYRPRKP RFFNRVHTGF 120  
 WNKYNQTHY DFDNPPPKIV QGYKFNIFYP DLIDKRSTPE YFLEACADNK DFAILRFTRG 180  
 LRQHRFQDR QPRVGILAPP RLPLPVCQRH LPAVLSLQAL PLSAVTALGN GRPGGPATR 240  
 PQPRSEWPS RQACSSASDG NISNRSKTES ASRTPRPPN LTSHQPQTH SPSQTPRLIW 300



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PCT/US02/29560

## DNA sequence 19

Gene name: tumor necrosis factor receptor superfamily, member 1A

Unigene number: Hs.159

Probeset Accession #: BE295782

Nucleic Acid Accession #: NM\_001065

Coding sequence: 256-1623

```
1      11      21      31      41      51
|      |      |      |      |      |
CGGCCAGTG ATCTTGAACC CCAAAGGCCA GAACTGGAGC CTCAGTCCAG AGAATTCTGA 60
GAAAAATTAA GCAGAGAGGA OGGGAGAGAT CACTGGGACC AGGCCGTGAT CTCATGCCCC 120
GAGTCTCAAC CCTCAACTGT CACCCCAAGG CACTTGGGAC GTCTGGGACA GACCGAGTCC 180
CGGGAAGCCC CAGCACTGCC GCTGCCACAC TGCCTTGAGC CCAAATGGGG GAGTGAGAGG 240
CCATAGCTGT CTGGCATGGG CCTCTCCACC GTGCCTGACC TGCTGCTGCC GCTGGTGCTC 300
CTGGAGCTGT TGGTGGGAAT ATACCCCTCA GGGGTTATTG GACTGGTCCC TCACCTAGGG 360
GACAGGGAGA AGAGAGATAG TGTGTGTCCC CAAGGAAAT ATATCCACCC TCAAAATAAT 420
TCGATTGTCT GTACCAAGTG CCACAAAGGA ACCTACTTGT ACAATGACTG TCCAGGCCCG 480
GGCAGAGATA CGGACTGCAG GGAGTGTGAG AGCGGCTCCT TCACCGCTTC AGAAAACCCAC 540
CTCAGACACT GCCTCAGCTG CTCCAAATGC CGAAAGGAAA TGGGTCAAGT GGAGATCTCT 600
TCTTGACACG TGGACCGGGA CACCGTGTGT GGCTGCAGGA AGAACCAGTA CCGGCATTAT 660
TGAGAGTAAA ACCTTTTCCA GTGCTTCAAT TGCAGCCTCT GCCTCAATGG GACCGTGCAC 720
CTCTCTGTCC AGGAGAAACA GAACACCGTG TGCACCTGCC ATGCAGGTTT CTTTCTAAGA 780
GAAACCGAGT GTGTCTCCTG TAGTAACGTG AAGAAAAGCC TGGAGTGCAC GAAGTTGTGC 840
CTACCCACGA TTGAGATATG TAAGGGCACT GAGGACTCAG GCACCACAGT GCTGTTGCC 900
CTGGTCAATT TCTTGGTCTT TTGCTTTTTC TCCTCTCTCT TCATTGGTIT AATGTATCGC 960
TACCAACGCT GGAAGTCCAA GCTCTACTCC ATTGTTTGTG GGAATCCGAC ACCTGAAAAA 1020
GAGGGGGACC TTGAAGGAAC TACTACTAAG CCCCTGGGCC CAAACCCAGC CTTCAGTCCC 1080
ACTCCAGGCT TCACCCCCAC CTGGGGCTTC AGTCCCGTGC CCAGTTCCAC CTTCACCTCC 1140
AGCTCCACCT ATACCCCCGG TGACTGTCCC AACTTTGGGG CTCCCGCAG AGAGGTGGCA 1200
CCACCTTATC AGGGGGCTGA CCCATCCTT GGCACAGCCC TCGCTCCGA CCCCATCCCC 1260
AACCCTCTTC AGAAGTGGGA GGACAGCGCC CACAAGCCAC AGAGCCTAGA CACTGATGAC 1320
CCCGCGACGC TGTACGCCGT GTTGGAGAAC GTGCCCCCGT TGGCTGGAA GGAATTCGTG 1380
CGGCGCCTAG GGCTGAGCGA CCACGAGATC GATCGGCTGG AGCTGCAGAA CGGCGCCTGC 1440
CTGCGGAGG CGCAATACAG CATGCTGGCG ACCTGGAGGC GGCGCACGCC CGGCGCGAG 1500
GCCACGCTGG AGCTGTCTGG ACGCTGTCTC CGCGACATGG ACCTGCTGGG CTGCTGAG 1560
GACATCGAGC AGGCGCTTTG CGCCCCCGCC GCCCTCCCGC CCGCGCCAG TCTTCTCAGA 1620
TGAGGCTGCT CGGCTGCGGG CAGCTCTAAG GACCGTCTGT CGAGATCGCC TTCCAAACCC 1680
ACTTTTTTCT GGAAGGAGG GTTCTGTCAG GGGCAAGCAG GAGCTAGCAG CCGCCTACTT 1740
GGTGCTAACT CCTCGATGTA CATAGCTTTT CTCAGCTGCC TGGCGCGCGC GCACAGTCAG 1800
CGCTGTGCGC GCGGAGAGAG GTGCGCCGTG GGCTCAAGAG CCTGAGTGGG TGGTTTGCAG 1860
GGATGAGGGA CGCTATGCCT CATGCCCGTT TTGGGTGTCC TCACCAAGCA GGCTGCTCGG 1920
GGCGCCCTGG TTCGTCCCTG AGCCTTTTTC ACAGTGCATA AGCAGTTTTT TTTGTTTTTG 1980
TTTTGTTTTG TTTTGTTTTT AAATCAATCA TGTTACACTA ATAGAACTT GGCACCTCTG 2040
TGCCCTCTGC CTGGACAAGC ACATAGCAAG CTGAAGTGTG CTAAGGCAGG GCGGAGCACG 2100
GAACAATGGG GCCTTCAGCT GGAGCTGTGG ACTTTGTGAC ATACACTAAA ATTCTGAAGT 2160
T
```

## Protein sequence 19

Gene name: tumor necrosis factor receptor superfamily, member 1A

Unigene number: Hs.159

Protein Accession #: NP\_001056

Signal sequence: 1-29

TNFR domain: 44-81, 84-125, 127-166, 168-195

Transmembrane domains: 211-234

Cellular Localization: plasma membrane

```
1      11      21      31      41      51
|      |      |      |      |      |
MGLSTVPDLL LPLVLELLV GIYPSCVIGL VPHLGDREKR DSVCPQKKYI HPQNNISICT 60
KCHKGYLYN DCPGPGQD TD CRECESGSFT ASENHLRHCL SCSKCRKEMG QVEISSCTVD 120
RDTVCGRKN QYRHYWSEN L FQCFNCSLCL NGTVHLSQEE KQNTVCTCHA GFFLRENECV 180
SCSNCKKSL E CTKLCLPQIE NVKGTEDSGT TVLLPLVIFL GLCLLSLLFI GLMYRYQRWK 240
SKLYSIVCGK STPEKEGELE GTTTKPLAPN PSFSPTPGFT PTLGFSFVPS STFTSSSTYT 300
PGDCPNFAAP RREVAPPYQG ADFILATALA SDPIPNPLQK WEDSAHKPQS LDTDDPATLY 360
AVVENVPPLR WKEFVRLGL SDHEIDRL EL QNGRCLREAQ YSMLATWRRR TPRREATLEL 420
LGRVLRDMDL LGCLEDEIEB LCGPAALPPA PSLLR
```

## DNA sequence 20

Gene name: prominin (mouse)-like 1

Unigene number: Hs.112360

Probeset Accession #: R40057

Nucleic Acid Accession #: NM\_006017

Coding sequence: 38-2635

```
1      11      21      31      41      51
|      |      |      |      |      |
CCAAGTTCTA CCTCATGTTT GGAGGATCTT GCTAGCTATG GCCCTCGTAC TCGGCTCCCT 60
GTTGCTGCTG GGGCTGTGCG GGAACCTCCTT TTCAGGAGGG CAGCCTTCAT CCACAGATGC 120
TCCTAAGGCT TCGAATTATG AATTGCCTGC AACAAATTAT GAGACCCAAG ACTCCCAATA 180
AGCTGGAGCC ATTTGGCATT TCTTTGAACT AGTGCAATAT TTTCTCTATG TGGTACAGCC 240
CGGTGATTTC CCAGAAGATA CTTTGAGAAA ATTCTTACAG AAGGCATATC AATCCAAAAT 300
TGATTATGAC AAGCCAGAAA CTGTAATCTT AGGTCTAAAG ATTGTCTACT ATGAAGCAGG 360
GATTATTCTA TGCTGTGTCC TGGGGCTGCT GTTTATTATT CTGATGCCTC TGGTGGGGTA 420
TTTCTTTTGT ATGTGTCTGT GCTGTAACAA ATGTGGTGGG GAAATGCACC AGCCACAGAA 480
GGAAAATGGG CCCTTCTCTG GGAATGCTT TGCAATCTCC CTGTTGGTGA TTTGTATAAT 540
AATAAGCATT GGCATCTTCT ATGGTTTTGT GGCAATCAC CAGGTAAGAA CCGGATCAA 600
AAGGAGTCGG AAATGCGCAG ATAGCAATTT CAAGGACTTG CGAAGCTCT TGAATGAAAC 660
```

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5 TCCAGAGCAA ATCAAATATA TATTGGCCCA GTACAACACT ACCAAGGACA AGGCGTTCAC 720  
 AGATCTGAAC AGTATCAATT CAGTGCTAGG AGCGGGAATT CTGACCGAC TGAGACCCAA 780  
 CATCATCCCT GTTCTTGATG AGATTAAATC CATGGCAACA GCGATCAAGG AGACCAAAGA 840  
 GCGGTGGAG AACATGAACA GCACCTTGAA GAGCTTGAC CAACAAAGTA CACAGCTTAG 900  
 CAGCATCTG ACCAGCGTGA AAACCTAGCCT GCGGTCTATCT CTCAATGACC CTCTGTGCTT 960  
 GGTGCATCCA TCAAGTGAAG CCTGCAACAG CATCAGATTG TCTCTAAGCC AGCTGAATAG 1020  
 CAACCTTGAA CTGAGGCAGC TTCACCCGT GATGTCAGAA CTGACAAACG TTAATAACGT 1080  
 TCTTAGGACA GATTTGGATG GCCTGGTCCA ACAGGGCTAT CAATCCCTTA ATGATATACC 1140  
 TGACAGATCA CAACGCCAAA CCACGACTGT CGTAGCAGGT ATCAAAAGGG TCTTGAATTC 1200  
 CATTTGGTTC GATATCGACA ATGTAACTCA GCGTCTTCTT ATTACAGATA TACTCTCAGC 1260  
 ATTCTCTGTT TATGTTAATA AACTGAAAG TTACATCCAC AGAAATTTAC CTACATTGGA 1320  
 AGAGTATGAT TCATACTGGT GGCCTGGTGG CCTGGTCATC TGCTCTCTGC TGACCTCAT 1380  
 CGTGATTGTT TACTACTGGT GCTTACTGTG TGGCGTGTGC GGCTATGACA GGCATGCCAA 1440  
 CCGGACCACC CGAGGCTGTG TCTCCAACAC CGGAGGCGTC TTCTCTATGG TTGGAGTTGG 1500  
 15 ATTAAGTTTC CTCTTTTGGT GGTATTTGAT GATCATTGTG GTTCTTACCT TTGTCTTTGG 1560  
 TGCAATGTG GAAAACTGA TCTGTGAACC TTACACGAGC AAGGAATTAT TCCGGGTTTT 1620  
 GGATACACCC TACTTACTAA ATGAAGACTG GGAATACTAT CTCTCTGGGA AGCTATTTAA 1680  
 TAAATCAAAA ATGAAGCTCA CTTTGAACA AGTTTACAGT GACTGCMMAA AAAATAGAGG 1740  
 CACTTACGGC ACTCTTACC TGCAGAACAG CTTCAATATC AGTGAACATC TCAACATTAA 1800  
 20 TCAGCATACT GGAAGCATAA GCAGTGAATT GGAAAGTCIG AAGGTAAATC TTAATATCTT 1860  
 TCTGTTGGGT GCAGCAGGAA GAAAAAACCT TCAGGATTTT GCTGCTTGTG GAATAGACAG 1920  
 AATGAATTAT GACAGCTACT TGGCTCAGAC TGGTAAATCC CCGCAGGAG TGAACTTTTT 1980  
 ATCATTTGAT TACTAGCTAG AAGCAAAAGC AAACAGTTTG CCGCCAGGAA ATTIGAGGAA 2040  
 CTCCCTGAAA AGAGATGCAC AAATATTAA AACAAATCAC CAGCAACGAG TCCTTCTCTAT 2100  
 25 AGAACAAATCA CTGAGCACTC TATACCAAAG CGTCAAGATA CTTCAACGCA CAGGGAATGG 2160  
 ATTGTTGGAG AGAGTAACTA GGATTTCTAGC TTCTCTGGAT TTTGCTCAGA ACTTCATCAC 2220  
 AAACAATACC TCCTCTGTGA TTATTGAGGA AACTAAGAAG TATGGGAGAA CAATAATAGG 2280  
 ATATTTTGAA CATTAATCTGC AGTGGATCGA GTTCTCTATC AGTGAGAAAG TGGCATCGTG 2340  
 CAAACCTGTG GCCACCGCTC TAGATACTGC TGTGTATGTC TTTCTGTGTA GCTACATTAT 2400  
 30 CGACCCCTTG AATTGTGTTT GGTTTGGCAT AGGAAAAGCT ACTGTATTTT TACTTCCGGC 2460  
 TCTAATTTTG CCGGTAAGAA TGGCTAAGTA CTATCGTCGA ATGGATTCCG AGGACGTGTA 2520  
 CGATGATGTT GAAACTATAC CCATGAAAAA TATGGAAAAA GGTAAATAATG GTTATCATAA 2580  
 AGATCATGTA TATGTTATTC ACAATCCTGT TATGACMAAG CCATCACAAC ATTGATAGCT 2640  
 35 GATGTTGAAA CTGCTTGAGC ATCAGGATAC TCAAAGTGA AAGGATCACA GAITTTTGGT 2700  
 AGTTTCTGGG TCTACAAGGA CTTTCCAAT CCAGGAGCAA CGCCAGTGGC AACGTAGTGA 2760  
 CTCAGGCGGG ACCCAAGGCA ACGGCACCAT TGGTCTCTGG TAGTGCTTTT AAGAATGAAC 2820  
 ACAATCACGT TATAGTCCAT GGTCCATCAC TATTCAAGGA TGACTCCCTC CCTTCCGTGC 2880  
 TATTTTGTGT TTTTACTTTT TTACTCTGAG TTTCTATTTA GACACTACAA CATATGGGGT 2940  
 40 GTTTGTTCCT ATTGGATGCA TTTCTATCAA AACTCTATCA AATGTGATGG CTGATTCTTA 3000  
 ACATATTGCC ATGCTGGGAG TGTGCTGAAC ACACACCACT TTACAGGAAA GATGCATTTT 3060  
 GTGTACAGTA AACCGTGAT ATACCTTTTG TTACCACAGA GTTTTTTAAA CAATGAGTA 3120  
 TTATAGGACT TTCTTCTAAA TGAGCTAAAT AAGTCAACAT TGACTTCTTG GTGCTGTGTA 3180  
 AAATAATCAA TTTTCACTAA AAGTGTGTGA AACCTACAGC ATATTCTTCA CCGCAGAGAT 3240  
 45 TTTCTTATT ATACTTTATC AAAGATTGAC CATGTTCCAC TTGGAATGAG CATGCAAAAG 3300  
 CCATCATAGA GAAACCTGCG TAACTCCATC TGACAAATTC AAAGAGAGGA GAGAGATCTT 3360  
 GAGAGAGAAA TGCTGTTCTG TCAAAAGTGG AGTTGTTTGA ACAGATGCCA ATTACGGTGT 3420  
 ACAGTTTAAAC AGAGTTTTCT GTTGCAATTG GATAAACATT AATTGGAGTG CAGCTACAT 3480  
 GAGTATCATC AGACTAGTAT CAAGTGTCTT AAAATGAAAT ATGAGAAGAT CCTGTCACAA 3540  
 50 TTCTTAGATC TGGTGTCCAG CATGGATCAA ACCTTTGAGT TTGGTCCCTA AATTGTCATG 3600  
 AAAGCACAGG GTAAATATTC ATTGTCTTCA GGAGTTTCAT GTTGGATCTG TCATTATCAA 3660  
 AAGTGATCAG CAATGAAGAA CTGCTCGGAC AAAATTTAAC GTTGATGTAA TGAATTCCCA 3720  
 GATGTAGGCA TTCCCCCAGC GTCTTTTCAT GTGCAGATTG CAGTTCTGAT TCATTTGAAT 3780  
 AAAAGGAAC TTGGC

55 Protein sequence 20  
 Gene name: prominin (mouse)-like 1  
 Unigene number: Hs.112360  
 Protein Accession #: NP\_006008  
 Signal sequence: 1-21  
 60 Transmembrane domains: 105-127, 157-179, 438-460, 482-504, 784-806  
 Cellular Localization: plasma membrane  
 1 11 21 31 41 51  
 | | | | |  
 65 MALVLGSLLL LGLCQNSFSG QPSSTDAPK AWNYELPATN YETQDSHKAG PIGILFELVH 60  
 IFLYVQPRD FPEDTLRKFL QKAYESKIDY DKPETVILGL KIVYYEAGII LCCVLGLLFI 120  
 ILMPLVGYFF CMCRCCNKG GEMHQKQEN GPFLRKCFAI SLLVICIIIS IGFYGFVAN 180  
 HQVRLRIKRS RKLADSNFKD LRTLNETPE QIKYILAQYN TKDKAFTDL NSINSVLGGG 240  
 ILDRLRPNII FVLDEIKSMA TAIKETKEAL ENMNSTLKS L HQQSTQLSSS LTSVKTSLRS 300  
 70 SLNDPLCLVH PSSETCNSIR LSLSQLNSNP ELRLPVPDA ELDNVNNVLR TDLGLVQQG 360  
 YQSLNDIPDR VQRQTTTVVA GIKRVLNSIG SDIDNVQRL PIQDILSAFS VYVNNTESYI 420  
 HRNLPTELEY DSYWMLGLV ICSLLTLIVI FYYLGLLGGV CGYDRHATPT TRGCVSNTGG 480  
 VFLMWGVGLS FLCWILMII VVLTFFVFGAN VEKLICEPYT SKELFRVLDL PYLLNEDWEY 540  
 YLSGKLFNKS KMKLTFEQVY SDCKKNRGTY GTLHLQNSFN ISEHLNINEH TGSISSELES 600  
 LKVNINLIFLL GAAGRNLQD FAACGIDRMN YDSYLAQTKG SPAGVNLLSF AYDLEAKANS 660  
 75 LPPGNLRNLS KRDAQTIKTI HQORVLPBQ SLSTLYQSVK ILQRTGNGLL ERVTRILASL 720  
 DPAQNFIITNN TSSVIIETEK KYGRITIGYF EHYLQWIEFS ISEKVASCCKP VATALDTAVD 780  
 VFLCSYIIDP LNLFWFGICK ATVFLPALI FAVKLAKYR RMDSEDVYDD VETIPMKAME 840  
 NGNNGYHKDH VYGIHPVMT SPSQH

80 DNA sequence 21  
 Gene name: G protein-coupled receptor 39  
 Unigene number: Hs.85339  
 Nucleic Acid Accession #: NM\_001508  
 Coding sequence: 1-1362

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PCT/US02/29560

1 11 21 31 41 51  
 | | | | |  
 ATGGCTTCAC CCAGCCTCCC GGCAGTGAC TGCTCCCAA TCATTGATCA CAGTCATGTC 60  
 CCCGAGTTTG AGGTGGCCAC CTGCATCAA ATCACCTTA TTCTGGTGT CCTGATCATC 120  
 5 TTCTGTATGG GCGTTCTGGG GAACAGCGCC ACCATTCCGG TCACCCAGGT GCTGCAGAAG 180  
 AAAGGATACT TGCAGAAAGG GGTGACAGAC CACATGGTGA GTTTGGCTTG CTCGGACATC 240  
 TTGGTGTTC TCATCGGCAT GCCATGGAG TTCTACAGCA TCATCTGGAA TCCCTGACC 300  
 ACGTCCAGCT ACACCTGTC CTGCAAGCTG CACACTTCC TCTTCGAGGC CTGCAGCTAC 360  
 10 GCTACGCTGC TGCAGTGCT GACACTCAGC TTTGAGCGCT ACATCGCCAT CTGTACCCC 420  
 TTCAGGTACA AGGCTGTGTC GGGACCTTGC CAGGTGAAGC TGCTGATTGG CTTCGTCTGG 480  
 GTCACCTCCG CCTCGTGGC ACTGCCCTTG CTGTTTGCCA TGGGTACTGA GTACCCCTTG 540  
 GTGAACGTGC CCAGCCACCG GGGTCTCACT TGCAACCGCT CCAGCACCCG CCACCAGGAG 600  
 CAGCCCGAGA CCTCCAATAT GTCCATCTGT ACCAACCTCT CCAGCCGCTG GACCGTGTTC 660  
 CAGTCCAGCA TCTTCGGCGC CTTCGTGGTC TACCTCGTGG TCCTGCTCTC CGTAGCCCTTC 720  
 15 ATGTGCTGGA GAATGATGCA GGTGCTCATG AAAAGCCAGA AGGGCTCGCT GGCCGGGGGC 780  
 ACGCGGCTC CGCAGCTGAG GAAGTCCGAG AGCGAAGAGA GCAGGACCGC CAGGAGGCAG 840  
 ACCATCATCT TCCTGAGGCT GATTGTGTG ACATTTGGCC TATGCTGGAT GCCCAACCAG 900  
 ATTCGGAGGA TCATGGCTGC GGCCAAACCC AAGCACGACT GGACGAGGTC CTACTTCCGG 960  
 GCGTACATGA TCCTCCTCCC CTTCCTGGAG ACGTTTTTCT ACCTCAGCTC GGTCACTAAC 1020  
 20 CGCTCCTGT ACACGCTGTC CTCGAGCAG TTTCGGCGGC TGTTCGTGCA GGTGCTGTGC 1080  
 TGCCGCTGT CGCTGCAGCA CGCCAACCAC GAGAAGCGCC TGCGCGTACA TCGCCTCTCC 1140  
 ACCACCGACA GCGCCCGCTT TGTGACAGCG CCGTGTGCTCT TCGCGTCCCG GCGCCAGTCC 1200  
 CTCGCAAGGA GAACGTGAGA GATTTTCTTA AGCACTTTTC AGAGCGAGGC CGAGCCCGAG 1260  
 25 TCTAAGTCCC AGTCATTGAG TCTCGAGTCA CTAGAGCCCA ACTCAGGCGC GAAACCAGCC 1320  
 AATTCTGCTG CAGAGAATGG TTTTCAGGAG CATGAAGTTT GA

## Protein sequence 21

Gene name: G protein-coupled receptor 39

Unigene number: Hs.85339

Protein Accession #: NM\_001508, NP\_001409

Signal sequence: none found

Pfam domains: 7tm\_1 [72-172, 224-344]

Transmembrane domains: 32-54, 68-90, 111-133, 151-173, 221-243, 280-301, 320-342

Cellular Localization: plasma membrane

35 1 11 21 31 41 51  
 | | | | |  
 MASPSLPGSD CSQIIDHSHV PEFEVATWIK ITLILVYLII FVMGLLGNSA TIRVTQVLQK 60  
 KGYLQKEVTD HMVSLACSDI LVFLIGMPME FYSIWNPLT TSSYTLSCKL HTFLFEACSY 120  
 40 ATLLHVLTL FERYIAICHP FRYKAVSGPC QVKLLIGFVW VTSALVALFL LFMGTETVPL 180  
 VNVPSHRLT CNRSSTRHHE QPETSNMSIC TNLSSRWTVF QSSIFGAFVW YLVVLLSVAF 240  
 MCWNMMQVLM KSKQGLAGG TRPPQLRKSE SEESRTARRQ TIIPLRLIV TLAVCWMPNQ 300  
 IRRIMAAKP KHDWTRSYFR AYMLLPFSE TFFYLSSVIN PLYTVSSQO FRRVFVQVLC 360  
 CRLSLQHANH EKRLRVHAHS TTDSARFVQR PLLFASRRQS SARRTEKIFL STFQSEAEFQ 420  
 45 SKSQSLLES LEPNSGAKPA NSAAENGQFE HBV

TABLE 8A: ABOUT 1260 GENES UP-REGULATED IN GLIOBLASTOMA COMPARED TO NORMAL ADULT TISSUES

Table 8A lists about 1260 genes up-regulated in glioblastoma compared to normal adult tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" glioblastoma to "average" normal adult tissues was greater than or equal to 2.5. The "average" glioblastoma level was set to the 75th percentile amongst various glioblastoma tumors. The "average" normal adult tissue level was set to the 85th percentile amongst various non-malignant tissues. In order to remove gene-specific background levels of non-specific hybridization, the 10th percentile value amongst the non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

Pkey: Unique Eos probeset identifier number

ExAccn: Exemplar Accession number, Genbank accession number

UnigeneID: Unigene number

Unigene Title: Unigene gene title

R1: Ratio of 75th percentile tumor to 85th percentile normal body tissue

| Pkey   | ExAccn    | UnigeneID | Unigene Title                            | R1   |
|--------|-----------|-----------|--|------|
| 431917 | D15181    | Hs.2868   | peripheral myelin protein 2              | 75.2 |
| 427343 | A1880044  | Hs.176977 | protein kinase C binding protein 2       | 74.6 |
| 455601 | A1368680  | Hs.816    | SRY (sex determining region Y)-box 2     | 74.2 |
| 428321 | A1699994  | Hs.2868   | peripheral myelin protein 2              | 71.6 |
| 412719 | AW016610  | Hs.129911 | ESTs                                     | 70.7 |
| 449494 | AW237014  | Hs.315369 | Homo sapiens cDNA: FLJ23075 fis, clone L | 66.3 |
| 415817 | U88967    | Hs.78867  | protein tyrosine phosphatase, receptor-l | 64.3 |
| 413472 | BE242870  | Hs.75379  | solute carrier family 1 (glial high affi | 60.1 |
| 456759 | BE259150  | Hs.127792 | delta (Drosophila)-like 3                | 52.3 |
| 435147 | AL133731  | Hs.4774   | Homo sapiens mRNA; cDNA DKFZp761C1712 (f | 46.7 |
| 425842 | AI587490  | Hs.159623 | NK-2 (Drosophila) homolog B              | 40.1 |
| 412733 | AA984472  | Hs.74554  | KIAA0080 protein                         | 39.0 |
| 418375 | NM_003081 | Hs.84389  | synaptosomal-associated protein, 25kD    | 38.7 |
| 453392 | U23752    | Hs.32564  | SRY (sex determining region Y)-box 11    | 37.2 |
| 423849 | AL157425  | Hs.133315 | Homo sapiens mRNA; cDNA DKFZp761J1324 (f | 36.8 |
| 413333 | M74028    | Hs.75297  | fibroblast growth factor 1 (acidic)      | 32.8 |
| 416829 | AB013805  | Hs.80220  | catenin (cadherin-associated protein), d | 31.8 |
| 431941 | AK000106  | Hs.272227 | Homo sapiens cDNA FLJ20099 fis, clone CO | 31.8 |
| 436878 | BE465204  | Hs.47448  | ESTs                                     | 31.4 |
| 426325 | D28114    | Hs.169309 | myelin-associated oligodendrocyte basic  | 30.9 |
| 425057 | AA826434  | Hs.1619   | achaete-scute complex (Drosophila) homol | 30.4 |
| 446711 | AF169692  | Hs.12450  | protocadherin 9                          | 30.2 |
| 439415 | F05538    | Hs.12825  | ESTs                                     | 28.3 |
| 430838 | N46664    | Hs.169395 | hypothetical protein FLJ12015            | 26.9 |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 429466 | M85835    | Hs.12827  | ESTs                                     | 25.9 |
|    | 447004 | AW296968  | Hs.157539 | ESTs                                     | 25.3 |
|    | 424581 | M62062    | Hs.150917 | catenin (cadherin-associated protein), a | 24.8 |
| 5  | 452744 | AI267652  | Hs.30504  | Homo sapiens mRNA; cDNA DKFZp434E082 (fr | 24.8 |
|    | 441285 | NM_002374 | Hs.167    | microtubule-associated protein 2         | 24.3 |
|    | 453642 | AI370936  | Hs.34074  | dipeptidylpeptidase VI                   | 24.3 |
|    | 424140 | Z48051    | Hs.141308 | myelin oligodendrocyte glycoprotein      | 24.2 |
|    | 450133 | AW369769  | Hs.105201 | ESTs                                     | 24.2 |
| 10 | 408562 | AI436323  | Hs.31141  | Homo sapiens mRNA for KIAA1568 protein,  | 23.3 |
|    | 448672 | AI955511  | Hs.225106 | ESTs                                     | 22.7 |
|    | 435708 | AI362949  | Hs.75169  | ESTs                                     | 22.0 |
|    | 407034 | U84540    |           | gb:Human dystrobrevin isoform DTN-3 (DTN | 21.9 |
|    | 407168 | R45175    | Hs.117183 | ESTs                                     | 21.7 |
| 15 | 431019 | NM_005249 | Hs.2714   | forkhead box G1B                         | 21.5 |
|    | 409049 | AI423132  | Hs.146343 | ESTs                                     | 21.4 |
|    | 433896 | AW294729  | Hs.274461 | ESTs                                     | 21.1 |
|    | 445041 | T64183    | Hs.282982 | solute carrier                           | 21.0 |
|    | 418738 | AW388633  | Hs.6682   | solute carrier family 7, (cationic amino | 20.4 |
| 20 | 444378 | R41339    | Hs.12569  | ESTs                                     | 20.0 |
|    | 411305 | BE241596  | Hs.69547  | myelin basic protein                     | 19.9 |
|    | 437414 | AW894071  | Hs.48448  | hypothetical protein DKFZp547C176        | 19.8 |
|    | 441016 | AW138653  | Hs.25845  | ESTs                                     | 19.6 |
|    | 440435 | AL042201  | Hs.21273  | transcription factor NYD-sp10            | 18.5 |
| 25 | 438209 | AL120659  | Hs.6111   | aryl-hydrocarbon receptor nuclear trans  | 18.4 |
|    | 452461 | N78223    | Hs.108106 | transcription factor                     | 18.1 |
|    | 409395 | U46745    | Hs.54435  | dystrobrevin, alpha                      | 18.1 |
|    | 417183 | R52089    | Hs.172717 | ESTs                                     | 18.0 |
|    | 409638 | AW450420  | Hs.21335  | ESTs                                     | 18.0 |
| 30 | 428392 | H10233    | Hs.2265   | secretory granule, neuroendocrine protei | 18.0 |
|    | 449611 | AI970394  | Hs.197075 | ESTs                                     | 17.0 |
|    | 446692 | Z44514    | Hs.156829 | Homo sapiens mRNA for KIAA1763 protein,  | 16.9 |
|    | 425088 | AA663372  | Hs.169395 | hypothetical protein FLJ12015            | 16.9 |
|    | 444471 | AB020684  | Hs.11217  | KIAA0877 protein                         | 16.8 |
| 35 | 421559 | NM_014459 | Hs.106511 | protocadherin 17                         | 16.7 |
|    | 431725 | X65724    | Hs.2839   | Norrie disease (pseudoglioma)            | 16.6 |
|    | 429276 | AF056085  | Hs.198612 | G protein-coupled receptor 51            | 16.6 |
|    | 416892 | L24498    | Hs.80409  | growth arrest and DNA-damage-inducible,  | 16.5 |
|    | 441440 | AI807981  | Hs.30495  | ESTs                                     | 15.7 |
| 40 | 449433 | AI672096  | Hs.9012   | ESTs, Weakly similar to S26650 DNA-bindi | 15.7 |
|    | 421264 | AL039123  | Hs.103042 | microtubule-associated protein 1B        | 15.5 |
|    | 415910 | U20350    | Hs.78913  | chemokine (C-X3-C) receptor 1            | 15.3 |
|    | 413597 | AW302885  | Hs.117183 | ESTs                                     | 15.1 |
|    | 424945 | AI221919  | Hs.173438 | hypothetical protein FLJ10582            | 14.9 |
| 45 | 447414 | D82343    | Hs.18551  | neuroblastoma (nerve tissue) protein     | 14.9 |
|    | 426269 | H15302    | Hs.168950 | Homo sapiens mRNA; cDNA DKFZp566A1046 (f | 14.8 |
|    | 416857 | AA188775  | Hs.292453 | ESTs                                     | 14.7 |
|    | 419721 | NM_001650 | Hs.288650 | aquaporin 4                              | 14.6 |
|    | 411078 | AI222020  | Hs.182364 | CocoaCrisp                               | 14.4 |
| 50 | 453924 | R49295    | Hs.24886  | ESTs                                     | 14.4 |
|    | 409389 | AB007979  | Hs.301281 | Homo sapiens mRNA, chromosome 1 specific | 14.3 |
|    | 430130 | AL137311  | Hs.234074 | Homo sapiens mRNA; cDNA DKFZp761G02121 ( | 14.1 |
|    | 410909 | AW898161  | Hs.53112  | ESTs, Moderately similar to ALU8_HUMAN A | 14.0 |
|    | 412266 | N59006    | Hs.26133  | ESTs                                     | 14.0 |
| 55 | 412986 | X81120    | Hs.75110  | cannabinoid receptor 1 (brain)           | 14.0 |
|    | 424790 | AL119344  | Hs.13326  | ESTs, Weakly similar to 2004399A chromos | 14.0 |
|    | 439239 | AI031540  | Hs.235331 | ESTs                                     | 14.0 |
|    | 441497 | R51064    | Hs.23172  | ESTs                                     | 14.0 |
|    | 445495 | BE622641  | Hs.38489  | ESTs, Weakly similar to I38022 hypotheti | 14.0 |
| 60 | 414245 | BE148072  | Hs.75850  | WAS protein family, member 1             | 13.7 |
|    | 429900 | AA460421  | Hs.30875  | ESTs                                     | 13.6 |
|    | 448595 | AB014544  | Hs.21572  | KIAA0644 gene product                    | 13.6 |
|    | 449605 | AW138581  | Hs.198416 | ESTs                                     | 13.6 |
|    | 452526 | W38537    | Hs.280740 | hypothetical protein MGC3040             | 13.6 |
| 65 | 420547 | AF155140  | Hs.98738  | gonadotropin-regulated testicular RNA he | 13.3 |
|    | 441350 | AB020690  | Hs.7782   | paraneoplastic antigen MA2               | 13.3 |
|    | 420077 | AW512260  | Hs.87767  | ESTs                                     | 13.2 |
|    | 424120 | T80579    | Hs.290270 | ESTs                                     | 13.2 |
|    | 456965 | AW131888  | Hs.172792 | ESTs, Weakly similar to hypothetical pro | 13.2 |
| 70 | 423361 | AW170055  | Hs.47628  | ESTs                                     | 13.1 |
|    | 428409 | AW117207  | Hs.98523  | ESTs                                     | 12.9 |
|    | 417160 | N76497    | Hs.1787   | proteolipid protein 1 (Pelizaeus-Merzbac | 12.6 |
|    | 451621 | AI679148  | Hs.26770  | fatty acid binding protein 7, brain      | 12.5 |
|    | 411379 | AI816344  | Hs.12554  | ESTs, Weakly similar to NPL4_HUMAN NUCLE | 12.5 |
| 75 | 436954 | AA740151  | Hs.130425 | ESTs                                     | 12.4 |
|    | 430691 | C14187    | Hs.103538 | ESTs                                     | 12.4 |
|    | 433551 | AI985544  | Hs.12450  | protocadherin 9                          | 12.4 |
|    | 422544 | AB018259  | Hs.118140 | KIAA0716 gene product                    | 12.2 |
|    | 427540 | R12014    | Hs.20976  | ESTs                                     | 12.1 |
| 80 | 435624 | AF218942  | Hs.24889  | formin 2                                 | 12.1 |
|    | 415849 | R20529    | Hs.6806   | ESTs                                     | 12.1 |
|    | 428845 | AL157579  | Hs.153610 | KIAA0751 gene product                    | 11.9 |
|    | 442671 | AI005668  | Hs.134779 | EST                                      | 11.9 |
|    | 444396 | T65213    | Hs.4257   | ESTs                                     | 11.8 |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 452752 | AW044058  | Hs.33578  | KIAA0820 protein                         | 11.8 |
|    | 425523 | AB007948  | Hs.158244 | KIAA0479 protein                         | 11.8 |
|    | 416072 | AL110370  | Hs.79000  | growth associated protein 43             | 11.7 |
| 5  | 440184 | AB002297  | Hs.7022   | dedicator of cyto-kinesis 3              | 11.7 |
|    | 428976 | AL037824  | Hs.194695 | ras homolog gene family, member I        | 11.6 |
|    | 444783 | AK001468  | Hs.62180  | anillin (Drosophila Scraps homolog), act | 11.6 |
|    | 448299 | AA497044  | Hs.20887  | hypothetical protein FLJ10392            | 11.6 |
|    | 414214 | D49958    | Hs.75819  | glycoprotein MGA                         | 11.5 |
| 10 | 428982 | NM_005097 | Hs.194704 | leucine-rich, glioma inactivated 1       | 11.5 |
|    | 405238 |           |           |  | 11.4 |
|    | 420362 | U79734    | Hs.97206  | huntingtin interacting protein 1         | 11.4 |
|    | 422980 | N46569    | Hs.76722  | CCAAT/enhancer binding protein (C/EBP),  | 11.4 |
|    | 424918 | R13982    | Hs.169309 | myelin-associated oligodendrocyte basic  | 11.4 |
| 15 | 434277 | X77748    | Hs.3786   | glutamate receptor, metabotropic 3       | 11.4 |
|    | 451952 | AL120173  | Hs.301663 | ESTs                                     | 11.3 |
|    | 408829 | NM_006042 | Hs.48384  | heparan sulfate (glucosamine) 3-O-sulfol | 11.3 |
|    | 424278 | AK000723  | Hs.144517 | hypothetical protein FLJ20716            | 11.3 |
|    | 429418 | AI381028  | Hs.118769 | ESTs                                     | 11.3 |
|    | 429918 | AW873986  | Hs.119383 | ESTs                                     | 11.3 |
| 20 | 443912 | R37257    | Hs.184780 | ESTs                                     | 11.3 |
|    | 448743 | AB032962  | Hs.21896  | KIAA1136 protein                         | 11.3 |
|    | 420092 | AA814043  | Hs.88045  | ESTs                                     | 11.2 |
|    | 408081 | AW451597  | Hs.167409 | ESTs                                     | 11.2 |
| 25 | 411642 | NM_014932 | Hs.71132  | neuroligin 1                             | 10.9 |
|    | 415170 | R44386    | Hs.164578 | ESTs                                     | 10.9 |
|    | 426320 | W47595    | Hs.169300 | transforming growth factor, beta 2       | 10.8 |
|    | 450568 | AL050078  | Hs.25159  | Homo sapiens cDNA FLJ10784 fis, clone NT | 10.8 |
|    | 425799 | T08133    | Hs.182906 | Homo sapiens mRNA for KIAA1872 protein,  | 10.8 |
| 30 | 423863 | AB011537  | Hs.133466 | slit (Drosophila) homolog 1              | 10.7 |
|    | 400293 | N51002    | Hs.306480 | Homo sapiens mRNA; cDNA DKFZp761E2112 (f | 10.7 |
|    | 447773 | AI423930  | Hs.36790  | ESTs, Weakly similar to putative p150 [H | 10.7 |
|    | 448321 | NM_005883 | Hs.20912  | adenomatous polyposis coli like          | 10.5 |
|    | 448533 | AL119710  | Hs.21365  | nucleosome assembly protein 1-like 3     | 10.5 |
| 35 | 440684 | AI253123  | Hs.127356 | ESTs, Highly similar to S21424 nestin [H | 10.3 |
|    | 444017 | U04840    | Hs.214    | neuro-oncological ventral antigen 1      | 10.3 |
|    | 438380 | T06430    | Hs.6194   | chondroitin sulfate proteoglycan BEHAB/b | 10.3 |
|    | 440471 | AA886146  | Hs.307944 | ESTs                                     | 10.2 |
|    | 413063 | AL035737  | Hs.75184  | chitinase 3-like 1 (cartilage glycoprote | 10.1 |
| 40 | 439978 | BE139460  | Hs.124673 | Homo sapiens cDNA FLJ11477 fis, clone HE | 10.1 |
|    | 448902 | Z45998    | Hs.22543  | Homo sapiens mRNA; cDNA DKFZp76111912 (f | 10.1 |
|    | 424932 | R14070    | Hs.315369 | Homo sapiens cDNA: FLJ23075 fis, clone L | 9.9  |
|    | 431721 | AB032996  | Hs.268044 | KIAA1170 protein                         | 9.9  |
|    | 419088 | AI538323  | Hs.52620  | integrin, beta 8                         | 9.8  |
| 45 | 420602 | AF060877  | Hs.99236  | regulator of G-protein signaling 20      | 9.8  |
|    | 436511 | AA721252  | Hs.291502 | ESTs                                     | 9.8  |
|    | 414696 | AF002020  | Hs.76918  | Niemann-Pick disease, type C1            | 9.7  |
|    | 449539 | W80363    | Hs.58446  | ESTs                                     | 9.7  |
|    | 412959 | D87458    | Hs.75090  | KIAA0282 protein                         | 9.6  |
|    | 412811 | H06382    | Hs.21400  | ESTs                                     | 9.6  |
| 50 | 449300 | AI656959  | Hs.222165 | ESTs                                     | 9.6  |
|    | 426344 | H41821    | Hs.322469 | transcriptional activator of the c-fos p | 9.5  |
|    | 419271 | N34901    | Hs.238532 | ESTs                                     | 9.5  |
|    | 419078 | M93119    | Hs.89584  | insulinoma-associated 1                  | 9.4  |
| 55 | 451516 | AI800515  | Hs.12024  | ESTs                                     | 9.4  |
|    | 422656 | AI870435  | Hs.1569   | LIM homeobox protein 2                   | 9.3  |
|    | 449318 | AW236021  | Hs.78531  | Homo sapiens, Similar to RIKEN cDNA 5730 | 9.3  |
|    | 414175 | AI308876  | Hs.103849 | hypothetical protein DKFZp761D112        | 9.3  |
|    | 415279 | F04237    | Hs.1447   | glial fibrillary acidic protein          | 9.2  |
| 60 | 428784 | Y12851    | Hs.193470 | purinergic receptor P2X, ligand-gated io | 9.2  |
|    | 429903 | AL134197  | Hs.93597  | cyclin-dependent kinase 5, regulatory su | 9.2  |
|    | 424641 | AB001106  | Hs.151413 | glia maturation factor, beta             | 9.1  |
|    | 417435 | NM_005181 | Hs.82129  | carbonic anhydrase II, muscle specific   | 9.1  |
|    | 449448 | D60730    | Hs.57471  | ESTs                                     | 9.1  |
| 65 | 408508 | AI806109  | Hs.135736 | KIAA1580 protein                         | 9.0  |
|    | 452785 | AL359942  | Hs.296434 | erythroid differentiation and denucleati | 9.0  |
|    | 448986 | H42169    | Hs.18653  | hypothetical protein FLJ14627            | 8.9  |
|    | 447072 | D61594    | Hs.17279  | tyrosylprotein sulfotransferase 1        | 8.9  |
|    | 433900 | AI034361  | Hs.135150 | lung type-I cell membrane-associated gly | 8.9  |
| 70 | 408926 | AF217525  | Hs.49002  | Down syndrome cell adhesion molecule     | 8.8  |
|    | 449625 | NM_014253 | Hs.23796  | odx (odd Oz/ten-m, Drosophila) homolog 1 | 8.8  |
|    | 400292 | AA250737  | Hs.72472  | ESTs                                     | 8.7  |
|    | 417404 | NM_007350 | Hs.82101  | pleckstrin homology-like domain, family  | 8.7  |
|    | 420345 | AW295230  | Hs.25231  | ESTs                                     | 8.7  |
| 75 | 429927 | NM_001115 | Hs.2522   | adenylate cyclase 8 (brain)              | 8.7  |
|    | 437528 | N59646    | Hs.169745 | crumbs (Drosophila) homolog 1            | 8.7  |
|    | 440152 | AB002376  | Hs.7006   | KIAA0378 protein                         | 8.7  |
|    | 451099 | R52795    | Hs.25954  | interleukin 13 receptor, alpha 2         | 8.6  |
|    | 400780 |           |           |  | 8.6  |
| 80 | 434891 | AA814309  | Hs.123583 | ESTs                                     | 8.6  |
|    | 449277 | AA001064  | Hs.172976 | ESTs                                     | 8.6  |
|    | 415709 | AA649850  | Hs.278558 | ESTs                                     | 8.5  |
|    | 439947 | AB006627  | Hs.6788   | astrotactin                              | 8.5  |
|    | 447197 | R36075    |           | gb:yh88b01.s1 Soares placenta Nb2HP Homo | 8.5  |

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|----|--------|-----------|-----------|--|-----|
|    | 433042 | AW193534  | Hs.281895 | Homo sapiens cDNA FLJ11660 fis, clone HE | 8.4 |
|    | 416370 | N90470    | Hs.203697 | ESTs, Weakly similar to I38022 hypotheti | 8.4 |
|    | 452786 | R61362    | Hs.106642 | ESTs, Weakly similar to T09052 hypotheti | 8.4 |
|    | 415796 | R87548    | Hs.78854  | ATPase, Na+/K+ transporting, beta 2 poly | 8.3 |
| 5  | 426271 | AF026547  | Hs.169047 | chondroitin sulfate proteoglycan 3 (neur | 8.3 |
|    | 408947 | AL080093  | Hs.49117  | Homo sapiens mRNA; cDNA DKFZp564N1662 (f | 8.3 |
|    | 419863 | AW952691  | Hs.93485  | Homo sapiens mRNA; cDNA DKFZp761D191 (fr | 8.3 |
|    | 433447 | U29195    | Hs.3281   | neuronal pentraxin II                    | 8.3 |
| 10 | 431467 | N71831    | Hs.256398 | Homo sapiens mRNA; cDNA DKFZp434E0528 (f | 8.3 |
|    | 409327 | L41162    | Hs.53563  | collagen, type IX, alpha 3               | 8.3 |
|    | 414300 | AI304870  | Hs.188680 | ESTs                                     | 8.2 |
|    | 407728 | AW071502  | Hs.175931 | ESTs                                     | 8.2 |
|    | 422798 | R92347    | Hs.34574  | ESTs, Weakly similar to ALU1_HUMAN ALU S | 8.2 |
| 15 | 419704 | AA429104  | Hs.45057  | ESTs                                     | 8.2 |
|    | 429007 | D80642    |           | gb:HUM092E09B Human fetal brain (TFujiwa | 8.1 |
|    | 442710 | AI015631  | Hs.23210  | ESTs                                     | 8.1 |
|    | 425048 | H05468    | Hs.164502 | ESTs                                     | 8.1 |
|    | 429149 | AW193360  | Hs.197962 | ESTs, Weakly similar to I38022 hypotheti | 8.0 |
| 20 | 445740 | T78281    | Hs.13226  | Homo sapiens clone 25181 mRNA sequence   | 8.0 |
|    | 418771 | AA807881  | Hs.25329  | ESTs                                     | 7.9 |
|    | 422728 | AW937826  | Hs.103262 | ESTs, Weakly similar to ZN91_HUMAN ZINC  | 7.9 |
|    | 425984 | AW836277  | Hs.165636 | hypothetical protein DKFZp761C07121      | 7.9 |
|    | 448408 | AA322866  | Hs.21107  | neuroigin                                | 7.9 |
| 25 | 455364 | H72176    | Hs.4273   | hypothetical protein FLJ13159            | 7.9 |
|    | 446619 | AU076643  | Hs.313    | secreted phosphoprotein 1 (osteopontin,  | 7.9 |
|    | 435501 | AW051819  | Hs.129908 | KIAA0591 protein                         | 7.8 |
|    | 423600 | AI633559  | Hs.310359 | ESTs                                     | 7.8 |
|    | 450625 | AW970107  |           | gb:EST382188 MAGE resequences, MAGK Homo | 7.8 |
| 30 | 415314 | N88802    | Hs.5422   | glycoprotein M6B                         | 7.7 |
|    | 420036 | R60336    | Hs.52792  | Homo sapiens mRNA; cDNA DKFZp586I1823 (f | 7.7 |
|    | 427687 | AW003867  | Hs.1570   | histamine receptor H1                    | 7.7 |
|    | 449328 | AI962493  | Hs.197647 | ESTs                                     | 7.7 |
|    | 419249 | X14767    | Hs.89768  | gamma-aminobutyric acid (GABA) A recepto | 7.7 |
| 35 | 407896 | D76435    | Hs.41154  | Zic family member 1 (odd-paired Drosophi | 7.7 |
|    | 419103 | Z40229    | Hs.96423  | hypothetical protein FLJ23033            | 7.6 |
|    | 438779 | NM_003787 | Hs.6414   | nucleolar protein 4                      | 7.6 |
|    | 433532 | AW975367  |           | gb:EST387475 MAGE resequences, MAGN Homo | 7.6 |
|    | 448555 | AI536697  | Hs.159863 | ESTs                                     | 7.5 |
| 40 | 439662 | H97552    | Hs.269060 | ESTs                                     | 7.5 |
|    | 448543 | AW897741  | Hs.21380  | Homo sapiens mRNA; cDNA DKFZp586P1124 (f | 7.5 |
|    | 410099 | AA061630  | Hs.169387 | KIAA0036 gene product                    | 7.5 |
|    | 431592 | R69016    | Hs.213194 | hypothetical protein MGC10895            | 7.4 |
|    | 409731 | AA125985  | Hs.56145  | thymosin, beta, identified in neuroblast | 7.4 |
| 45 | 405819 |           |           |  | 7.4 |
|    | 407886 | AW969688  | Hs.100826 | ESTs                                     | 7.4 |
|    | 437416 | AL359605  | Hs.283851 | Homo sapiens mRNA; cDNA DKFZp547G036 (fr | 7.4 |
|    | 437698 | R61637    | Hs.7990   | ESTs, Moderately similar to I84505 calci | 7.4 |
|    | 408604 | D51408    | Hs.21925  | ESTs                                     | 7.4 |
| 50 | 418506 | AA084248  | Hs.85339  | G protein-coupled receptor 39            | 7.3 |
|    | 447499 | AW262580  | Hs.147674 | protocadherin beta 16                    | 7.3 |
|    | 454036 | AA374756  | Hs.93560  | Homo sapiens mRNA for KIAA1771 protein,  | 7.3 |
|    | 409746 | NM_004794 | Hs.56294  | RAB33A, member RAS oncogene family       | 7.2 |
|    | 410037 | AB020725  | Hs.58009  | KIAA0918 protein                         | 7.2 |
| 55 | 419318 | AW969742  | Hs.291005 | ESTs                                     | 7.2 |
|    | 424051 | AL110203  | Hs.138411 | Homo sapiens mRNA; cDNA DKFZp586J1922 (f | 7.2 |
|    | 442026 | AI243749  | Hs.8074   | brain-specific angiogenesis inhibitor 3  | 7.2 |
|    | 448243 | AW369771  | Hs.52620  | integrin, beta 8                         | 7.2 |
|    | 436281 | AW411194  | Hs.85195  | myeloid leukemia factor 1                | 7.2 |
| 60 | 426429 | X73114    | Hs.169849 | myosin-binding protein C, slow-type      | 7.2 |
|    | 407182 | AA312551  | Hs.230157 | ESTs                                     | 7.1 |
|    | 415293 | R49462    | Hs.106541 | ESTs                                     | 7.1 |
|    | 422764 | AI767727  | Hs.47522  | ESTs                                     | 7.1 |
|    | 451592 | AI805416  | Hs.213897 | ESTs                                     | 7.1 |
| 65 | 429469 | M64590    | Hs.27     | glycine dehydrogenase (decarboxylating;  | 7.0 |
|    | 415734 | NM_014747 | Hs.78748  | KIAA0237 gene product                    | 7.0 |
|    | 434149 | Z43829    | Hs.19574  | hypothetical protein MGC5459             | 7.0 |
|    | 436726 | AA324975  | Hs.128993 | ESTs, Weakly similar to T00079 hypotheti | 7.0 |
|    | 417632 | R20855    | Hs.5422   | glycoprotein M6B                         | 7.0 |
| 70 | 422421 | AA325138  | Hs.235873 | hypothetical protein FLJ22672            | 6.9 |
|    | 435267 | N23797    | Hs.110114 | ESTs                                     | 6.9 |
|    | 437117 | AL049256  | Hs.122593 | ESTs                                     | 6.9 |
|    | 445523 | Z30118    | Hs.293788 | ESTs, Moderately similar to unnamed prot | 6.9 |
|    | 445900 | AF070526  | Hs.13429  | Homo sapiens clone 24787 mRNA sequence   | 6.9 |
| 75 | 445745 | AB007924  | Hs.13245  | KIAA0455 gene product                    | 6.9 |
|    | 424085 | NM_002914 | Hs.139226 | replication factor C (activator 1) 2 (40 | 6.9 |
|    | 428588 | F12101    | Hs.185701 | Homo sapiens mRNA full length insert cDN | 6.8 |
|    | 421723 | AA620400  | Hs.300717 | sodium channel, voltage-gated, type III, | 6.8 |
|    | 447342 | AI199268  | Hs.19322  | Homo sapiens, Similar to RIKEN cDNA 2010 | 6.7 |
| 80 | 443297 | AI049884  | Hs.133029 | ESTs                                     | 6.7 |
|    | 443992 | AW022228  | Hs.322922 | ESTs                                     | 6.7 |
|    | 453096 | AW294631  | Hs.11325  | ESTs                                     | 6.7 |
|    | 453857 | AL080235  | Hs.35861  | DKFZP586E1621 protein                    | 6.7 |
|    | 443761 | AI525743  | Hs.160603 | ESTs                                     | 6.6 |

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|----|--------|-----------|-----------|--|-----|
|    | 429609 | AF002246  | Hs.210863 | cell adhesion molecule with homology to      | 6.6 |
|    | 435056 | AW023337  | Hs.5422   | glycoprotein M6B                             | 6.5 |
|    | 453431 | AF094754  | Hs.32973  | glycine receptor, beta                       | 6.5 |
| 5  | 444190 | A1878918  | Hs.10526  | cysteine and glycine-rich protein 2          | 6.5 |
|    | 418110 | R43523    | Hs.217754 | hypothetical protein FLJ22202                | 6.5 |
|    | 413988 | M81883    | Hs.324784 | glutamate decarboxylase 1 (brain, 67kD)      | 6.5 |
|    | 420805 | L10333    | Hs.99947  | reticulum 1                                  | 6.4 |
|    | 429125 | AA446854  | Hs.271004 | ESTs, Weakly similar to I38022 hypotheti     | 6.4 |
| 10 | 435256 | AF193766  | Hs.13872  | cytokine-like protein C17                    | 6.4 |
|    | 407866 | AW088232  | Hs.89506  | paired box gene 6 (aniridia, keratitis)      | 6.3 |
|    | 440700 | AW952281  | Hs.296184 | guanine nucleotide binding protein (G pr     | 6.3 |
|    | 427701 | AA411101  | Hs.243886 | nuclear autoantigenic sperm protein (his     | 6.3 |
|    | 422949 | AA319435  |           | gb:EST21687 Adrenal gland tumor Homo sap     | 6.2 |
| 15 | 445102 | AW204610  | Hs.22270  | ESTs   | 6.2 |
|    | 452401 | NM_007115 | Hs.29352  | tumor necrosis factor, alpha-induced pro     | 6.2 |
|    | 435538 | AB011540  | Hs.4930   | low density lipoprotein receptor-related     | 6.2 |
|    | 410102 | AW248508  | Hs.279727 | Homo sapiens cDNA FLJ14035 fis, clone HE     | 6.2 |
|    | 416871 | H98716    |           | gb:yx13d08.s1 Soares melanocyte 2NbHM Ho     | 6.1 |
| 20 | 416702 | AA186428  | Hs.85591  | ESTs   | 6.1 |
|    | 419347 | C15944    | Hs.90005  | superfornic cervical ganglia, neural specifi | 6.1 |
|    | 424997 | AL138167  | Hs.96920  | ESTs   | 6.1 |
|    | 438660 | U95740    | Hs.6349   | Homo sapiens, clone IMAGE3010666, mRNA,      | 6.1 |
|    | 453549 | Y07494    | Hs.34114  | ATPase, Na+/K+ transporting, alpha 2 (+)     | 6.1 |
| 25 | 449444 | AW818436  | Hs.23590  | solute carrier family 16 (monocarboxylic     | 6.1 |
|    | 414117 | W88559    | Hs.1787   | proteolipid protein 1 (Pelizaeus-Merzbac     | 6.0 |
|    | 425517 | AF121179  |           | gb:AF121179 Homo sapiens liver (Chang L-     | 6.0 |
|    | 427457 | AW779105  | Hs.164682 | ESTs   | 6.0 |
|    | 437034 | AA742643  |           | gb:ny91c01.s1 NCI_CGAP_GCB1 Homo sapiens     | 6.0 |
| 30 | 444170 | AW613879  | Hs.102408 | ESTs   | 6.0 |
|    | 457183 | H91882    | Hs.118569 | Dvl-binding protein IDAX (inhibition of      | 6.0 |
|    | 448999 | AF179274  | Hs.22791  | transmembrane protein with EGF-like and      | 6.0 |
|    | 454048 | H05626    | Hs.6921   | ESTs   | 6.0 |
|    | 439772 | AL365406  | Hs.10268  | Homo sapiens mRNA full length insert cDN     | 5.9 |
| 35 | 448944 | AB014605  | Hs.22599  | atrophin-1 interacting protein 1; activi     | 5.9 |
|    | 410011 | AB020641  | Hs.57856  | PFTAIRE protein kinase 1                     | 5.9 |
|    | 415486 | H12214    | Hs.13284  | ESTs, Weakly similar to 2109260A B cell      | 5.9 |
|    | 438993 | AA828995  |           | gb:oc77b08.s1 NCI_CGAP_Ov2 Homo sapiens      | 5.9 |
|    | 447350 | AI375572  | Hs.172634 | ESTs   | 5.9 |
| 40 | 451783 | R42554    | Hs.210862 | T-box, brain, 1                              | 5.9 |
|    | 447101 | N72185    | Hs.44189  | ESTs   | 5.9 |
|    | 440492 | R39127    | Hs.21433  | hypothetical protein DKFZp547J036            | 5.9 |
|    | 440274 | R24595    | Hs.7122   | scrapie responsive protein 1                 | 5.9 |
|    | 438461 | AW075485  | Hs.286049 | phosphoserine aminotransferase               | 5.9 |
| 45 | 418064 | BE387287  | Hs.83384  | S100 calcium-binding protein, beta (neur     | 5.8 |
|    | 437036 | AI571514  | Hs.133022 | ESTs   | 5.7 |
|    | 412225 | AW902042  |           | gb:QV0-NN1022-170400-193-c02 NN1022 Homo     | 5.7 |
|    | 426342 | AF093419  | Hs.169378 | multiple PDZ domain protein                  | 5.7 |
|    | 444218 | AF070641  | Hs.10684  | Homo sapiens clone 24421 mRNA sequence       | 5.7 |
| 50 | 445828 | F05802    | Hs.81907  | ESTs   | 5.7 |
|    | 447198 | D61523    | Hs.283435 | ESTs   | 5.7 |
|    | 427897 | NM_017413 | Hs.303084 | apelin; peptide ligand for APJ receptor      | 5.7 |
|    | 448499 | BE613280  | Hs.77550  | hypothetical protein MGC1780                 | 5.7 |
|    | 443672 | AA323362  | Hs.9657   | butyrobetaine (gamma), 2-oxoglutarate di     | 5.6 |
| 55 | 412155 | R38167    | Hs.12449  | Homo sapiens transmembrane protein HTMP1     | 5.6 |
|    | 435718 | R06569    | Hs.265534 | ESTs   | 5.6 |
|    | 449340 | AW235786  | Hs.195359 | hypothetical protein MGC10954                | 5.6 |
|    | 424481 | R19453    | Hs.1787   | proteolipid protein 1 (Pelizaeus-Merzbac     | 5.6 |
|    | 451996 | AW514021  | Hs.245510 | ESTs   | 5.6 |
| 60 | 422411 | AW749443  | Hs.22511  | ESTs   | 5.6 |
|    | 438328 | AI492261  | Hs.32450  | ESTs   | 5.6 |
|    | 433244 | AB040943  | Hs.271285 | KIAA1510 protein                             | 5.6 |
|    | 435191 | R15912    | Hs.4817   | Homo sapiens clone 24461 mRNA sequence       | 5.5 |
|    | 418677 | S83308    | Hs.87224  | SRY (sex determining region Y)-box 5         | 5.5 |
| 65 | 400859 |           |           |  | 5.5 |
|    | 413625 | AW451103  | Hs.71371  | ESTs   | 5.5 |
|    | 421863 | AI952677  | Hs.108972 | Homo sapiens mRNA; cDNA DKFZp434P228 (fr     | 5.5 |
|    | 434933 | R91095    | Hs.4276   | KIAA1701 protein                             | 5.5 |
|    | 438702 | AI879054  | Hs.54618  | ESTs   | 5.5 |
| 70 | 452055 | AI377431  | Hs.141693 | hypothetical protein MGC10858                | 5.5 |
|    | 430979 | AI479755  | Hs.129010 | ESTs   | 5.5 |
|    | 412709 | AL022327  | Hs.74518  | KIAA0027 protein                             | 5.5 |
|    | 439920 | H05430    | Hs.288433 | neurotrimin                                  | 5.5 |
|    | 424343 | AW956360  | Hs.4748   | adenylate cyclase activating polypeptide     | 5.4 |
| 75 | 407846 | AA426202  | Hs.40403  | Cbp/p300-interacting transactivator, wit     | 5.4 |
|    | 419235 | AW470411  | Hs.288433 | neurotrimin                                  | 5.4 |
|    | 418030 | BE207573  | Hs.83321  | neuromedin B                                 | 5.4 |
|    | 410330 | AW023630  | Hs.46786  | ESTs   | 5.4 |
|    | 410781 | AI375672  | Hs.165028 | ESTs   | 5.4 |
| 80 | 420658 | AW965215  | Hs.336555 | ESTs   | 5.4 |
|    | 421308 | AA887322  | Hs.192843 | leucine zipper protein FKSG14                | 5.4 |
|    | 443740 | R56434    | Hs.21062  | ESTs   | 5.4 |
|    | 426457 | AW894667  | Hs.169965 | chimerin (chimaerin) 1                       | 5.4 |
|    | 450375 | AA009647  | Hs.8850   | alpha disintegrin and metalloproteinase doma | 5.4 |

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|    | 412494 | AL133900  | Hs.792    | ADP-ribosylation factor domain protein 1   | 5.4 |
|    | 426600 | NM_003378 | Hs.171014 | VEGF nerve growth factor inducible         | 5.4 |
|    | 424432 | AB037821  | Hs.146858 | protocadherin 10                           | 5.4 |
| 5  | 429250 | H56585    | Hs.198308 | tryptophan rich basic protein              | 5.4 |
|    | 443785 | AW449952  | Hs.190125 | basic-helix-loop-helix-PAS protein         | 5.4 |
|    | 436282 | R91913    | Hs.272104 | ESTs, Moderately similar to ALU1_HUMAN A   | 5.4 |
|    | 404584 |           |           |  | 5.3 |
|    | 430091 | AB032958  | Hs.233023 | KIAA1132 protein                           | 5.3 |
| 10 | 439845 | AL355743  | Hs.56663  | Homo sapiens EST from clone 41214, full    | 5.3 |
|    | 424001 | W67883    | Hs.137476 | paternally expressed 10                    | 5.3 |
|    | 425073 | W39609    | Hs.22003  | solute carrier family 6 (neurotransmitter) | 5.3 |
|    | 426625 | T78300    | Hs.300642 | serologically defined colon cancer antigen | 5.3 |
|    | 428137 | AA421792  | Hs.170999 | ESTs                                       | 5.3 |
|    | 428679 | AA431765  |           | gb:zw80c03.s1 Soares_testis_NHT Homo sap   | 5.3 |
| 15 | 438176 | AW138970  | Hs.122113 | ESTs                                       | 5.3 |
|    | 440138 | AB033023  | Hs.318127 | hypothetical protein FLJ10201              | 5.3 |
|    | 451018 | AW965599  | Hs.247324 | mitochondrial ribosomal protein S14        | 5.3 |
|    | 416340 | N31772    | Hs.79226  | fasciculation and elongation protein zet   | 5.3 |
| 20 | 435244 | N77221    | Hs.187824 | ESTs                                       | 5.3 |
|    | 446035 | NM_006558 | Hs.13565  | Sam68-like phosphotyrosine protein, T-ST   | 5.3 |
|    | 424624 | AB032947  | Hs.151301 | Ca2+-dependent activator protein for sec   | 5.3 |
|    | 407748 | AL079409  | Hs.38176  | KIAA0606 protein; SCN Circadian Oscillator | 5.3 |
|    | 430437 | AF768801  | Hs.169943 | Homo sapiens cDNA FLJ13569 fis, clone PL   | 5.3 |
| 25 | 414825 | X06370    | Hs.77432  | epidermal growth factor receptor (avian)   | 5.2 |
|    | 453941 | U39817    | Hs.36820  | Bloom syndrome                             | 5.2 |
|    | 424998 | U58515    | Hs.154138 | chitinase 3-like 2                         | 5.2 |
|    | 423419 | R55336    | Hs.23539  | ESTs                                       | 5.2 |
|    | 424922 | BE386547  | Hs.217112 | hypothetical protein MGC10825              | 5.2 |
| 30 | 447359 | NM_012093 | Hs.18268  | adenylate kinase 5                         | 5.2 |
|    | 408206 | AF041853  | Hs.43670  | kinesin family member 3A                   | 5.2 |
|    | 421013 | M62397    | Hs.1345   | mutated in colorectal cancers              | 5.2 |
|    | 429443 | AB028967  | Hs.202687 | potassium voltage-gated channel, Shal-re   | 5.2 |
|    | 434367 | AB020700  | Hs.3830   | KIAA0893 protein                           | 5.2 |
| 35 | 444861 | R46789    | Hs.76118  | ubiquitin carboxyl-terminal esterase L1    | 5.2 |
|    | 446142 | AF754693  | Hs.145968 | ESTs                                       | 5.2 |
|    | 448816 | AB033052  | Hs.22151  | KIAA1226 protein                           | 5.2 |
|    | 451050 | AW937420  | Hs.69662  | ESTs                                       | 5.2 |
|    | 451106 | BE382701  | Hs.25960  | v-myc avian myelocytomatosis viral related | 5.2 |
| 40 | 439285 | AL133916  | Hs.172572 | hypothetical protein FLJ20093              | 5.2 |
|    | 416737 | AF154335  | Hs.79691  | LIM domain protein                         | 5.2 |
|    | 424800 | AL035588  | Hs.153203 | MyoD family inhibitor                      | 5.2 |
|    | 443695 | AW204099  | Hs.337720 | ESTs, Weakly similar to AF126780 1 retin   | 5.2 |
|    | 415257 | F03016    | Hs.27513  | ESTs                                       | 5.2 |
| 45 | 433929 | AF375499  | Hs.27379  | ESTs                                       | 5.1 |
|    | 415651 | AF207162  | Hs.3815   | stathmin-like-protein RB3                  | 5.1 |
|    | 451027 | AW519204  | Hs.40808  | ESTs                                       | 5.1 |
|    | 409172 | Z99399    | Hs.118145 | ESTs                                       | 5.1 |
|    | 423343 | AA324643  | Hs.246106 | ESTs                                       | 5.1 |
| 50 | 429172 | AA447417  | Hs.285491 | ESTs                                       | 5.1 |
|    | 437268 | AF754847  | Hs.227571 | regulator of G-protein signalling 4        | 5.1 |
|    | 451270 | AW341392  | Hs.235795 | ESTs                                       | 5.1 |
|    | 452904 | AL157581  | Hs.30957  | Homo sapiens mRNA; cDNA DKFZp434E0626 (f   | 5.1 |
|    | 420560 | AW207748  | Hs.59115  | ESTs                                       | 5.1 |
| 55 | 418097 | R45137    | Hs.21868  | ESTs                                       | 5.1 |
|    | 442910 | AF365130  | Hs.11307  | ESTs, Weakly similar to T19326 hypotheti   | 5.1 |
|    | 434849 | AW292765  | Hs.8053   | ESTs                                       | 5.1 |
|    | 413554 | AA319146  | Hs.75426  | secretogranin II (chromogranin C)          | 5.1 |
|    | 414217 | AF309298  | Hs.279898 | Homo sapiens cDNA: FLJ23165 fis, clone L   | 5.1 |
| 60 | 412068 | S72043    | Hs.73133  | metallothionein 3 (growth inhibitory fac   | 5.0 |
|    | 413627 | BE182082  | Hs.246973 | ESTs                                       | 5.0 |
|    | 418661 | NM_001949 | Hs.1189   | E2F transcription factor 3                 | 5.0 |
|    | 422438 | AA445925  | Hs.270896 | ESTs, Moderately similar to Z195_HUMAN Z   | 5.0 |
|    | 423728 | AW891294  | Hs.132136 | solute carrier family 4, sodium bicarbon   | 5.0 |
| 65 | 431431 | AL096711  | Hs.252953 | Human DNA sequence from clone RP3-403A15   | 5.0 |
|    | 435087 | AW975241  | Hs.23567  | ESTs                                       | 5.0 |
|    | 452097 | AB002364  | Hs.27916  | a disintegrin-like and metalloprotease (   | 5.0 |
|    | 410434 | AF051152  | Hs.63668  | toll-like receptor 2                       | 4.9 |
| 70 | 408692 | AL040127  | Hs.34074  | dipeptidylpeptidase VI                     | 4.9 |
|    | 407808 | AA663559  | Hs.279789 | histone deacetylase 3                      | 4.9 |
|    | 418940 | H17739    | Hs.288513 | Human DNA sequence from clone RP5-899C14   | 4.9 |
|    | 425977 | R15138    | Hs.165570 | Homo sapiens clone 25052 mRNA sequence     | 4.9 |
|    | 426814 | AF036943  | Hs.172619 | myelin transcription factor 1-like         | 4.9 |
|    | 447112 | H17800    | Hs.71154  | ESTs                                       | 4.9 |
| 75 | 449574 | F05048    | Hs.175373 | ESTs                                       | 4.9 |
|    | 453652 | AW009640  | Hs.28368  | ESTs, Moderately similar to S65657 alpha   | 4.9 |
|    | 423869 | BE409301  | Hs.134012 | C1q-related factor                         | 4.9 |
|    | 413248 | T64858    | Hs.21433  | hypothetical protein DKFZp547J036          | 4.9 |
|    | 449176 | AF633545  | Hs.198072 | ESTs                                       | 4.9 |
| 80 | 448451 | AW015994  |           | gb:UH-B10p-abh-g-09-0-U1.s1 NCI_CGAP_S     | 4.8 |
|    | 402604 |           |           |  | 4.8 |
|    | 436039 | AW023323  | Hs.121070 | ESTs                                       | 4.8 |
|    | 448769 | N66037    | Hs.38173  | ESTs                                       | 4.8 |
|    | 423678 | AW963357  | Hs.7847   | ESTs                                       | 4.8 |



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|----|--------|-----------|-----------|---|-----|
|    | 439451 | AF036270  | Hs.278554 | heterochromatin-like protein 1            | 4.8 |
|    | 425870 | R13406    | Hs.56782  | ESTs                                      | 4.8 |
|    | 408777 | U71204    | Hs.47626  | Ric (Drosophila)-like, expressed in neur  | 4.8 |
| 5  | 413409 | AI638418  | Hs.78580  | DEAD/H (Asp-Glu-Ala-Asp/His) box polypep  | 4.8 |
|    | 413623 | AA825721  | Hs.246973 | ESTs                                      | 4.8 |
|    | 417246 | AI760098  | Hs.21411  | ESTs                                      | 4.8 |
|    | 420900 | AL045633  | Hs.44269  | ESTs                                      | 4.8 |
|    | 424153 | AA451737  | Hs.141496 | MAGE-like 2                               | 4.8 |
| 10 | 443539 | AI076182  | Hs.134074 | ESTs, Moderately similar to ALU6_HUMAN A  | 4.8 |
|    | 448750 | U95020    | Hs.21903  | calcium channel, voltage-dependent, beta  | 4.8 |
|    | 454030 | AW021429  | Hs.231980 | ESTs                                      | 4.8 |
|    | 424458 | M29273    | Hs.1780   | myelin associated glycoprotein            | 4.8 |
|    | 444119 | R41231    | Hs.184261 | ESTs, Weakly similar to T26686 hypotheti  | 4.8 |
|    | 407792 | AI077715  | Hs.39384  | putative secreted ligand homologous to f  | 4.8 |
| 15 | 431462 | AW533672  | Hs.256311 | granin-like neuroendocrine peptide precu  | 4.7 |
|    | 431103 | M57399    | Hs.44     | pleiotrophin (heparin binding growth fac  | 4.7 |
|    | 429956 | AI374651  | Hs.22542  | ESTs                                      | 4.7 |
|    | 435060 | AI422719  | Hs.233349 | ESTs, Weakly similar to fork head like p  | 4.7 |
| 20 | 436203 | BE384982  | Hs.5076   | Homo sapiens cDNA: FLJ22128 fis, clone H  | 4.7 |
|    | 448475 | BE613134  | Hs.247474 | hypothetical protein FLJ21032             | 4.7 |
|    | 422222 | AI699372  | Hs.193247 | hypothetical protein DKFZp434A171         | 4.7 |
|    | 431733 | AW298410  | Hs.21475  | ESTs                                      | 4.7 |
|    | 449353 | AA001220  | Hs.271369 | ESTs                                      | 4.7 |
| 25 | 452022 | AW072330  | Hs.293875 | ESTs                                      | 4.7 |
|    | 454269 | AI961060  | Hs.129908 | KIAA0591 protein                          | 4.7 |
|    | 404541 |           |           |   | 4.7 |
|    | 428189 | AA424030  | Hs.46627  | ESTs                                      | 4.7 |
|    | 409125 | R17268    | Hs.259873 | axonal transport of synaptic vesicles     | 4.7 |
| 30 | 450435 | AI418718  | Hs.144121 | ESTs, Weakly similar to T46916 hypotheti  | 4.6 |
|    | 425745 | U44060    | Hs.14427  | Homo sapiens cDNA: FLJ21800 fis, clone H  | 4.6 |
|    | 413492 | D87470    | Hs.75400  | KIAA0280 protein                          | 4.6 |
|    | 419629 | AB020695  | Hs.91662  | KIAA0888 protein                          | 4.6 |
|    | 407638 | AI404672  | Hs.334483 | hypothetical protein FLJ23571             | 4.6 |
| 35 | 436140 | W87355    | Hs.269587 | ESTs                                      | 4.6 |
|    | 439169 | AI912122  | Hs.41095  | ESTs                                      | 4.6 |
|    | 443150 | AI034467  | Hs.34650  | ESTs                                      | 4.6 |
|    | 451073 | AI758905  | Hs.206063 | ESTs                                      | 4.6 |
|    | 451659 | BE379761  | Hs.14248  | ESTs                                      | 4.6 |
| 40 | 452106 | AI141031  | Hs.21342  | ESTs                                      | 4.6 |
|    | 451407 | AA131376  | Hs.326401 | fibroblast growth factor 12B              | 4.6 |
|    | 448765 | R15337    | Hs.21958  | Homo sapiens mRNA: cDNA DKFZp547D086 (fr  | 4.6 |
|    | 430147 | R60704    | Hs.234434 | hairly/enhancer-of-split related with YRP | 4.6 |
|    | 437204 | AL110216  | Hs.12285  | ESTs, Weakly similar to I55214 salivary   | 4.6 |
| 45 | 431117 | AF003522  | Hs.250500 | della (Drosophila)-like 1                 | 4.5 |
|    | 422175 | N79885    | Hs.6382   | ESTs, Highly similar to T00391 hypotheti  | 4.5 |
|    | 407889 | R34556    | Hs.30800  | ESTs, Weakly similar to S65657 alpha-1C-  | 4.5 |
|    | 419343 | AA456245  | Hs.85603  | down-regulated by Ctnnb1, a               | 4.5 |
|    | 421790 | AW896201  | Hs.22654  | sodium channel, voltage-gated, type I, a  | 4.5 |
|    | 429399 | AA452244  | Hs.16727  | ESTs                                      | 4.5 |
| 50 | 450149 | AW969781  | Hs.132863 | Zic family member 2 (odd-paired Drosophi  | 4.5 |
|    | 453118 | AW195849  | Hs.252757 | ESTs                                      | 4.5 |
|    | 443455 | AB001025  | Hs.9349   | ryanodine receptor 3                      | 4.4 |
|    | 442613 | AI004002  | Hs.130522 | Kv channel-interacting protein 1          | 4.4 |
| 55 | 429643 | AA456889  | Hs.167279 | FYVE-finger-containing Rab5 effector pro  | 4.4 |
|    | 416209 | AA236776  | Hs.79078  | MAD2 (mitotic arrest deficient, yeast, h  | 4.4 |
|    | 418845 | AA852985  | Hs.89232  | chromobox homolog 5 (Drosophila HP1 alph  | 4.4 |
|    | 435202 | AI971313  | Hs.170204 | KIAA0551 protein                          | 4.4 |
|    | 437496 | AA452378  | Hs.170144 | Homo sapiens mRNA: cDNA DKFZp547J125 (fr  | 4.4 |
| 60 | 451254 | AI571016  | Hs.172967 | ESTs                                      | 4.4 |
|    | 439039 | AI656707  | Hs.48713  | ESTs                                      | 4.4 |
|    | 439979 | AW600291  | Hs.6823   | hypothetical protein FLJ10430             | 4.4 |
|    | 441607 | NM_005010 | Hs.7912   | neuronal cell adhesion molecule           | 4.4 |
|    | 424983 | AI742434  | Hs.169911 | ESTs                                      | 4.4 |
| 65 | 410611 | AW954134  | Hs.20924  | KIAA1628 protein                          | 4.4 |
|    | 402605 |           |           |   | 4.4 |
|    | 409248 | AB033035  | Hs.51965  | KIAA1209 protein                          | 4.4 |
|    | 442222 | AI061301  | Hs.164773 | ESTs                                      | 4.4 |
|    | 454027 | R40192    | Hs.21527  | Human DNA sequence from clone GS1-115M3   | 4.4 |
| 70 | 454293 | H49739    | Hs.134013 | ESTs, Moderately similar to HK61_HUMAN H  | 4.4 |
|    | 442832 | AW206560  | Hs.253569 | ESTs                                      | 4.4 |
|    | 407304 | AA565832  |           | gb:nj32b03.s1 NCI_CGAP_AA1 Homo sapiens   | 4.4 |
|    | 423279 | AW959861  | Hs.290943 | ESTs                                      | 4.3 |
|    | 427194 | AA399018  | Hs.250835 | ESTs                                      | 4.3 |
| 75 | 419723 | AL120193  | Hs.92614  | longevity assurance (LAG1, S. cerevisiae  | 4.3 |
|    | 445810 | AW265700  | Hs.155660 | ESTs                                      | 4.3 |
|    | 409734 | BE161664  | Hs.56155  | hypothetical protein                      | 4.3 |
|    | 410389 | AW954049  | Hs.8177   | ESTs, Weakly similar to PIHUB6 salivary   | 4.3 |
|    | 411571 | AA122393  | Hs.70811  | hypothetical protein FLJ20516             | 4.3 |
| 80 | 433024 | AA573847  | Hs.26549  | KIAA1708 protein                          | 4.3 |
|    | 453202 | AW085781  | Hs.26270  | hypothetical protein FLJ11588             | 4.3 |
|    | 425264 | AA353953  | Hs.20369  | ESTs, Weakly similar to gonadotropin ind  | 4.3 |
|    | 416427 | BE244050  | Hs.79307  | Rac/Cdc42 guanine exchange factor (GEF)   | 4.3 |
|    | 431789 | H19500    | Hs.269222 | mitogen-activated protein kinase 4        | 4.3 |

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|    | 444600 | R41398    | Hs.6996   | ESTs                                     | 4.3 |
|    | 454042 | H22570    | Hs.172572 | hypothetical protein FLJ20093            | 4.3 |
|    | 441899 | A1372588  | Hs.8022   | TU3A protein                             | 4.3 |
| 5  | 425255 | BE297611  | Hs.155392 | collapsin response mediator protein 1    | 4.3 |
|    | 410359 | AW975168  | Hs.13337  | ESTs, Weakly similar to unnamed protein  | 4.2 |
|    | 430291 | AV660345  | Hs.238126 | CGI-49 protein                           | 4.2 |
|    | 433597 | AA708205  | Hs.100343 | ESTs                                     | 4.2 |
|    | 444127 | N63620    | Hs.13281  | ESTs                                     | 4.2 |
| 10 | 448507 | AL133109  | Hs.21333  | Homo sapiens mRNA; cDNA DKFZp566N1047 (f | 4.2 |
|    | 413589 | AW452631  | Hs.313803 | ESTs, Highly similar to AF157833.1 noncl | 4.2 |
|    | 408577 | H50572    | Hs.19515  | ESTs, Highly similar to NRG3_HUMAN PRO-N | 4.2 |
|    | 409719 | AI769160  | Hs.108681 | Homo sapiens brain tumor associated prot | 4.2 |
|    | 428536 | AI143139  | Hs.2288   | visinin-like 1                           | 4.2 |
| 15 | 429118 | H20669    | Hs.35406  | ESTs, Highly similar to unnamed protein  | 4.2 |
|    | 432865 | AI753709  | Hs.152484 | ESTs, Weakly similar to I38022 hypothe   | 4.2 |
|    | 447138 | AI439112  | Hs.93828  | ESTs, Weakly similar to 2109260A B cell  | 4.2 |
|    | 450648 | AI703366  | Hs.26766  | ESTs                                     | 4.2 |
|    | 451459 | AI797515  | Hs.270560 | ESTs, Moderately similar to ALU7_HUMAN A | 4.2 |
| 20 | 421686 | AB011156  | Hs.106794 | KIAA0584 protein                         | 4.2 |
|    | 452776 | AA194540  | Hs.13522  | ESTs, Weakly similar to I38022 hypothe   | 4.2 |
|    | 436421 | AI676031  | Hs.122813 | ESTs, Weakly similar to ZN22_HUMAN ZINC  | 4.2 |
|    | 423858 | AL137326  | Hs.133483 | Homo sapiens mRNA; cDNA DKFZp434B0650 (f | 4.2 |
|    | 434001 | AW950905  | Hs.3697   | serine (or cysteine) proteinase inhibito | 4.2 |
| 25 | 437380 | AL359577  | Hs.112198 | Homo sapiens mRNA; cDNA DKFZp547M073 (fr | 4.2 |
|    | 432328 | AI572739  | Hs.195471 | 6-phosphofructo-2-kinase/fructose-2,6-bi | 4.1 |
|    | 439607 | BE540565  | Hs.159460 | ESTs                                     | 4.1 |
|    | 424028 | AF055084  | Hs.153692 | Homo sapiens cDNA FLJ14354 fis, clone Y7 | 4.1 |
|    | 446936 | H10207    | Hs.47314  | ESTs                                     | 4.1 |
| 30 | 424240 | AB023185  | Hs.143535 | calcium/calmodulin-dependent protein kin | 4.1 |
|    | 412446 | AI768015  | Hs.92127  | ESTs                                     | 4.1 |
|    | 409953 | AA332277  | Hs.57691  | cadherin 18, type 2                      | 4.1 |
|    | 416220 | N49776    | Hs.170994 | hypothetical protein MGC10946            | 4.1 |
|    | 419683 | AA248897  | Hs.48784  | ESTs                                     | 4.1 |
| 35 | 425071 | AW138057  | Hs.163835 | ESTs                                     | 4.1 |
|    | 428743 | AL080060  | Hs.301549 | Homo sapiens mRNA; cDNA DKFZp564H172 (fr | 4.1 |
|    | 432809 | AA565509  | Hs.131703 | ESTs                                     | 4.1 |
|    | 440105 | AA694010  | Hs.6932   | Homo sapiens clone 23809 mRNA sequence   | 4.1 |
|    | 452039 | AI922988  | Hs.172510 | ESTs                                     | 4.1 |
| 40 | 425905 | AB032959  | Hs.318584 | novel C3HC4 type Zinc finger (ring finge | 4.1 |
|    | 457561 | AA331517  | Hs.286055 | chimerin (chimaerin) 2                   | 4.1 |
|    | 429038 | AL023513  | Hs.194766 | seizure related gene 6 (mouse)-like      | 4.1 |
|    | 433932 | AW954599  | Hs.169330 | neuronal protein                         | 4.1 |
|    | 436637 | AI783829  | Hs.26766  | ESTs                                     | 4.1 |
| 45 | 439231 | AW581935  | Hs.141480 | Homo sapiens mRNA; cDNA DKFZp434N079 (fr | 4.1 |
|    | 450530 | NM_006668 | Hs.25121  | cytochrome P450, subfamily 46 (cholester | 4.1 |
|    | 407721 | Y12735    | Hs.38018  | dual-specificity tyrosine-(Y)-phosphoryl | 4.1 |
|    | 407881 | AW072003  | Hs.40968  | heparan sulfate (glucosamine) 3-O-sulfo  | 4.1 |
|    | 410486 | AW235094  | Hs.89233  | zinc finger protein                      | 4.0 |
| 50 | 413916 | N49813    | Hs.75615  | apolipoprotein C-II                      | 4.0 |
|    | 438703 | AI803373  | Hs.31599  | ESTs                                     | 4.0 |
|    | 424726 | AK001007  | Hs.138760 | Homo sapiens cDNA FLJ10145 fis, clone HE | 4.0 |
|    | 405771 |           |           |  | 4.0 |
|    | 418841 | NM_002332 | Hs.89137  | low density lipoprotein-related protein  | 4.0 |
| 55 | 421764 | AI681535  | Hs.148135 | serine/threonine kinase 33               | 4.0 |
|    | 424176 | AL137273  | Hs.142307 | hypothetical protein                     | 4.0 |
|    | 425773 | N21279    | Hs.237749 | ESTs                                     | 4.0 |
|    | 427304 | AA761526  | Hs.163853 | ESTs                                     | 4.0 |
|    | 428882 | AA436915  | Hs.131748 | ESTs, Moderately similar to ALU7_HUMAN A | 4.0 |
| 60 | 452634 | AI638627  | Hs.105685 | KIAA1688 protein                         | 4.0 |
|    | 453745 | AA952989  | Hs.63908  | hypothetical protein MGC14726            | 4.0 |
|    | 405239 | U89281    | Hs.11958  | oxidative 3 alpha hydroxysteroid dehydro | 4.0 |
|    | 413801 | M62246    | Hs.35406  | ESTs, Highly similar to unnamed protein  | 4.0 |
|    | 429698 | AI685086  | Hs.26339  | ESTs, Weakly similar to S21348 probable  | 4.0 |
| 65 | 435854 | AJ278120  | Hs.4996   | putative ankyrin-repeat containing prote | 4.0 |
|    | 439199 | R40373    | Hs.26299  | ESTs                                     | 4.0 |
|    | 439450 | R51613    | Hs.125304 | ESTs                                     | 4.0 |
|    | 446782 | AI653048  | Hs.144006 | ESTs                                     | 4.0 |
|    | 419687 | AI638859  | Hs.227699 | ESTs, Weakly similar to T2D3_HUMAN TRANS | 3.9 |
| 70 | 402408 |           |           |  | 3.9 |
|    | 453362 | H14988    | Hs.107375 | ESTs                                     | 3.9 |
|    | 414219 | W20010    | Hs.75823  | ALL1-fused gene from chromosome 1q       | 3.9 |
|    | 420578 | AA613546  | Hs.99034  | GTP-binding protein Rho7                 | 3.9 |
|    | 425010 | T16837    | Hs.4241   | ESTs                                     | 3.9 |
| 75 | 444230 | H95537    | Hs.146067 | ESTs                                     | 3.9 |
|    | 441736 | AW292779  | Hs.169799 | ESTs                                     | 3.9 |
|    | 418951 | F07809    | Hs.89506  | paired box gene 6 (aniridia, keratitis)  | 3.9 |
|    | 406311 |           |           |  | 3.9 |
|    | 408460 | AA054726  | Hs.285574 | ESTs                                     | 3.9 |
| 80 | 410658 | AW105231  | Hs.192035 | ESTs                                     | 3.9 |
|    | 414699 | AI815523  | Hs.76930  | synuclein, alpha (non A4 component of am | 3.9 |
|    | 418849 | AW474547  | Hs.53565  | Homo sapiens PIG-M mRNA for mannosyltran | 3.9 |
|    | 429477 | AJ275514  | Hs.6658   | ESTs                                     | 3.9 |
|    | 433766 | AA609234  | Hs.112669 | ESTs                                     | 3.9 |

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|    | 436190 | AK001059  |           | gb:Homo sapiens cDNA FLJ10197 fis, clone  | 3.9 |
|    | 447891 | R41754    | Hs.6496   | ESTs                                      | 3.9 |
|    | 450221 | AA328102  | Hs.24641  | cytoskeleton associated protein 2         | 3.9 |
|    | 404283 |           |           |   | 3.9 |
| 5  | 453919 | AW959912  | Hs.7076   | KIAA1705 protein                          | 3.9 |
|    | 429656 | X05608    | Hs.211584 | neurofilament, light polypeptide (68kD)   | 3.9 |
|    | 412754 | AW160375  | Hs.74565  | amyloid beta (A4) precursor-like protein  | 3.9 |
|    | 445314 | AI689948  | Hs.65489  | Homo sapiens cDNA: FLJ21517 fis, clone C  | 3.9 |
| 10 | 435652 | N32388    | Hs.334370 | uncharacterized hypothalamus protein HBE  | 3.9 |
|    | 407378 | AA299264  | Hs.57776  | ESTs, Moderately similar to I38022 hypot  | 3.9 |
|    | 438054 | AA776626  | Hs.62183  | ESTs                                      | 3.9 |
|    | 436420 | AA443966  | Hs.31595  | ESTs                                      | 3.9 |
|    | 445133 | AW157646  | Hs.153506 | ESTs                                      | 3.9 |
| 15 | 432590 | AI609273  | Hs.110783 | ESTs                                      | 3.9 |
|    | 453331 | AI240665  | Hs.8895   | ESTs                                      | 3.9 |
|    | 410227 | AB009284  | Hs.61152  | exostoses (multiple)-like 2               | 3.8 |
|    | 424635 | AA420687  | Hs.115455 | Homo sapiens cDNA FLJ14259 fis, clone PL  | 3.8 |
|    | 451489 | NM_005503 | Hs.26468  | amyloid beta (A4) precursor protein-bind  | 3.8 |
| 20 | 447247 | AW369351  | Hs.287955 | Homo sapiens cDNA FLJ13090 fis, clone NT  | 3.8 |
|    | 448302 | AI480208  | Hs.182906 | Homo sapiens mRNA for KIAA1872 protein,   | 3.8 |
|    | 415669 | NM_005025 | Hs.78589  | serine (or cysteine) proteinase inhibitor | 3.8 |
|    | 417355 | D13168    | Hs.82002  | endothelin receptor type B                | 3.8 |
|    | 446727 | AB011095  | Hs.16032  | KIAA0523 protein                          | 3.8 |
| 25 | 424340 | AA339036  | Hs.7033   | ESTs                                      | 3.8 |
|    | 423346 | AI267677  | Hs.127416 | synaptotagmin 1                           | 3.8 |
|    | 412788 | AA120960  | Hs.198416 | ESTs                                      | 3.8 |
|    | 404593 |           |           |   | 3.8 |
|    | 416856 | N27833    | Hs.269028 | ESTs, Weakly similar to I38022 hypotheti  | 3.8 |
| 30 | 429896 | AA460367  | Hs.224223 | ESTs, Moderately similar to I38022 hypot  | 3.8 |
|    | 439619 | AW975998  | Hs.58595  | ESTs, Weakly similar to I38022 hypotheti  | 3.8 |
|    | 439634 | W79377    | Hs.167    | microtubule-associated protein 2          | 3.8 |
|    | 440322 | AA879430  |           | gb:oj91d08.s1 Soares_NFL_T_GBC_S1 Homo s  | 3.8 |
|    | 447761 | AF061573  | Hs.19492  | protocadherin 8                           | 3.8 |
| 35 | 452453 | AI902519  |           | gb:QV-BT009-101198-051 BT009 Homo sapien  | 3.8 |
|    | 439671 | AW162840  | Hs.6641   | kinesin family member 5C                  | 3.8 |
|    | 447937 | AL109716  | Hs.20034  | Homo sapiens mRNA full length insert cDN  | 3.8 |
|    | 459278 | AW294659  | Hs.34054  | Homo sapiens cDNA: FLJ22488 fis, clone H  | 3.8 |
|    | 447028 | AI973128  | Hs.167257 | brain link protein-1                      | 3.8 |
| 40 | 449458 | AI805078  | Hs.208261 | ESTs                                      | 3.8 |
|    | 445888 | AF070564  | Hs.13415  | Homo sapiens clone 24571 mRNA sequence    | 3.8 |
|    | 407385 | AA610150  | Hs.272072 | ESTs, Weakly similar to I38022 hypotheti  | 3.8 |
|    | 428841 | AI418430  | Hs.104935 | ESTs                                      | 3.8 |
| 45 | 430643 | AW970065  | Hs.287425 | MEGF10 protein                            | 3.8 |
|    | 422263 | AA307639  | Hs.129908 | KIAA0591 protein                          | 3.8 |
|    | 451625 | R56793    | Hs.106576 | alanine-glyoxylate aminotransferase 2-l   | 3.8 |
|    | 439236 | BE160952  | Hs.247117 | ESTs, Moderately similar to ALUF_HUMAN I  | 3.8 |
|    | 441928 | AI370188  | Hs.211454 | ESTs                                      | 3.8 |
|    | 441797 | AI936933  | Hs.214635 | ESTs                                      | 3.7 |
| 50 | 414922 | D00723    | Hs.77631  | glycine cleavage system protein H (amino  | 3.7 |
|    | 425588 | F07396    | Hs.46751  | ESTs                                      | 3.7 |
|    | 437007 | AA741300  | Hs.202599 | ESTs, Weakly similar to I38022 hypotheti  | 3.7 |
|    | 435793 | AB037734  | Hs.4993   | KIAA1313 protein                          | 3.7 |
|    | 443682 | AI383061  | Hs.47248  | ESTs, Highly similar to similar to Cdc14  | 3.7 |
| 55 | 425741 | AF052152  | Hs.159412 | Homo sapiens clone 24628 mRNA sequence    | 3.7 |
|    | 418211 | BE244746  | Hs.247474 | hypothetical protein FLJ21032             | 3.7 |
|    | 440080 | AW051597  | Hs.143707 | ESTs                                      | 3.7 |
|    | 452898 | AA814497  | Hs.78792  | ESTs                                      | 3.7 |
|    | 435575 | AF213457  | Hs.44234  | triggering receptor expressed on myeloid  | 3.7 |
| 60 | 409234 | AI879419  | Hs.27206  | ESTs                                      | 3.7 |
|    | 420489 | AA815089  | Hs.193513 | ESTs                                      | 3.7 |
|    | 426890 | AA393167  | Hs.41294  | ESTs                                      | 3.7 |
|    | 438849 | W28948    | Hs.10762  | ESTs                                      | 3.7 |
|    | 441869 | NM_003947 | Hs.8004   | huntingtin-associated protein interactin  | 3.7 |
| 65 | 448796 | AA147629  | Hs.301431 | endothelial zinc finger protein induced   | 3.7 |
|    | 459318 | NM_000038 |           | gb:Homo sapiens adenomatosis polyposis c  | 3.7 |
|    | 459518 | AI937419  | Hs.294069 | Homo sapiens cDNA FLJ13384 fis, clone PL  | 3.7 |
|    | 434444 | AI765276  | Hs.101257 | hypothetical protein MGC3295              | 3.7 |
|    | 421183 | AL135740  | Hs.102447 | TSC-22-like                               | 3.7 |
| 70 | 410555 | U92649    | Hs.64311  | a disintegrin and metalloproteinase doma  | 3.7 |
|    | 421637 | AF035290  | Hs.106300 | Homo sapiens clone 23556 mRNA sequence    | 3.7 |
|    | 418522 | AA605038  | Hs.7149   | Homo sapiens cDNA: FLJ21950 fis, clone H  | 3.7 |
|    | 420807 | AA280627  | Hs.57846  | ESTs                                      | 3.7 |
|    | 449961 | AW265634  | Hs.133100 | ESTs                                      | 3.7 |
| 75 | 422634 | NM_016010 | Hs.118821 | CGI-62 protein                            | 3.7 |
|    | 421030 | AW161357  | Hs.101174 | microtubule-associated protein tau        | 3.7 |
|    | 427099 | AB032953  | Hs.173560 | odd Oz/ten-m homolog 2 (Drosophila, mous  | 3.7 |
|    | 452355 | N54926    | Hs.29202  | G protein-coupled receptor 34             | 3.7 |
|    | 440483 | AI200836  | Hs.150385 | ESTs                                      | 3.7 |
| 80 | 429597 | NM_003816 | Hs.2442   | a disintegrin and metalloproteinase doma  | 3.7 |
|    | 423756 | AA828125  |           | gb:od71a09.s1 NCL_CGAP_Ov2 Homo sapiens   | 3.6 |
|    | 425187 | AW014486  | Hs.22509  | ESTs                                      | 3.6 |
|    | 434859 | BE255080  | Hs.299315 | collapsin response mediator protein-5; C  | 3.6 |
|    | 413199 | M62843    | Hs.75236  | ELAV (embryonic lethal, abnormal vision,  | 3.6 |

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|    | 445729 | H21066    | Hs.13223  | Homo sapiens mRNA full length insert cDN | 3.6 |
|    | 416120 | H46739    |           | gb:yo14h02.s1 Soares adult brain N2b5HB5 | 3.6 |
|    | 429239 | AA448419  | Hs.45209  | ESTs                                     | 3.6 |
|    | 419086 | NM_000216 | Hs.89591  | Kallmann syndrome 1 sequence             | 3.6 |
| 5  | 446659 | AI335361  | Hs.226376 | ESTs                                     | 3.6 |
|    | 426757 | AW205640  | Hs.158206 | ESTs                                     | 3.6 |
|    | 418819 | AA228776  | Hs.191721 | ESTs                                     | 3.6 |
|    | 458332 | AI000341  | Hs.220491 | ESTs                                     | 3.6 |
| 10 | 408826 | AF216077  | Hs.48376  | Homo sapiens clone HB-2 mRNA sequence    | 3.6 |
|    | 410343 | AA084273  | Hs.76561  | ESTs, Weakly similar to S47072 finger pr | 3.6 |
|    | 410507 | AA355288  | Hs.40834  | transitional epithelia response protein  | 3.6 |
|    | 422977 | AA631498  |           | gb:np83h04.s1 NCI_CGAP_Thy1 Homo sapiens | 3.6 |
|    | 425305 | AA363025  | Hs.155572 | Human clone 23801 mRNA sequence          | 3.6 |
| 15 | 428002 | AA418703  |           | gb:zv98c03.s1 Soares_NhHMPu_S1 Homo sapi | 3.6 |
|    | 428505 | AL035461  | Hs.2281   | chromogranin B (secretogranin 1)         | 3.6 |
|    | 430530 | AA480870  | Hs.47660  | ESTs                                     | 3.6 |
|    | 436425 | AI913145  | Hs.318725 | CGI-72 protein                           | 3.6 |
|    | 438078 | AI016377  | Hs.131693 | ESTs                                     | 3.6 |
| 20 | 442927 | AI024347  | Hs.131519 | ESTs                                     | 3.6 |
|    | 446242 | N66336    | Hs.7360   | ESTs                                     | 3.6 |
|    | 448831 | AL080123  | Hs.22182  | zinc finger protein 23 (KOX 16)          | 3.6 |
|    | 450474 | AW872844  | Hs.201919 | ESTs                                     | 3.6 |
|    | 452198 | AI097560  | Hs.61210  | ESTs, Weakly similar to I33022 hypotheti | 3.6 |
| 25 | 455600 | R22479    | Hs.167073 | Homo sapiens cDNA FLJ13047 fis, clone NT | 3.6 |
|    | 436443 | AW138211  | Hs.128746 | ESTs                                     | 3.6 |
|    | 426514 | BE616633  | Hs.170195 | bone morphogenetic protein 7 (osteogenic | 3.6 |
|    | 456038 | AA203285  | Hs.294141 | ESTs, Weakly similar to alternatively sp | 3.6 |
|    | 408902 | AW014869  | Hs.5510   | ESTs                                     | 3.6 |
| 30 | 442950 | AI500417  | Hs.46764  | ESTs                                     | 3.6 |
|    | 423905 | AW579960  | Hs.135150 | lung type-I cell membrane-associated gly | 3.6 |
|    | 425478 | AB007953  | Hs.268840 | ESTs                                     | 3.6 |
|    | 453884 | AA355925  | Hs.36232  | KIAA0186 gene product                    | 3.6 |
|    | 404721 |           |           |  | 3.6 |
| 35 | 408453 | AI369838  | Hs.45127  | chondroitin sulfate proteoglycan 5 (neur | 3.6 |
|    | 440553 | AA889416  | Hs.295362 | Homo sapiens cDNA FLJ14459 fis, clone HE | 3.5 |
|    | 446372 | AB020644  | Hs.14945  | long fatty acyl-CoA synthetase 2 gene    | 3.5 |
|    | 413999 | N46124    | Hs.34460  | ESTs                                     | 3.5 |
|    | 421458 | NM_003654 | Hs.104576 | carbohydrate (keratan sulfate Gal-6) sul | 3.5 |
| 40 | 425017 | AL119305  | Hs.288405 | ESTs                                     | 3.5 |
|    | 435958 | H98180    | Hs.117975 | ESTs                                     | 3.5 |
|    | 415101 | R45531    | Hs.144534 | ESTs                                     | 3.5 |
|    | 451320 | AW118072  | Hs.89981  | diacylglycerol kinase, zeta (104kD)      | 3.5 |
|    | 430290 | AI734110  | Hs.136355 | ESTs                                     | 3.5 |
| 45 | 416836 | D54745    | Hs.80247  | cholecystokinin                          | 3.5 |
|    | 414821 | M63835    | Hs.77424  | Fc fragment of IgG, high affinity Ia, re | 3.5 |
|    | 415412 | AW161058  | Hs.90297  | synuclein, beta                          | 3.5 |
|    | 437860 | AA333063  | Hs.279898 | Homo sapiens cDNA: FLJ23165 fis, clone L | 3.5 |
|    | 452689 | F33868    | Hs.284176 | transferrin                              | 3.5 |
| 50 | 416661 | AA634543  | Hs.79440  | IGF-II mRNA-binding protein 3            | 3.5 |
|    | 427491 | R43279    | Hs.22574  | ESTs, Weakly similar to I38022 hypotheti | 3.5 |
|    | 428037 | N47474    | Hs.89230  | potassium intermediate/small conductance | 3.5 |
|    | 444584 | AI168422  |           | gb:ok30e11.x1 Soares_NSF_F8_9W_OT_PA_P_S | 3.5 |
| 55 | 408296 | AL117452  | Hs.44155  | DKFZP586G1517 protein                    | 3.5 |
|    | 453775 | NM_002916 | Hs.35120  | replication factor C (activator 1) 4 (37 | 3.5 |
|    | 412659 | AW753865  | Hs.74376  | olfactomedin related ER localized protei | 3.5 |
|    | 429077 | AB028983  | Hs.2352   | adenylate cyclase 2 (brain)              | 3.5 |
|    | 436887 | AW953157  | Hs.193235 | hypothetical protein DKFZp547D155        | 3.5 |
|    | 450784 | AW246803  | Hs.47289  | ESTs                                     | 3.5 |
| 60 | 446827 | AW451243  | Hs.157069 | ESTs                                     | 3.5 |
|    | 436434 | N50465    | Hs.92927  | putative 47 kDa protein                  | 3.5 |
|    | 412777 | AI335773  | Hs.270123 | ESTs                                     | 3.5 |
|    | 436476 | AA326108  | Hs.33829  | bHLH protein DEC2                        | 3.5 |
|    | 409601 | U47928    | Hs.86122  | protein A                                | 3.4 |
| 65 | 429401 | AW296102  | Hs.99272  | ESTs, Weakly similar to S32567 A4 protei | 3.4 |
|    | 448425 | AI500359  | Hs.233401 | ESTs                                     | 3.4 |
|    | 418727 | AA227609  | Hs.94834  | ESTs                                     | 3.4 |
|    | 451729 | AW160725  | Hs.312469 | ESTs                                     | 3.4 |
|    | 435910 | AI084152  | Hs.21782  | ESTs, Weakly similar to ALU7_HUMAN ALU S | 3.4 |
| 70 | 434577 | R37316    | Hs.179769 | Homo sapiens cDNA: FLJ22487 fis, clone H | 3.4 |
|    | 414598 | AI094221  | Hs.135150 | lung type-I cell membrane-associated gly | 3.4 |
|    | 439627 | BE621702  | Hs.29076  | hypothetical protein FLJ21841            | 3.4 |
|    | 413293 | AL047483  | Hs.302498 | GTP-binding protein homologous to Saccha | 3.4 |
|    | 423992 | AW898292  | Hs.137206 | Homo sapiens mRNA: cDNA DKFZp564H1663 (f | 3.4 |
| 75 | 426249 | F05422    | Hs.168352 | nucleoporin-like protein 1               | 3.4 |
|    | 426968 | U07616    | Hs.173034 | amphiphysin (Stiff-Mann syndrome with br | 3.4 |
|    | 430388 | AA356923  | Hs.240770 | nuclear cap binding protein subunit 2, 2 | 3.4 |
|    | 435061 | AI651474  | Hs.163944 | ESTs                                     | 3.4 |
|    | 452291 | AF015592  | Hs.28853  | CDC7 (cell division cycle 7, S. cerevisi | 3.4 |
| 80 | 449714 | AB033015  | Hs.23941  | KIAA1189 protein                         | 3.4 |
|    | 443392 | AI055821  | Hs.293420 | ESTs                                     | 3.4 |
|    | 410082 | AA081594  | Hs.158311 | Musashi (Drosophila) homolog 1           | 3.4 |
|    | 445337 | NM_013280 | Hs.12523  | fibronectin leucine rich transmembrane p | 3.4 |
|    | 408493 | BE206854  | Hs.46039  | phosphoglycerate mutase 2 (muscle)       | 3.4 |

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|    |        |           |           |   |     |
|----|--------|-----------|-----------|---|-----|
|    | 432731 | R31178    | Hs.287820 | fibronectin 1                             | 3.4 |
|    | 449758 | AB018311  | Hs.21917  | KIAA0768 protein                          | 3.4 |
|    | 432613 | AW081698  | Hs.80712  | KIAA0202 protein                          | 3.4 |
| 5  | 434164 | AW207019  | Hs.148135 | serine/threonine kinase 33                | 3.4 |
|    | 425294 | AF033827  | Hs.155553 | HNK-1 sulfotransferase                    | 3.4 |
|    | 410108 | AA081659  | Hs.318775 | OSBP-related protein 6                    | 3.4 |
|    | 406815 | AA833930  | Hs.288036 | IRNA isopentenylpyrophosphate transferas  | 3.4 |
|    | 402855 |           |           |   | 3.3 |
| 10 | 422170 | AI791949  | Hs.112432 | anti-Mullerian hormone                    | 3.3 |
|    | 445034 | AW293376  | Hs.143659 | ESTs                                      | 3.3 |
|    | 424378 | W28020    | Hs.167988 | neural cell adhesion molecule 1           | 3.3 |
|    | 423611 | AB011163  | Hs.129908 | KIAA0591 protein                          | 3.3 |
|    | 435593 | R88872    | Hs.4964   | DKFZP586J1624 protein                     | 3.3 |
|    | 404819 |           |           |   | 3.3 |
| 15 | 436507 | AW661783  | Hs.211061 | ESTs                                      | 3.3 |
|    | 427315 | AA179949  | Hs.175563 | Homo sapiens mRNA; cDNA DKFZp564N0763 (f  | 3.3 |
|    | 452693 | T79153    | Hs.48589  | zinc finger protein 228                   | 3.3 |
|    | 454996 | AW850180  |           | gb:IL3-CT0219-271099-022-C09 CT0219 Homo  | 3.3 |
| 20 | 406927 | M26460    |           | gb:Homo sapiens (clone 104) retinoblasto  | 3.3 |
|    | 409045 | AA635062  | Hs.50094  | Homo sapiens mRNA; cDNA DKFZp434O00515 (f | 3.3 |
|    | 415238 | R37780    | Hs.21422  | ESTs                                      | 3.3 |
|    | 417845 | AL117461  | Hs.82719  | Homo sapiens mRNA; cDNA DKFZp586F1822 (f  | 3.3 |
|    | 421192 | AA833718  | Hs.204529 | KIAA1806 protein                          | 3.3 |
| 25 | 426695 | AW118191  | Hs.112729 | ESTs                                      | 3.3 |
|    | 438885 | AI886558  | Hs.184987 | ESTs                                      | 3.3 |
|    | 451762 | AF222980  | Hs.26985  | disrupted in schizophrenia 1              | 3.3 |
|    | 452103 | R42764    | Hs.339654 | ESTs, Weakly similar to I38022 hypotheti  | 3.3 |
|    | 453590 | AF150278  | Hs.33578  | KIAA0820 protein                          | 3.3 |
| 30 | 453616 | NM_003452 | Hs.33846  | dynein, axonemal, light intermediate pol  | 3.3 |
|    | 457285 | AI038858  | Hs.130522 | Kv channel-interacting protein 1          | 3.3 |
|    | 436045 | AB037723  | Hs.5028   | DKFZP564O0423 protein                     | 3.3 |
|    | 437470 | AL390147  | Hs.134742 | hypothetical protein DKFZp547D065         | 3.3 |
|    | 448520 | AB002367  | Hs.21355  | doublecortin and CaM kinase-like 1        | 3.3 |
|    | 436480 | AJ271643  | Hs.87469  | putative acid-sensing ion channel         | 3.3 |
| 35 | 432656 | NM_000246 | Hs.3076   | MHC class II transactivator               | 3.3 |
|    | 443698 | AW804296  | Hs.9950   | Sec61 gamma                               | 3.3 |
|    | 423582 | BE000831  | Hs.23837  | Homo sapiens cDNA FLJ11812 fis, clone HE  | 3.3 |
|    | 445953 | AI612775  | Hs.145710 | ESTs                                      | 3.3 |
| 40 | 427940 | AA417812  | Hs.38775  | ESTs                                      | 3.3 |
|    | 414683 | S78296    | Hs.76888  | hypothetical protein MGC12702             | 3.3 |
|    | 428484 | AF104032  | Hs.184601 | solute carrier family 7 (cationic amino   | 3.3 |
|    | 420649 | AI866964  | Hs.124704 | ESTs, Moderately similar to S65657 alpha  | 3.3 |
|    | 419498 | AL036591  | Hs.20887  | hypothetical protein FLJ10392             | 3.3 |
| 45 | 457579 | AB030816  | Hs.36761  | HRAS-like suppressor                      | 3.3 |
|    | 436556 | AI364997  | Hs.7572   | ESTs                                      | 3.2 |
|    | 424369 | R87622    | Hs.26714  | KIAA1831 protein                          | 3.2 |
|    | 457065 | AI476318  | Hs.192480 | ESTs                                      | 3.2 |
|    | 440210 | AW674562  | Hs.125296 | ESTs                                      | 3.2 |
| 50 | 444513 | AL120214  | Hs.7117   | glutamate receptor, ionotropic, AMPA 1    | 3.2 |
|    | 434363 | AA630863  | Hs.131375 | ESTs, Moderately similar to ALUB_HUMAN!   | 3.2 |
|    | 414430 | AI346201  | Hs.76118  | ubiquitin carboxyl-terminal esterase L1   | 3.2 |
|    | 439924 | AI985897  | Hs.125293 | ESTs                                      | 3.2 |
|    | 411505 | AF155659  | Hs.70565  | molybdenum cofactor synthesis 2           | 3.2 |
| 55 | 423175 | W27595    | Hs.18653  | hypothetical protein FLJ14627             | 3.2 |
|    | 415115 | AA214228  | Hs.127751 | hypothetical protein                      | 3.2 |
|    | 407878 | D87468    | Hs.40888  | activity-regulated cytoskeleton-associat  | 3.2 |
|    | 410274 | AA381807  | Hs.61762  | hypoxia-inducible protein 2               | 3.2 |
|    | 437762 | T78028    | Hs.154679 | synaptotagmin I                           | 3.2 |
| 60 | 438944 | AA302517  | Hs.92732  | KIAA1444 protein                          | 3.2 |
|    | 450313 | AI038989  | Hs.332633 | Bardet-Biedl syndrome 2                   | 3.2 |
|    | 409459 | D86407    | Hs.54481  | low density lipoprotein receptor-related  | 3.2 |
|    | 410953 | AW811766  | Hs.334858 | hypothetical protein MGC12250             | 3.2 |
|    | 418527 | AA450386  | Hs.7149   | Homo sapiens cDNA: FLJ21950 fis, clone H  | 3.2 |
| 65 | 420081 | AW510776  | Hs.94958  | tubulin tyrosine ligase-like 1            | 3.2 |
|    | 429496 | AA453800  | Hs.192793 | ESTs                                      | 3.2 |
|    | 430099 | AW194988  | Hs.20537  | hypothetical protein FLJ13942             | 3.2 |
|    | 434928 | AW015595  | Hs.4267   | Homo sapiens clones 24714 and 24715 mRNA  | 3.2 |
|    | 435532 | AW291488  | Hs.117305 | Homo sapiens, clone IMAGE:3682908, mRNA   | 3.2 |
| 70 | 438306 | AW188266  | Hs.163645 | ESTs                                      | 3.2 |
|    | 439274 | AF086092  | Hs.48372  | ESTs                                      | 3.2 |
|    | 440847 | AA907511  | Hs.130178 | ESTs                                      | 3.2 |
|    | 447750 | AI422234  | Hs.143434 | contactin 1                               | 3.2 |
|    | 455350 | AW901309  |           | gb:QV0-NN1020-170400-195-h02 NN1020 Homo  | 3.2 |
| 75 | 430890 | X54232    | Hs.2699   | glypican 1                                | 3.2 |
|    | 420568 | F09247    | Hs.247735 | protocadherin alpha 10                    | 3.2 |
|    | 410763 | AF038185  | Hs.66187  | Homo sapiens clone 23700 mRNA sequence    | 3.2 |
|    | 427450 | AB014526  | Hs.178121 | KIAA0626 gene product                     | 3.2 |
|    | 430456 | AA314998  | Hs.241503 | hypothetical protein                      | 3.2 |
| 80 | 430181 | AF065314  | Hs.234785 | cyclic nucleotide gated channel alpha 3   | 3.2 |
|    | 418512 | AW498974  | Hs.89981  | diacylglycerol kinase, zeta (104kD)       | 3.2 |
|    | 419912 | AF249745  | Hs.6066   | Rho guanine nucleotide exchange factor (  | 3.2 |
|    | 450689 | AI369275  | Hs.243010 | Homo sapiens cDNA FLJ14445 fis, clone HE  | 3.2 |
|    | 424899 | AL119387  | Hs.119062 | ESTs                                      | 3.2 |

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|    | 436277 | R88520    | Hs.120917 | ESTs                                     | 3.2 |
|    | 451455 | AI937227  | Hs.8821   | hepcidin antimicrobial peptide           | 3.2 |
|    | 445078 | AI869975  | Hs.4775   | junctional protein 3                     | 3.2 |
| 5  | 447746 | AW015920  | Hs.161359 | ESTs                                     | 3.2 |
|    | 435458 | F11872    | Hs.4892   | Homo sapiens clone 24841 mRNA sequence   | 3.2 |
|    | 427729 | AB033100  | Hs.300646 | KIAA protein (similar to mouse paladin)  | 3.2 |
|    | 417417 | F05745    | Hs.89512  | ATPase, Ca++ transporting, plasma membra | 3.1 |
|    | 439810 | AW897846  | Hs.6421   | hypothetical protein DKFZp761N09121      | 3.1 |
| 10 | 439570 | T79925    | Hs.269165 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 3.1 |
|    | 432527 | AW975028  | Hs.102754 | ESTs                                     | 3.1 |
|    | 416801 | X98834    | Hs.79971  | sal (Drosophila)-like 2                  | 3.1 |
|    | 421988 | AW450481  | Hs.161333 | ESTs                                     | 3.1 |
|    | 426509 | M31166    | Hs.2050   | pentaxin-related gene, rapidly induced b | 3.1 |
| 15 | 408786 | AA773187  | Hs.294027 | ESTs                                     | 3.1 |
|    | 433494 | AB029396  | Hs.3353   | beta-1,3-glucuronyltransferase 1 (glucur | 3.1 |
|    | 412723 | AA648459  | Hs.335951 | hypothetical protein AF301222            | 3.1 |
|    | 418329 | AW247430  | Hs.84152  | cystathionine-beta-synthase              | 3.1 |
|    | 439456 | AI752409  | Hs.109314 | hypothetical protein FLJ20980            | 3.1 |
| 20 | 428832 | AA578229  | Hs.324239 | ESTs, Moderately similar to ZN91_HUMAN Z | 3.1 |
|    | 452780 | BE171598  | Hs.13522  | ESTs, Weakly similar to I38022 hypotheti | 3.1 |
|    | 438192 | AI859065  | Hs.337620 | Homo sapiens AFG3L1 isoform 1 mRNA, part | 3.1 |
|    | 424939 | AK000059  | Hs.153881 | Homo sapiens NY-REN-62 antigen mRNA, par | 3.1 |
|    | 403053 | R58624    | Hs.2186   | eukaryotic translation elongation factor | 3.1 |
| 25 | 404299 |           |           |  | 3.1 |
|    | 407864 | AF069291  | Hs.40539  | chromosome 8 open reading frame 1        | 3.1 |
|    | 410181 | AI468210  | Hs.261285 | pleiotropic regulator 1 (PRL1, Arabidops | 3.1 |
|    | 418852 | BE537037  | Hs.273294 | hypothetical protein FLJ20069            | 3.1 |
|    | 449101 | AA205847  | Hs.23016  | G protein-coupled receptor               | 3.1 |
| 30 | 453240 | AI969564  | Hs.166254 | hypothetical protein DKFZp566I133        | 3.1 |
|    | 440486 | BE243513  | Hs.7212   | hypothetical protein PP1044              | 3.1 |
|    | 408096 | BE250162  | Hs.83765  | dihydrofolate reductase                  | 3.1 |
|    | 439864 | AI720078  | Hs.291997 | ESTs, Weakly similar to A47582 B-cell gr | 3.1 |
|    | 414706 | AW340125  | Hs.76989  | KIAA0097 gene product                    | 3.1 |
| 35 | 436315 | BE390513  | Hs.27935  | hypothetical protein MGC4837             | 3.1 |
|    | 426855 | AL117427  | Hs.172778 | Homo sapiens mRNA; cDNA DKFZp566P013 (fr | 3.1 |
|    | 425683 | AB037813  | Hs.159200 | hypothetical protein DKFZp762K222        | 3.1 |
|    | 410126 | BE169274  | Hs.169387 | KIAA0036 gene product                    | 3.1 |
|    | 435312 | AJ243396  | Hs.4865   | voltage-gated sodium channel beta-3 subu | 3.1 |
| 40 | 425491 | AA883316  | Hs.255221 | ESTs                                     | 3.1 |
|    | 456273 | AF154846  | Hs.1148   | zinc finger protein                      | 3.1 |
|    | 412140 | AA219691  | Hs.73625  | RAB6 interacting, kinesin-like (rabkines | 3.1 |
|    | 445255 | NM_014841 | Hs.12477  | synaptosomal-associated protein, 91 kDa  | 3.1 |
|    | 432154 | AI701523  | Hs.112577 | ESTs                                     | 3.1 |
| 45 | 453128 | AW026516  | Hs.31791  | acylphosphatase 2, muscle type           | 3.1 |
|    | 438458 | AW975186  |           | gb:EST387294 MAGE resequences, MAGN Homo | 3.1 |
|    | 448616 | AF035621  | Hs.21611  | kinesin family member 3C                 | 3.0 |
|    | 429281 | AA830856  | Hs.29808  | Homo sapiens cDNA: FLJ21122 fls, clone C | 3.0 |
|    | 443906 | AA348031  | Hs.7913   | ESTs                                     | 3.0 |
| 50 | 417318 | AW953937  | Hs.12891  | ESTs                                     | 3.0 |
|    | 452619 | AW298597  | Hs.61884  | Homo sapiens, clone IMAGE:4298026, mRNA, | 3.0 |
|    | 444153 | AK001610  | Hs.10414  | hypothetical protein FLJ10748            | 3.0 |
|    | 408790 | AW580227  | Hs.47860  | neurotrophic tyrosine kinase, receptor,  | 3.0 |
|    | 426327 | W03242    | Hs.44898  | Homo sapiens clone TCCCTA00151 mRNA sequ | 3.0 |
| 55 | 451458 | AW503398  | Hs.293663 | ESTs, Moderately similar to I38022 hypot | 3.0 |
|    | 422758 | AF152329  | Hs.284180 | protocadherin gamma subfamily C, 3       | 3.0 |
|    | 421633 | AF121860  | Hs.106260 | sorting nexin 10                         | 3.0 |
|    | 428361 | NM_015905 | Hs.183858 | transcriptional intermediary factor 1    | 3.0 |
|    | 418932 | L34059    | Hs.89484  | cadherin 4, type 1, R-cadherin (retinal) | 3.0 |
| 60 | 416805 | F13271    | Hs.79981  | Human clone 23560 mRNA sequence          | 3.0 |
|    | 419518 | U79289    | Hs.90798  | Human clone 23695 mRNA sequence          | 3.0 |
|    | 422709 | AA315331  | Hs.153485 | ESTs                                     | 3.0 |
|    | 423135 | N67655    | Hs.26411  | ESTs                                     | 3.0 |
|    | 424901 | Z11933    | Hs.182505 | POU domain, class 3, transcription facto | 3.0 |
| 65 | 426617 | W58006    | Hs.266258 | endonuclease G-like 1                    | 3.0 |
|    | 427386 | AW836261  | Hs.337717 | ESTs                                     | 3.0 |
|    | 429859 | NM_007050 | Hs.225952 | protein tyrosine phosphatase, receptor t | 3.0 |
|    | 435071 | D60683    | Hs.35495  | ESTs                                     | 3.0 |
|    | 435092 | AL137310  | Hs.4749   | Homo sapiens mRNA; cDNA DKFZp761E13121 ( | 3.0 |
| 70 | 436211 | AK001581  | Hs.334828 | hypothetical protein FLJ10719; KIAA1794  | 3.0 |
|    | 436936 | AL134451  | Hs.197478 | ESTs                                     | 3.0 |
|    | 445855 | BE247129  | Hs.145569 | ESTs                                     | 3.0 |
|    | 452294 | AI871925  | Hs.117895 | ESTs, Moderately similar to A47582 B-cel | 3.0 |
|    | 433980 | AA137152  | Hs.286049 | phosphoserine aminotransferase           | 3.0 |
| 75 | 430228 | AW950939  | Hs.6382   | ESTs, Highly similar to T00391 hypotheti | 3.0 |
|    | 451026 | AA013218  | Hs.157492 | cer-d4 (mouse) homolog                   | 3.0 |
|    | 435232 | NM_001262 | Hs.4854   | cyclin-dependent kinase inhibitor 2C (p1 | 3.0 |
|    | 439566 | AF086387  |           | gb:Homo sapiens full length insert cDNA  | 3.0 |
|    | 425782 | U66468    | Hs.159525 | cell growth regulatory with EF-hand doma | 3.0 |
| 80 | 416586 | D44643    | Hs.14144  | secreted modular calcium-binding protein | 3.0 |
|    | 416874 | H98752    | Hs.42568  | ESTs                                     | 3.0 |
|    | 410386 | W26187    | Hs.3327   | Homo sapiens cDNA: FLJ22219 fls, clone H | 3.0 |
|    | 411411 | AA345241  | Hs.55950  | ESTs, Weakly similar to KIAA1330 protein | 3.0 |
|    | 424066 | Z99348    | Hs.112461 | ESTs, Weakly similar to I38022 hypotheti | 3.0 |

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|----|--------|-----------|-----------|---|-----|
|    | 404048 |           |           |   | 3.0 |
|    | 429163 | AA884766  |           | gb:am20a10.s1 Scores_NFL_T_GBC_S1 Homo s  | 3.0 |
|    | 454117 | BE410100  | Hs.40368  | adaptor-related protein complex 1, sigma  | 3.0 |
|    | 418196 | AI745649  | Hs.26549  | KIAA1708 protein                          | 3.0 |
| 5  | 434131 | AI858275  | Hs.143659 | ESTs                                      | 3.0 |
|    | 441255 | R06350    | Hs.171635 | ESTs                                      | 2.9 |
|    | 453900 | AW003582  | Hs.226414 | ESTs, Weakly similar to ALU8_HUMAN ALU S  | 2.9 |
|    | 453905 | NM_002314 | Hs.36566  | LIM domain kinase 1                       | 2.9 |
| 10 | 416602 | NM_006159 | Hs.79389  | nei (chicken)-like 2                      | 2.9 |
|    | 431173 | AW971198  | Hs.294068 | ESTs                                      | 2.9 |
|    | 425599 | AW366745  | Hs.214140 | ESTs, Weakly similar to ALU1_HUMAN ALU S  | 2.9 |
|    | 436401 | AI087958  | Hs.29088  | ESTs                                      | 2.9 |
|    | 422960 | AW890487  | Hs.63984  | cadherin 13, H-cadherin (heart)           | 2.9 |
| 15 | 451558 | NM_001089 | Hs.26530  | ATP-binding cassette, sub-family A (ABC1  | 2.9 |
|    | 412490 | AW803564  | Hs.288850 | Homo sapiens cDNA: FLJ22526 fis, clone H  | 2.9 |
|    | 433149 | BE257672  | Hs.42949  | hypothetical protein HES6                 | 2.9 |
|    | 434811 | AW971205  | Hs.114280 | ESTs                                      | 2.9 |
|    | 425897 | AA935315  | Hs.48965  | Homo sapiens cDNA: FLJ21693 fis, clone C  | 2.9 |
| 20 | 452092 | BE245374  | Hs.27842  | hypothetical protein FLJ11210             | 2.9 |
|    | 453496 | AA442103  | Hs.33084  | solute carrier family 2 (facilitated glu  | 2.9 |
|    | 411124 | AW196937  | Hs.53929  | ESTs, Weakly similar to ALUB_HUMAN IIII   | 2.9 |
|    | 419227 | BE537383  | Hs.89739  | cholinergic receptor, nicotinic, beta po  | 2.9 |
|    | 427651 | AW405731  | Hs.18498  | Homo sapiens cDNA FLJ12277 fis, clone MA  | 2.9 |
| 25 | 441707 | R42637    | Hs.21963  | hypothetical protein DKFZp761B0514        | 2.9 |
|    | 435741 | AI240668  | Hs.113099 | ESTs                                      | 2.9 |
|    | 437273 | AL137451  | Hs.120873 | ESTs, Highly similar to T46266 hypotheti  | 2.9 |
|    | 422939 | AW394055  | Hs.98427  | ESTs, Weakly similar to I38022 hypotheti  | 2.9 |
|    | 439376 | AA883521  | Hs.222064 | ESTs                                      | 2.9 |
| 30 | 439935 | S75105    | Hs.301675 | glutamate receptor, ionotropic, kainate   | 2.9 |
|    | 437267 | AW511443  | Hs.258110 | ESTs                                      | 2.9 |
|    | 453740 | AL120295  | Hs.311809 | ESTs, Moderately similar to PC4259 ferri  | 2.9 |
|    | 400250 |           |           |   | 2.9 |
|    | 400992 |           |           |   | 2.9 |
| 35 | 408814 | N62499    | Hs.176227 | hypothetical protein FLJ11155             | 2.9 |
|    | 411849 | AW964970  | Hs.18861  | ESTs, Moderately similar to KIAA1276 pro  | 2.9 |
|    | 414853 | U31116    | Hs.77501  | sarcoglycan, beta (43kD dystrophin-assoc  | 2.9 |
|    | 423751 | AW235633  | Hs.46525  | ESTs                                      | 2.9 |
|    | 426910 | AA470023  | Hs.190089 | ESTs, Moderately similar to ALU1_HUMAN A  | 2.9 |
| 40 | 450203 | AF097994  | Hs.301528 | L-kynurenine/alpha-aminoadipate aminotra  | 2.9 |
|    | 459311 | R40192    | Hs.21527  | Human DNA sequence from clone GS1-115M3   | 2.9 |
|    | 425304 | AA463844  | Hs.31339  | fibroblast growth factor 11               | 2.9 |
|    | 428500 | AI815395  | Hs.184641 | fatty acid desaturase 2                   | 2.9 |
|    | 421641 | AI638184  | Hs.106334 | Homo sapiens clone 23836 mRNA sequence    | 2.9 |
| 45 | 421141 | AW117261  | Hs.125914 | ESTs                                      | 2.9 |
|    | 407870 | AB032990  | Hs.40719  | hypothetical protein KIAA1164             | 2.9 |
|    | 456723 | Z43902    | Hs.4748   | adenylate cyclase activating polypeptide  | 2.9 |
|    | 436456 | AW292677  | Hs.248122 | G protein-coupled receptor 24             | 2.9 |
|    | 421483 | NM_003388 | Hs.104717 | hypothetical protein MGC11333             | 2.9 |
| 50 | 412190 | R16180    | Hs.274461 | ESTs                                      | 2.9 |
|    | 446131 | NM_000929 | Hs.290    | phospholipase A2, group V                 | 2.9 |
|    | 441668 | AI611973  | Hs.127525 | ESTs                                      | 2.9 |
|    | 437387 | AI198874  | Hs.28847  | AD026 protein                             | 2.9 |
|    | 423420 | AI571364  | Hs.128382 | Homo sapiens mRNA; cDNA DKFZp7611224 (f   | 2.9 |
| 55 | 427958 | AA418000  | Hs.98280  | potassium intermediate/small conductance  | 2.9 |
|    | 429084 | AJ001443  | Hs.195614 | splicing factor 3b, subunit 3, 130kD      | 2.9 |
|    | 447067 | R42098    | Hs.21964  | ESTs                                      | 2.9 |
|    | 430887 | N66801    | Hs.260287 | KIAA1841 protein                          | 2.9 |
|    | 441824 | AB007871  | Hs.7977   | KIAA0411 gene product                     | 2.9 |
| 60 | 424126 | AA335635  | Hs.96917  | ESTs                                      | 2.9 |
|    | 409739 | W01556    | Hs.238797 | ESTs, Moderately similar to I38022 hypot  | 2.9 |
|    | 447422 | BE618703  | Hs.98258  | orthopedia (Drosophila) homolog           | 2.9 |
|    | 435615 | Y15065    | Hs.4975   | potassium voltage-gated channel, KQT-lik  | 2.9 |
| 65 | 446997 | AA383439  | Hs.16758  | Spir-1 protein                            | 2.9 |
|    | 433573 | AF234887  | Hs.57652  | cadherin, EGF LAG seven-pass G-type rece  | 2.9 |
|    | 408447 | AK002089  | Hs.45080  | Homo sapiens cDNA FLJ11227 fis, clone PL  | 2.9 |
|    | 419586 | AI083485  | Hs.144759 | ESTs, Weakly similar to I38022 hypotheti  | 2.8 |
|    | 417022 | NM_014737 | Hs.80905  | Ras association (RalGDS/AF-6) domain fam  | 2.8 |
|    | 408432 | AW195252  |           | gb:xn67b05.x1 NCI_CGAP_CML1 Homo sapiens  | 2.8 |
| 70 | 420320 | AB002361  | Hs.96633  | KIAA0363 protein                          | 2.8 |
|    | 425241 | AA324624  | Hs.155247 | aldolase C, fructose-bisphosphate         | 2.8 |
|    | 428670 | AA431682  | Hs.134832 | ESTs                                      | 2.8 |
|    | 424415 | NM_001975 | Hs.146580 | enolase 2, (gamma, neuronal)              | 2.8 |
|    | 409185 | AW961601  | Hs.252406 | hypothetical protein FLJ12296 similar to  | 2.8 |
| 75 | 411555 | AF113537  | Hs.70669  | HMP19 protein                             | 2.8 |
|    | 426847 | S78723    | Hs.298623 | 5-hydroxytryptamine (serotonin) receptor  | 2.8 |
|    | 458809 | AW972512  | Hs.20935  | sin3-associated polypeptide, 30kD         | 2.8 |
|    | 420071 | AB028985  | Hs.94806  | ATP-binding cassette, sub-family A (ABC1  | 2.8 |
|    | 424572 | M19650    | Hs.150741 | 2',3'-cyclic nucleotide 3' phosphodiester | 2.8 |
|    | 444670 | H58373    | Hs.332938 | hypothetical protein MGC5370              | 2.8 |
| 80 | 411089 | AA456454  | Hs.183418 | cell division cycle 2-like 1 (PITSLRE pr  | 2.8 |
|    | 416111 | AA033813  | Hs.79018  | chromatin assembly factor 1, subunit A (  | 2.8 |
|    | 440637 | AW900115  | Hs.7309   | Homo sapiens clone 23741 mRNA sequence    | 2.8 |
|    | 408554 | AA836381  | Hs.315111 | nuclear receptor co-repressor/HDAC3 comp  | 2.8 |

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|    |        |           |           |   |     |
|----|--------|-----------|-----------|---|-----|
|    | 403056 | R58624    | Hs.2186   | eukaryotic translation elongation factor  | 2.8 |
|    | 423449 | AI497900  | Hs.33067  | ESTs                                      | 2.8 |
|    | 424188 | AW954552  | Hs.142634 | zinc finger protein                       | 2.8 |
|    | 429006 | AA443143  | Hs.50929  | hypothetical protein FLJ13842             | 2.8 |
| 5  | 434981 | AW182577  | Hs.293077 | ESTs                                      | 2.8 |
|    | 437435 | AA249439  | Hs.27027  | hypothetical protein DKFZp762H1311        | 2.8 |
|    | 442748 | AI016713  | Hs.135787 | ESTs                                      | 2.8 |
|    | 443312 | N52025    | Hs.46616  | ESTs                                      | 2.8 |
| 10 | 450940 | AI744943  | Hs.143209 | ESTs, Weakly similar to I38022 hypotheti  | 2.8 |
|    | 452738 | AL133800  | Hs.7086   | hypothetical protein MGC12435             | 2.8 |
|    | 409182 | AA064970  | Hs.118145 | ESTs                                      | 2.8 |
|    | 439793 | AA018825  | Hs.7934   | Kruppel-like factor 4 (gut)               | 2.8 |
|    | 432683 | AW995441  | Hs.10475  | ESTs                                      | 2.8 |
| 15 | 434269 | AK001991  | Hs.3731   | similar to murine leucine-rich repeat pr  | 2.8 |
|    | 429500 | X78565    | Hs.289114 | hexabrachion (tenascin C, cytactin)       | 2.8 |
|    | 433290 | R20077    | Hs.302185 | Homo sapiens clone 23618 mRNA sequence    | 2.8 |
|    | 434276 | AF123659  | Hs.93605  | leucine zipper, putative tumor suppresso  | 2.8 |
|    | 435977 | AL138079  | Hs.5012   | brain-specific membrane-anchored protein  | 2.8 |
| 20 | 430294 | AI536226  | Hs.32976  | guanine nucleotide binding protein 4      | 2.8 |
|    | 425168 | R96366    |           | gb:yq37d04.s1 Soares fetal liver spleen   | 2.8 |
|    | 428180 | AI129767  | Hs.182874 | guanine nucleotide binding protein (G pr  | 2.8 |
|    | 409348 | AI401535  | Hs.146090 | ESTs                                      | 2.8 |
|    | 409887 | AL137534  | Hs.56876  | Homo sapiens mRNA; cDNA DKFZp434H1419 (f  | 2.8 |
| 25 | 457211 | AW972565  | Hs.32399  | ESTs, Weakly similar to S51797 vasodilat  | 2.8 |
|    | 430039 | BE253012  | Hs.153400 | ESTs, Weakly similar to ALU1_HUMAN ALU S  | 2.8 |
|    | 417642 | BE302655  | Hs.105461 | hypothetical protein FLJ20357             | 2.8 |
|    | 419169 | AW851980  | Hs.262346 | ESTs, Weakly similar to S72482 hypotheti  | 2.8 |
|    | 434008 | AA740878  | Hs.112982 | ESTs                                      | 2.8 |
| 30 | 446776 | AW293417  | Hs.156455 | ESTs                                      | 2.8 |
|    | 408838 | AI669535  | Hs.40369  | ESTs                                      | 2.8 |
|    | 422565 | BE259035  | Hs.118400 | singed (Drosophila)-like (sea urchin fas  | 2.8 |
|    | 447397 | BE247676  | Hs.18442  | E-1 enzyme                                | 2.8 |
|    | 412530 | AA766268  | Hs.266273 | hypothetical protein FLJ13346             | 2.8 |
| 35 | 424330 | AW073953  | Hs.333396 | Homo sapiens cDNA FLJ13596 fis, clone PL  | 2.8 |
|    | 445377 | AW014022  | Hs.170953 | ESTs                                      | 2.8 |
|    | 458924 | BE242158  | Hs.24427  | DKFZP566O1646 protein                     | 2.8 |
|    | 447710 | AI420523  | Hs.328241 | ESTs                                      | 2.8 |
|    | 404049 |           |           |   | 2.8 |
| 40 | 416913 | AW934714  |           | gb:RC1-DT0001-031299-011-a11 DT0001 Homo  | 2.8 |
|    | 426400 | M78361    | Hs.169743 | Homo sapiens clone 25121 neuronal olfact  | 2.8 |
|    | 413264 | W26456    | Hs.134757 | hypothetical protein FLJ20033             | 2.8 |
|    | 458997 | AW937420  | Hs.69662  | ESTs                                      | 2.7 |
|    | 422864 | AA318323  |           | gb:EST20390 Retina II Homo sapiens cDNA   | 2.7 |
| 45 | 430526 | AF181862  | Hs.242407 | G protein-coupled receptor, family C, gr  | 2.7 |
|    | 452023 | AB032999  | Hs.27566  | KIAA1173 protein                          | 2.7 |
|    | 432022 | AL1162042 | Hs.272348 | Homo sapiens mRNA; cDNA DKFZp761L1212 (f  | 2.7 |
|    | 452438 | BE514230  | Hs.29595  | JM4 protein                               | 2.7 |
|    | 435408 | H07897    | Hs.4302   | ESTs, Weakly similar to T29299 hypotheti  | 2.7 |
| 50 | 418791 | AA935633  | Hs.194628 | ESTs                                      | 2.7 |
|    | 438821 | AA826425  | Hs.291829 | ESTs                                      | 2.7 |
|    | 423464 | NM_016240 | Hs.128356 | CSR1 protein                              | 2.7 |
|    | 442091 | AW770493  | Hs.182874 | guanine nucleotide binding protein (G pr  | 2.7 |
|    | 442242 | AV647908  | Hs.90424  | Homo sapiens cDNA: FLJ23285 fis, clone H  | 2.7 |
| 55 | 412436 | AA665089  |           | gb:nu76d01.s1 NCL_CGAP_Alvi1 Homo sapiens | 2.7 |
|    | 432621 | BE170702  | Hs.279005 | solute carrier family 21 (organic anion   | 2.7 |
|    | 416404 | AA180138  | Hs.107924 | ESTs                                      | 2.7 |
|    | 441364 | AW450466  | Hs.126830 | ESTs, Weakly similar to YD38_YEAST HYPOT  | 2.7 |
|    | 450202 | AW969756  | Hs.34145  | ESTs, Weakly similar to B49647 GTP-bindi  | 2.7 |
| 60 | 426304 | AA374532  | Hs.124673 | Homo sapiens cDNA FLJ11477 fis, clone HE  | 2.7 |
|    | 428722 | U76456    | Hs.190787 | tissue inhibitor of metalloproteinase 4   | 2.7 |
|    | 449701 | AW952323  | Hs.129908 | KIAA0591 protein                          | 2.7 |
|    | 420372 | AW960049  | Hs.293660 | Homo sapiens, clone IMAGE:3535476, mRNA,  | 2.7 |
|    | 410318 | AA084050  | Hs.269259 | ESTs, Weakly similar to S23650 retroviru  | 2.7 |
| 65 | 414603 | R58394    | Hs.25119  | ESTs, Weakly similar to YEX0_YEAST HYPOT  | 2.7 |
|    | 416096 | H18577    | Hs.88974  | cytochrome b-245, beta polypeptide (chro  | 2.7 |
|    | 420896 | AW149342  | Hs.24444  | Homo sapiens cDNA: FLJ22165 fis, clone H  | 2.7 |
|    | 424856 | AA347746  | Hs.9521   | ESTs, Weakly similar to ZN43_HUMAN ZINC   | 2.7 |
|    | 436304 | AA339622  | Hs.108887 | ESTs                                      | 2.7 |
| 70 | 441027 | AI911412  | Hs.126444 | ESTs                                      | 2.7 |
|    | 452545 | N31940    | Hs.14434  | ESTs, Weakly similar to I38022 hypotheti  | 2.7 |
|    | 454201 | AB023191  | Hs.44131  | KIAA0974 protein                          | 2.7 |
|    | 448560 | BE613183  | Hs.23213  | ESTs                                      | 2.7 |
|    | 425807 | AA385315  | Hs.156682 | ESTs                                      | 2.7 |
| 75 | 425825 | AI929508  | Hs.159590 | lymphocyte antigen 6 complex, locus H     | 2.7 |
|    | 440351 | AF030933  | Hs.7179   | RAD1 (S. pombe) homolog                   | 2.7 |
|    | 425390 | AI092634  | Hs.156114 | protein tyrosine phosphatase, non-recept  | 2.7 |
|    | 427624 | AA406245  | Hs.24895  | ESTs                                      | 2.7 |
|    | 426413 | AA377823  |           | gb:EST90805 Synovial sarcoma Homo sapien  | 2.7 |
| 80 | 422491 | AA338548  | Hs.117546 | neuralin                                  | 2.7 |
|    | 424560 | AA158727  | Hs.150555 | protein predicted by clone 23733          | 2.7 |
|    | 432415 | T16971    | Hs.289014 | ESTs, Weakly similar to A43932 mucin 2 p  | 2.7 |
|    | 414865 | AA157155  | Hs.274414 | hypothetical protein FLJ14457             | 2.7 |
|    | 415827 | H17462    | Hs.23079  | ESTs                                      | 2.7 |



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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
|    | 445568 | H00918    | Hs.268744 | KIAA1796 protein                         | 2.7 |
|    | 433315 | R96754    | Hs.239706 | GRB2-associated binding protein 1        | 2.7 |
|    | 428862 | NM_000346 | Hs.2316   | SRY (sex determining region Y)-box 9 (ca | 2.7 |
| 5  | 447959 | AI452784  | Hs.270270 | ESTs, Weakly similar to 2109260A B cell  | 2.7 |
|    | 426420 | BE383808  | Hs.322430 | NDRG family, member 4                    | 2.7 |
|    | 436899 | AA764852  | Hs.291567 | ESTs                                     | 2.7 |
|    | 444100 | AA383343  | Hs.22116  | CDC14 (cell division cycle 14, S. cerevi | 2.7 |
|    | 426501 | AW043782  | Hs.293616 | ESTs                                     | 2.7 |
| 10 | 449092 | U91641    | Hs.22985  | alpha2,8-sialyltransferase               | 2.7 |
|    | 427311 | AB020672  | Hs.175411 | KIAA0865 protein                         | 2.7 |
|    | 453313 | BE005771  | Hs.153746 | hypothetical protein FLJ22490            | 2.7 |
|    | 404029 |           |           |  | 2.7 |
|    | 416289 | W26333    | Hs.337438 | ESTs                                     | 2.7 |
| 15 | 439108 | AW163034  | Hs.6467   | synaplogyrin 3                           | 2.6 |
|    | 418746 | AI955289  | Hs.300759 | ribosomal protein L36                    | 2.6 |
|    | 412046 | Y07847    | Hs.73088  | RAS-related on chromosome 22             | 2.6 |
|    | 435040 | AI932350  | Hs.152825 | ESTs                                     | 2.6 |
|    | 453083 | U87223    | Hs.31622  | contactin associated protein 1           | 2.6 |
| 20 | 428167 | AA770021  | Hs.16332  | ESTs                                     | 2.6 |
|    | 420028 | AB014680  | Hs.8786   | carbohydrate (N-acetylglucosamine-6-O) s | 2.6 |
|    | 443715 | AI583187  | Hs.9700   | cyclin E1                                | 2.6 |
|    | 421247 | BE391727  | Hs.102910 | general transcription factor IIH, polype | 2.6 |
|    | 424687 | J05070    | Hs.151738 | matrix metalloproteinase 9 (gelatinase B | 2.6 |
| 25 | 415056 | AB004662  | Hs.77867  | adenosine A1 receptor                    | 2.6 |
|    | 451697 | AW449774  | Hs.296380 | POM (POM121 rat homolog) and ZP3 fusion  | 2.6 |
|    | 433701 | AW445023  | Hs.15155  | ESTs                                     | 2.6 |
|    | 457358 | AI479755  | Hs.129010 | ESTs                                     | 2.6 |
|    | 430347 | NM_002039 | Hs.239706 | GRB2-associated binding protein 1        | 2.6 |
| 30 | 418027 | AB037807  | Hs.83293  | hypothetical protein                     | 2.6 |
|    | 440491 | R35252    | Hs.24944  | ESTs, Weakly similar to 2109260A B cell  | 2.6 |
|    | 425171 | AW732240  | Hs.16365  | ESTs                                     | 2.6 |
|    | 459335 | AW298545  | Hs.250726 | EST                                      | 2.6 |
|    | 425402 | AI215881  | Hs.24970  | ESTs, Weakly similar to B34323 GTP-bind  | 2.6 |
| 35 | 453169 | AB037815  | Hs.32156  | KIAA1394 protein                         | 2.6 |
|    | 433647 | AA603367  | Hs.222294 | ESTs                                     | 2.6 |
|    | 450414 | AI907735  | Hs.21446  | KIAA1716 protein                         | 2.6 |
|    | 446233 | AI282028  | Hs.25205  | ESTs                                     | 2.6 |
|    | 415446 | F08893    | Hs.66075  | ESTs                                     | 2.6 |
| 40 | 445873 | AA250970  | Hs.251946 | poly(A)-binding protein, cytoplasmic 1-I | 2.6 |
|    | 413012 | D63777    | Hs.75137  | KIAA0193 gene product                    | 2.6 |
|    | 428671 | BE297851  | Hs.189482 | zinc finger protein 179                  | 2.6 |
|    | 427158 | AA935603  | Hs.166231 | ESTs                                     | 2.6 |
|    | 408988 | AL119844  | Hs.49476  | Homo sapiens clone TUA8 Cri-du-chat regi | 2.6 |
| 45 | 459516 | AI049662  | Hs.246858 | EST                                      | 2.6 |
|    | 402693 |           |           |  | 2.6 |
|    | 409039 | AA131424  | Hs.50340  | ESTs                                     | 2.6 |
|    | 422896 | AW961489  | Hs.154116 | ESTs                                     | 2.6 |
|    | 423130 | AW897586  | Hs.21213  | ESTs                                     | 2.6 |
| 50 | 438796 | W67321    | Hs.109590 | genethonin 1                             | 2.6 |
|    | 439871 | R88518    | Hs.46736  | hypothetical protein FLJ23476            | 2.6 |
|    | 440192 | AA872282  | Hs.190596 | ESTs                                     | 2.6 |
|    | 419703 | AK000753  | Hs.02374  | hypothetical protein                     | 2.6 |
|    | 449436 | AA860329  | Hs.279307 | hypothetical protein DKFZp434I2117       | 2.6 |
| 55 | 436870 | AW204219  | Hs.155560 | calnexin                                 | 2.6 |
|    | 448424 | AW009892  | Hs.31924  | ESTs                                     | 2.6 |
|    | 401324 |           |           |  | 2.6 |
|    | 414136 | AA812434  | Hs.119023 | SMC2 (structural maintenance of chromoso | 2.6 |
|    | 433943 | AA992805  | Hs.44865  | lymphoid enhancer-binding factor 1       | 2.6 |
| 60 | 428001 | H97428    | Hs.219907 | ESTs, Moderately similar to Transforming | 2.6 |
|    | 429139 | F09092    | Hs.66087  | ESTs                                     | 2.6 |
|    | 423073 | BE252922  | Hs.123119 | MAD (mothers against decapentaplegic, Dr | 2.6 |
|    | 448966 | AW372914  | Hs.86149  | phosphoinositol 3-phosphate-binding prot | 2.6 |
|    | 444001 | AI095087  | Hs.152299 | ESTs, Moderately similar to S65657 alpha | 2.6 |
| 65 | 412049 | N53437    | Hs.18263  | adenylate kinase 5                       | 2.6 |
|    | 441783 | BE313412  | Hs.7961   | Homo sapiens clone 25012 mRNA sequence   | 2.6 |
|    | 425287 | R88249    | Hs.155524 | peanut (Drosophila)-like 2               | 2.6 |
|    | 432149 | AW614326  | Hs.157022 | ESTs, Weakly similar to T34549 probable  | 2.6 |
|    | 452234 | AW084176  | Hs.223296 | ESTs, Weakly similar to I38022 hypotheti | 2.6 |
|    | 453478 | AF083898  | Hs.33021  | neuro-oncological ventral antigen 2      | 2.6 |
| 70 | 418962 | AA714835  | Hs.271863 | ESTs                                     | 2.6 |
|    | 418858 | AW961605  | Hs.21145  | hypothetical protein RG083M05.2          | 2.6 |
|    | 443257 | AI334040  | Hs.11614  | HSPC065 protein                          | 2.6 |
|    | 428748 | AW593206  | Hs.98785  | Ksp37 protein                            | 2.6 |
| 75 | 444984 | H15474    | Hs.132898 | fatty acid desaturase 1                  | 2.6 |
|    | 433404 | T32982    | Hs.102720 | ESTs                                     | 2.6 |
|    | 434779 | AF153815  | Hs.50151  | potassium inwardly-rectifying channel, s | 2.6 |
|    | 420582 | BE047878  | Hs.99093  | Homo sapiens chromosome 19, cosmid R2837 | 2.6 |
|    | 452856 | AF034799  | Hs.30881  | protein tyrosine phosphatase, receptor l | 2.6 |
| 80 | 436440 | AI471862  | Hs.196008 | Homo sapiens cDNA FLJ11723 fis, clone HE | 2.6 |
|    | 438527 | AI969251  | Hs.115325 | RAB7, member RAS oncogene family-like 1  | 2.6 |
|    | 433216 | AF217412  | Hs.47320  | neuroligin 3                             | 2.6 |
|    | 435380 | AA679001  | Hs.192221 | ESTs                                     | 2.6 |
|    | 428966 | AF059214  | Hs.194687 | cholesterol 25-hydroxylase               | 2.6 |

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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
|    | 439653 | AW021103  | Hs.6631   | hypothetical protein FLJ20373            | 2.5 |
|    | 419304 | AI271326  | Hs.146101 | ESTs, Weakly similar to T45070 protein k | 2.5 |
|    | 422991 | H10940    | Hs.48965  | Homo sapiens cDNA: FLJ21693 fis, clone C | 2.5 |
| 5  | 448548 | R13209    | Hs.21413  | solute carrier family 12, (potassium-chl | 2.5 |
|    | 435370 | AI964074  | Hs.225838 | ESTs                                     | 2.5 |
|    | 408875 | NM_015434 | Hs.48604  | DKFZP434B168 protein                     | 2.5 |
|    | 457005 | AJ007421  | Hs.172597 | sal (Drosophila)-like 3                  | 2.5 |
|    | 430154 | AW583058  | Hs.234726 | serine (or cysteine) proteinase inhibito | 2.5 |
| 10 | 438549 | BE386801  | Hs.21858  | trinucleotide repeat containing 3        | 2.5 |
|    | 427951 | AI826125  | Hs.43546  | ESTs                                     | 2.5 |
|    | 411800 | N39342    | Hs.103042 | microtubule-associated protein 1B        | 2.5 |
|    | 457683 | AI821877  | Hs.140002 | ESTs, Moderately similar to ALU7_HUMAN A | 2.5 |
|    | 451422 | AB002336  | Hs.26395  | erythrocyte membrane protein band 4.1-li | 2.5 |
| 15 | 430713 | AA351647  | Hs.2642   | eukaryotic translation elongation factor | 2.5 |
|    | 428826 | AL048842  | Hs.194019 | atractin                                 | 2.5 |
|    | 428963 | AW382682  | Hs.258208 | Homo sapiens, clone MGC:15606, mRNA, com | 2.5 |
|    | 428141 | D50402    | Hs.182611 | solute carrier family 11 (proton-coupled | 2.5 |
|    | 429550 | AW293055  | Hs.119357 | ESTs                                     | 2.5 |
| 20 | 438662 | AA223599  | Hs.6351   | cleavage and polyadenylation specific fa | 2.5 |
|    | 435760 | AF231922  | Hs.213004 | chromosome 21 open reading frame 62      | 2.5 |
|    | 427513 | AI476318  | Hs.192480 | ESTs                                     | 2.5 |
|    | 430051 | AB037817  | Hs.230188 | KIAA1396 protein                         | 2.5 |
|    | 435923 | BE301930  | Hs.5010   | Homo sapiens clone 24672 mRNA sequence   | 2.5 |
|    | 417123 | BE326521  | Hs.159450 | ESTs                                     | 2.5 |
| 25 | 439699 | AF086534  | Hs.187561 | ESTs, Moderately similar to ALU1_HUMAN A | 2.5 |
|    | 412980 | AI815750  | Hs.20977  | hypothetical protein MGC3129 similar to  | 2.5 |
|    | 427209 | H06509    | Hs.92423  | KIAA1566 protein                         | 2.5 |
|    | 424327 | AA431707  | Hs.31209  | ESTs                                     | 2.5 |
|    | 436340 | R42246    | Hs.21606  | ESTs                                     | 2.5 |
| 30 | 450650 | T65617    | Hs.101257 | hypothetical protein MGC3295             | 2.5 |
|    | 439444 | AI277652  | Hs.54578  | ESTs, Weakly similar to I38022 hypotheti | 2.5 |
|    | 400777 |           |           |  | 2.5 |
|    | 439478 | AF049460  | Hs.6574   | deformed epidermal autoregulatory factor | 2.5 |
| 35 | 450407 | NM_000810 | Hs.24969  | gamma-aminobutyric acid (GABA) A recepto | 2.5 |
|    | 450385 | AI631024  | Hs.24948  | synuclein, alpha interacting protein (sy | 2.5 |
|    | 432558 | R97268    | Hs.177269 | ESTs                                     | 2.5 |
|    | 400860 |           |           |  | 2.5 |
|    | 410361 | BE391304  | Hs.62661  | guanylate binding protein 1, interferon- | 2.5 |
|    | 416063 | BE047699  | Hs.93454  | ESTs                                     | 2.5 |
| 40 | 414998 | NM_002543 | Hs.77729  | oxidised low density lipoprotein (lectin | 2.5 |
|    | 452823 | AB012124  | Hs.30696  | transcription factor-like 5 (basic helix | 2.5 |
|    | 417791 | AW965339  | Hs.111471 | ESTs                                     | 2.5 |
|    | 418079 | R40058    | Hs.6911   | ESTs                                     | 2.5 |
|    | 408495 | V68796    | Hs.237731 | ESTs                                     | 2.5 |
| 45 | 442104 | L20971    | Hs.188    | phosphodiesterase 4B, cAMP-specific (dun | 2.5 |
|    | 437370 | AL359567  | Hs.161962 | Homo sapiens mRNA; cDNA DKFZp547D023 (fr | 2.5 |
|    | 429803 | W81489    | Hs.223025 | RAB31, member RAS oncogene family        | 2.5 |
|    | 424959 | NM_005781 | Hs.153937 | activated p21cdc42Hs kinase              | 2.5 |
|    | 427413 | BE547647  | Hs.177781 | hypothetical protein MGC5618             | 2.5 |
| 50 | 408955 | BE315170  | Hs.8067   | NAG-5 protein                            | 2.5 |
|    | 415261 | T40928    | Hs.8346   | ESTs                                     | 2.5 |
|    | 415716 | N59294    | Hs.179662 | nucleosome assembly protein 1-like 1     | 2.5 |
|    | 417873 | BE266659  | Hs.293659 | Homo sapiens, Similar to RIKEN cDNA A430 | 2.5 |
|    | 418388 | R72332    | Hs.29258  | Homo sapiens cDNA FLJ11364 fis, clone HE | 2.5 |
| 55 | 421002 | AF116030  | Hs.100932 | transcription factor 17                  | 2.5 |
|    | 423244 | AL039379  | Hs.209602 | ESTs, Weakly similar to ubiquitous TPR m | 2.5 |
|    | 423553 | AA405635  | Hs.96854  | ESTs, Weakly similar to DYLL_HUMAN CYTOP | 2.5 |
|    | 427961 | AW293165  | Hs.143134 | ESTs                                     | 2.5 |
| 60 | 428301 | AW628666  | Hs.98440  | ESTs, Weakly similar to I38022 hypotheti | 2.5 |
|    | 428508 | BE252383  | Hs.184668 | SBB131 protein                           | 2.5 |
|    | 428858 | AA436760  |           | gb:zv67d11.r1 Soares_t0tal_fetus_Nb2HF8_ | 2.5 |
|    | 428943 | AW086180  | Hs.37636  | ESTs, Weakly similar to KIAA1392 protein | 2.5 |
|    | 432427 | AL037630  | Hs.6638   | Homo sapiens cDNA FLJ11602 fis, clone HE | 2.5 |
| 65 | 435347 | AW014873  | Hs.116963 | ESTs                                     | 2.5 |
|    | 437949 | U78519    | Hs.41654  | ESTs, Weakly similar to A46010 X-linked  | 2.5 |
|    | 438208 | AL041224  | Hs.65379  | ESTs                                     | 2.5 |
|    | 440286 | U29589    | Hs.7138   | cholinergic receptor, muscarinic 3       | 2.5 |
|    | 441523 | AW514263  | Hs.301771 | ESTs, Weakly similar to ALUF_HUMAN !!!   | 2.5 |
|    | 441805 | AA285136  | Hs.301914 | neuronal specific transcription factor D | 2.5 |
| 70 | 442337 | AI371029  | Hs.129257 | ESTs, Weakly similar to TC17_HUMAN TRANS | 2.5 |
|    | 442789 | AW904361  | Hs.131191 | ESTs, Weakly similar to ALU7_HUMAN ALU S | 2.5 |
|    | 445556 | AI910241  | Hs.12887  | actin-related protein 3-beta             | 2.5 |
|    | 449086 | AI628357  | Hs.208037 | ESTs                                     | 2.5 |
| 75 | 459583 | AI907673  |           | gb:IL-BT152-080399-004 BT152 Homo sapien | 2.5 |

TABLE 8B:

|             |                                       |
|-------------|---------------------------------------|
| Pkey:       | Unique Eos probeset identifier number |
| CAT number: | Gene cluster number                   |
| Accession:  | Genbank accession numbers             |

80

|        |            |                          |
|--------|------------|--------------------------|
| Pkey   | CAT Number | Accession                |
| 408432 | 1058667_1  | AW195262 R27868 AW811262 |
| 412225 | 1234108_1  | AW902042 N77591          |

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|        |           |  |
|--------|-----------|--|
| 412436 | 129439_1  | AA665089 AA135130 AA484059 AA102419 AW877765   |
| 416120 | 1571266_1 | H46739 H51513 H19779   |
| 416871 | 1626761_1 | H98716 N90792 N24283   |
| 416913 | 163001_1  | AW934714 BE161007 BE162500 AW749902 AW749864 BE162498 BE161005 AA190449 AW513465 BE161006 BE162499                           |
| 422864 | 222336_1  | AA318323 H11145 R15289 AA451945 AA476690 AA436954 Z43802 F11753 T65491 D81821  |
| 422949 | 223184_1  | AA319435 N56456 AA319377 AW961532 T48452 AA894424  |
| 422977 | 223410_1  | AA631498 AI017191 AA491211 AA761823 AA714555 AA768099 AA803286 A934069 AA570223 AA574339 AA582438 AI745346 AW964510 AA319642 |
|        |           | AW853758 H56414  |
| 423756 | 231725_1  | AA828125 AA834883 AA330555   |
| 425168 | 247552_1  | R96366 AL133929 AA351636 H78618 AA477084 Z28957 H80194   |
| 425517 | 252729_1  | AF121179 BE162736 AA358827   |
| 426413 | 266650_1  | AA377823 AW954494 AI022688   |
| 428002 | 285602_1  | AA418703 AA418711 BE071915 BE071920 BE071912   |
| 428679 | 294049_1  | AA431765 AA432015  |
| 428858 | 296453_1  | AA436760 AW237453 BE327496 N47347 N56967   |
| 429007 | 298301_1  | D80642 AA443145 AL119015 AW904500  |
| 429163 | 300543_1  | AA884766 AW974271 AA592975 AA447312  |
| 433532 | 368950_1  | AW975367 AA598607 AA742735   |
| 436190 | 41555_1   | AK001059 AA633055  |
| 437034 | 431713_1  | AA742643 AA808575 AW976668   |
| 438458 | 457837_1  | AW975186 AA807807 D29548   |
| 438993 | 467651_1  | AA828995 AA834879 AI926361   |
| 439566 | 47387_1   | AF086387 W77884 W72711   |
| 440322 | 491966_1  | AA879430 BE070262 BE070493 BE070272 BE070484 BE070397 BE070395 BE070201 BE070198 BE070404 BE070270 BE070400                  |
| 444584 | 611496_1  | AI168422 D80113 T59074   |
| 447197 | 711623_1  | R36075 AI366546 R36167   |
| 448451 | 764066_1  | AW015994 R39898 AW000978 AI598202 AI521706   |
| 450625 | 84032_1   | AW970107 AA513951 AA010406   |
| 452453 | 918300_1  | AI902519 AI902518 AI902516   |
| 454996 | 1248640_1 | AW850180 AW850326  |
| 455350 | 1283853_1 | AW901809 AW901787 AW901795 AW901792 AW901744 AW901753 AW901807 AW901798  |

TABLE 8C:

|              |   |
|--------------|---|
| Pkey:        | Unique number corresponding to an Eos probeset  |
| Ref:         | Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495. |
| Strand:      | Indicates DNA strand from which exons were predicted.   |
| NL_position: | Indicates nucleotide positions of predicted exons.  |

|    |        |         |        |   |
|----|--------|---------|--------|---|
| 40 | Pkey   | Ref     | Strand | NL_position   |
|    | 400777 | 8131663 | Plus   | 70745-71121   |
|    | 400780 | 8131663 | Minus  | 118372-118619   |
|    | 400859 | 9757499 | Minus  | 91888-92018,98131-98294,99474-99570   |
| 45 | 400860 | 9757499 | Minus  | 151830-152104,152649-152744   |
|    | 400992 | 8096828 | Plus   | 140390-140822   |
|    | 401324 | 9863791 | Plus   | 234057-234174   |
|    | 402408 | 9796239 | Minus  | 110326-110491   |
|    | 402604 | 9909420 | Plus   | 20393-20767   |
|    | 402605 | 9909420 | Minus  | 47680-47973   |
| 50 | 402693 | 8569863 | Minus  | 82366-82515   |
|    | 402855 | 9662953 | Minus  | 59763-59909   |
|    | 404029 | 7671252 | Plus   | 108716-111112   |
|    | 404048 | 3688074 | Minus  | 54421-56808   |
|    | 404049 | 3688074 | Minus  | 75765-78155   |
| 55 | 404283 | 2276311 | Minus  | 99460-99564   |
|    | 404299 | 5738652 | Minus  | 3826-4025   |
|    | 404541 | 8318559 | Plus   | 103456-103664   |
|    | 404584 | 9857511 | Plus   | 138651-139153   |
|    | 404593 | 3944086 | Minus  | 74922-75788   |
| 60 | 404721 | 9856648 | Minus  | 173763-174294   |
|    | 404819 | 4678240 | Plus   | 16223-16319,16427-16513,16736-16859,16941-17075,17170-17287,17389-17529,18261-18357,18443-18578 |
|    | 405238 | 7249119 | Minus  | 51728-51836   |
|    | 405771 | 7018349 | Plus   | 91191-91254,91510-91589   |
|    | 405819 | 4007557 | Plus   | 2830-2967   |
| 65 | 406311 | 9211559 | Minus  | 137114-139033   |

TABLE 9A: ABOUT 1202 GENES UP-REGULATED IN GLIOBLASTOMA COMPARED TO NORMAL ADULT CENTRAL NERVOUS SYSTEM (CNS)

Table 9A lists about 1202 genes up-regulated in glioblastoma compared to normal adult central nervous system (CNS). These were selected from 59680 probesets on the Affymetrix/Eos HuO3 GeneChip array such that the ratio of "average" glioblastoma to "average" normal adult CNS tissues was greater than or equal to 2.0. The "average" glioblastoma level was set to the 75th percentile amongst various glioblastoma tumors. The "average" normal adult CNS tissue level was set to the 95th percentile amongst various non-malignant tissues. In order to remove gene-specific background levels of non-specific hybridization, the 10th percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

|                |  |
|----------------|--|
| Pkey:          | Unique Eos probeset identifier number  |
| ExAccn:        | Exemplar Accession number, Genbank accession number                                  |
| UnigenelD:     | Unigene number   |
| Unigene Title: | Unigene gene title   |
| R1:            | Ratio of 75th percentile tumor to 95th percentile normal adult nervous system tissue |

|    |        |          |           |                        |      |
|----|--------|----------|-----------|------------------------|------|
| 80 | Pkey   | ExAccn   | UnigenelD | Unigene Title          | R1   |
|    | 452461 | N78223   | Hs.108106 | transcription factor   | 20.1 |
|    | 436895 | AF037335 | Hs.5338   | carbonic anhydrase XII | 15.2 |
|    | 453941 | U39817   | Hs.36820  | Bloom syndrome         | 14.2 |

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|        |           |           |  |      |
|--------|-----------|-----------|--|------|
| 443247 | BE614387  | Hs.333893 | c-Myc target JPO1                        | 12.4 |
| 428330 | L22524    | Hs.2256   | matrix metalloproteinase 7 (matrilysin,  | 12.0 |
| 447342 | AI199268  | Hs.19322  | Homo sapiens, Similar to RIKEN cDNA 2010 | 11.7 |
| 422163 | AF027208  | Hs.112360 | prominin (mouse)-like 1                  | 11.4 |
| 439451 | AF086270  | Hs.278554 | heterochromatin-like protein 1           | 11.2 |
| 424800 | AL035588  | Hs.153203 | MyoD family inhibitor                    | 10.2 |
| 416111 | AA033813  | Hs.79018  | chromatin assembly factor 1, subunit A ( | 10.0 |
| 444190 | AI878918  | Hs.10526  | cysteine and glycine-rich protein 2      | 9.9  |
| 412140 | AA219691  | Hs.73625  | RAB6 interacting, kinesin-like (rakkinas | 9.9  |
| 449340 | AW235786  | Hs.195359 | hypothetical protein MGC10954            | 9.8  |
| 409731 | AA125985  | Hs.56145  | thymosin, beta, identified in neuroblast | 9.4  |
| 439978 | BE139460  | Hs.124673 | Homo sapiens cDNA FLJ11477 fis, clone HE | 8.9  |
| 411411 | AA345241  | Hs.55950  | ESTs, Weakly similar to KIAA1330 protein | 8.9  |
| 456516 | BE172704  | Hs.222746 | KIAA1610 protein                         | 8.2  |
| 420092 | AA814043  | Hs.88045  | ESTs                                     | 7.9  |
| 422631 | BE218919  | Hs.118793 | hypothetical protein FLJ10688            | 7.9  |
| 453392 | U23752    | Hs.32964  | SRY (sex determining region Y)-box 11    | 7.9  |
| 438527 | AJ969251  | Hs.115325 | RAB7, member RAS oncogene family-like 1  | 7.9  |
| 427581 | NM_014788 | Hs.179703 | KIAA0129 gene product                    | 7.8  |
| 418661 | NM_001949 | Hs.1189   | E2F transcription factor 3               | 7.8  |
| 440684 | AI253123  | Hs.127356 | ESTs, Highly similar to S21424 nestin [H | 7.8  |
| 429643 | AA455889  | Hs.167279 | FYVE-finger-containing Rab5 effector pro | 7.7  |
| 409638 | AW450420  | Hs.21335  | ESTs                                     | 7.5  |
| 444665 | BE613126  | Hs.47783  | B aggressive lymphoma gene               | 7.5  |
| 456759 | BE259150  | Hs.127792 | delta (Drosophila)-like 3                | 7.5  |
| 412777 | AI335773  | Hs.270123 | ESTs                                     | 7.4  |
| 436607 | AW661783  | Hs.211061 | ESTs                                     | 7.3  |
| 432058 | AW565996  | Hs.130729 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 7.3  |
| 417061 | AI675944  | Hs.188691 | Homo sapiens cDNA FLJ12033 fis, clone HE | 7.3  |
| 428976 | AL037824  | Hs.194695 | ras homolog gene family, member I        | 7.2  |
| 433244 | AB040943  | Hs.271285 | KIAA1510 protein                         | 7.1  |
| 436726 | AA324975  | Hs.128993 | ESTs, Weakly similar to T00079 hypotheti | 7.1  |
| 400432 | AW195262  |           | gb:xn67b05.x1 NCI_CGAP_CML1 Homo sapiens | 7.1  |
| 434164 | AW207019  | Hs.148135 | serine/threonine kinase 33               | 7.0  |
| 445873 | AA250970  | Hs.251946 | poly(A)-binding protein, cytoplasmic 1-I | 7.0  |
| 439726 | AW449893  | Hs.293707 | ESTs, Weakly similar to I38598 zinc fing | 7.0  |
| 432656 | NM_000246 | Hs.3076   | MHC class II transactivator              | 6.8  |
| 431117 | AF003622  | Hs.250500 | delta (Drosophila)-like 1                | 6.8  |
| 453387 | AI990741  | Hs.252809 | ESTs                                     | 6.8  |
| 418821 | AA436002  | Hs.183161 | ESTs                                     | 6.6  |
| 437034 | AA742643  |           | gb:ny91c01.s1 NCI_CGAP_GCB1 Homo sapiens | 6.6  |
| 411252 | AB018549  | Hs.69328  | MD-2 protein                             | 6.5  |
| 424687 | J05070    | Hs.151738 | matrix metalloproteinase 9 (gelatinase B | 6.4  |
| 452953 | AI932884  | Hs.271741 | ESTs, Weakly similar to A46010 X-linked  | 6.3  |
| 433532 | AW975367  |           | gb:EST387475 MAGE resequences, MAGN Homo | 6.3  |
| 420311 | AW445044  | Hs.38207  | Human DNA sequence from clone RP4-530/15 | 6.3  |
| 418097 | R45137    | Hs.21368  | ESTs                                     | 6.2  |
| 407304 | AA565832  |           | gb:nj32b03.s1 NCI_CGAP_AA1 Homo sapiens  | 6.2  |
| 435256 | AF193766  | Hs.13872  | cytokine-like protein C17                | 6.1  |
| 449448 | D60730    | Hs.57471  | ESTs                                     | 6.1  |
| 403790 |           |           |  | 6.0  |
| 425517 | AF121179  |           | gb:AF121179 Homo sapiens liver (Chang L- | 6.0  |
| 420674 | NM_000055 | Hs.1327   | butyrylcholinesterase                    | 6.0  |
| 435542 | AA687376  | Hs.269533 | ESTs                                     | 5.9  |
| 418216 | AA662240  | Hs.283099 | AF15q14 protein                          | 5.8  |
| 439086 | AF085947  |           | gb:Homo sapiens full length insert cDNA  | 5.8  |
| 408037 | AW271720  | Hs.42233  | hypothetical protein FLJ10300            | 5.7  |
| 412225 | AW902042  |           | gb:QV0-NN1022-170400-193-c02 NN1022 Homo | 5.7  |
| 436109 | AA922153  | Hs.132760 | hypothetical protein MGC15729            | 5.7  |
| 435005 | U80743    | Hs.306094 | trinucleotide repeat containing 12       | 5.7  |
| 429149 | AW193360  | Hs.197962 | ESTs, Weakly similar to I38022 hypotheti | 5.7  |
| 418113 | AI272141  | Hs.83484  | SRY (sex determining region Y)-box 4     | 5.6  |
| 405558 |           |           |  | 5.6  |
| 442432 | BE093589  | Hs.38178  | hypothetical protein FLJ23468            | 5.6  |
| 442547 | AA306997  | Hs.217484 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 5.6  |
| 413063 | AL035737  | Hs.75184  | chitinase 3-like 1 (cartilage glycoprote | 5.5  |
| 420560 | AW207748  | Hs.59115  | ESTs                                     | 5.5  |
| 408096 | BE250162  | Hs.63765  | dihydrofolate reductase                  | 5.5  |
| 443539 | AI076182  | Hs.134074 | ESTs, Moderately similar to ALU6_HUMAN A | 5.4  |
| 426318 | AA375125  | Hs.147112 | Homo sapiens cDNA: FLJ22322 fis, clone H | 5.4  |
| 429115 | AA446728  | Hs.289020 | Homo sapiens cDNA FLJ14098 fis, clone MA | 5.3  |
| 453900 | AW003582  | Hs.226414 | ESTs, Weakly similar to ALU8_HUMAN ALU S | 5.3  |
| 444168 | AW379879  |           | gb:RC1-HT0256-081199-011-f01 HT0256 Homo | 5.3  |
| 432789 | D26361    | Hs.3104   | KIAA0042 gene product                    | 5.3  |
| 437036 | AI571514  | Hs.133022 | ESTs                                     | 5.2  |
| 421247 | BE391727  | Hs.102910 | general transcription factor IIH, polype | 5.2  |
| 441523 | AW514263  | Hs.301771 | ESTs, Weakly similar to ALUF_HUMAN !!!   | 5.2  |
| 451106 | BE382701  | Hs.25960  | v-myc avian myelocytomatosis viral relat | 5.1  |
| 457211 | AW972565  | Hs.32399  | ESTs, Weakly similar to S51797 vasodilat | 5.1  |
| 454157 | AW162906  | Hs.312481 | ESTs, Weakly similar to S66668 hydrogen  | 5.1  |
| 423343 | AA324643  | Hs.246106 | ESTs                                     | 5.1  |
| 425292 | NM_005824 | Hs.155545 | 37 kDa leucine-rich repeat (LRR) protein | 5.1  |
| 406679 | AA070786  |           | gb:zm66b07.r1 Stralagene neuroepithelium | 5.1  |

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| 5  | 442671 | AI005668  | Hs.134779 | EST                                      | 5.1 |
|    | 433001 | AF217513  | Hs.279905 | clone HQ0310 PRO0310p1                   | 5.0 |
|    | 418819 | AA228776  | Hs.191721 | ESTs                                     | 5.0 |
|    | 432946 | U60899    | Hs.279854 | mannosidase, alpha, class 2B, member 1   | 4.9 |
|    | 420730 | NM_002691 | Hs.99890  | polymerase (DNA directed), delta 1, cata | 4.9 |
| 10 | 441217 | AI922183  | Hs.213246 | ESTs                                     | 4.9 |
|    | 453385 | AW296101  | Hs.252806 | ESTs                                     | 4.8 |
|    | 418203 | X54942    | Hs.83758  | CDC28 protein kinase 2                   | 4.7 |
|    | 450813 | AI739625  | Hs.203376 | ESTs                                     | 4.7 |
|    | 444006 | BE395085  | Hs.10086  | type I transmembrane protein Fn14        | 4.7 |
| 15 | 412530 | AA766268  | Hs.266273 | hypothetical protein FLJ13346            | 4.7 |
|    | 431070 | AW408164  | Hs.249184 | transcription factor 19 (SC1)            | 4.7 |
|    | 429786 | AL080232  | Hs.220696 | Homo sapiens mRNA; cDNA DKFZp586A061 (fr | 4.7 |
|    | 405771 |           |           |  | 4.6 |
|    | 457065 | AI476318  | Hs.192480 | ESTs                                     | 4.6 |
| 20 | 436190 | AK001059  |           | gb:Homo sapiens cDNA FLJ10197 fis, clone | 4.6 |
|    | 400859 |           |           |  | 4.6 |
|    | 435267 | N23797    | Hs.110114 | ESTs                                     | 4.6 |
|    | 443454 | AI057494  | Hs.133421 | ESTs                                     | 4.5 |
|    | 452811 | AA937079  | Hs.118983 | hypothetical protein FLJ12150            | 4.5 |
| 25 | 437267 | AW511443  | Hs.258110 | ESTs                                     | 4.5 |
|    | 435020 | AW505076  | Hs.301855 | DiGeorge syndrome critical region gene 8 | 4.5 |
|    | 454269 | AI961060  | Hs.129908 | KIAA0591 protein                         | 4.5 |
|    | 422106 | D84239    | Hs.111732 | Fc fragment of IgG binding protein       | 4.5 |
|    | 422765 | AW409701  | Hs.1578   | baculoviral IAP repeat-containing 5 (sur | 4.5 |
| 30 | 456534 | X91195    | Hs.100623 | phospholipase C, beta 3, neighbor pseudo | 4.5 |
|    | 423756 | AA828125  |           | gb:cd71a09.s1 NCL_CGAP_Ov2 Homo sapiens  | 4.5 |
|    | 417308 | H60720    | Hs.81892  | KIAA0101 gene product                    | 4.5 |
|    | 422170 | AI791949  | Hs.112432 | anti-Mullerian hormone                   | 4.4 |
|    | 429500 | X78565    | Hs.289114 | hexabrachion (tenascin C, cyclactin)     | 4.4 |
| 35 | 406568 | AF088886  | Hs.115590 | cathepsin F                              | 4.4 |
|    | 426812 | AF105365  | Hs.172613 | solute carrier family 12 (potassium/chio | 4.4 |
|    | 402516 |           |           |  | 4.4 |
|    | 432865 | AI753709  | Hs.152484 | ESTs, Weakly similar to I38022 hypothei  | 4.4 |
|    | 413625 | AW451103  | Hs.71371  | ESTs                                     | 4.4 |
| 40 | 436098 | R20597    | Hs.9739   | glycerol-3-phosphate dehydrogenase 1 (so | 4.4 |
|    | 418333 | W92113    |           | gb:zh48e01.r1 Soares_fetal_liver_spleen_ | 4.4 |
|    | 416933 | BE561850  | Hs.80506  | small nuclear ribonucleoprotein polypept | 4.4 |
|    | 438192 | AI859065  | Hs.337620 | Homo sapiens AFG3L1 isoform 1 mRNA, part | 4.3 |
|    | 457374 | AA493662  |           | gb:nh05d12.s1 NCL_CGAP_Thy1 Homo sapiens | 4.3 |
| 45 | 433159 | AB035898  | Hs.150587 | kinesin-like protein 2                   | 4.3 |
|    | 444386 | BE065183  |           | gb:RC1-BT0314-020200-012-c04 BT0314 Homo | 4.3 |
|    | 453202 | AW085781  | Hs.26270  | hypothetical protein FLJ11588            | 4.3 |
|    | 441020 | W79283    | Hs.35952  | ESTs                                     | 4.3 |
|    | 414733 | BE514535  | Hs.77171  | minichromosome maintenance deficient (S. | 4.3 |
| 50 | 407902 | AL117474  | Hs.41181  | Homo sapiens mRNA; cDNA DKFZp727C191 (fr | 4.3 |
|    | 405701 |           |           |  | 4.3 |
|    | 451659 | BE379761  | Hs.14248  | ESTs                                     | 4.3 |
|    | 418845 | AA852985  | Hs.89232  | chromobox homolog 5 (Drosophila HP1 alph | 4.2 |
|    | 433323 | AA805132  | Hs.30701  | ESTs                                     | 4.2 |
| 55 | 439811 | AA135332  | Hs.71608  | ESTs                                     | 4.2 |
|    | 415406 | T26510    |           | gb:AB282F8R Infant brain, LLNL array of  | 4.2 |
|    | 436282 | R91913    | Hs.272104 | ESTs, Moderately similar to ALU1_HUMAN A | 4.1 |
|    | 441269 | AW015206  | Hs.178784 | ESTs                                     | 4.1 |
|    | 418727 | AA227609  | Hs.94834  | ESTs                                     | 4.1 |
| 60 | 433006 | BE242758  | Hs.190223 | ESTs, Moderately similar to T29285 hypot | 4.1 |
|    | 436480 | AJ271643  | Hs.87469  | putative acid-sensing ion channel        | 4.1 |
|    | 430786 | AA486144  | Hs.31293  | ESTs                                     | 4.1 |
|    | 445372 | N36417    | Hs.144928 | ESTs                                     | 4.1 |
|    | 410555 | U92649    | Hs.64311  | a disintegrin and metalloproteinase doma | 4.0 |
| 65 | 457465 | AW301344  | Hs.122908 | DNA replication factor                   | 4.0 |
|    | 422094 | AF129535  | Hs.272027 | F-box only protein 5                     | 4.0 |
|    | 442029 | AW956698  | Hs.14456  | neural precursor cell expressed, develop | 4.0 |
|    | 459321 | AW044477  | Hs.299538 | ESTs                                     | 4.0 |
|    | 421308 | AA687322  | Hs.192843 | leucine zipper protein FKSG14            | 4.0 |
| 70 | 420567 | AK000812  | Hs.98874  | similar to proline-rich protein 48       | 4.0 |
|    | 447004 | AW296968  | Hs.157539 | ESTs                                     | 4.0 |
|    | 446295 | AI381911  | Hs.334859 | KIAA1814 protein                         | 3.9 |
|    | 439699 | AF086534  | Hs.187561 | ESTs, Moderately similar to ALU1_HUMAN A | 3.9 |
|    | 440704 | M69241    | Hs.162    | insulin-like growth factor binding prote | 3.9 |
| 75 | 453096 | AW294631  | Hs.113325 | ESTs                                     | 3.9 |
|    | 457026 | AA397620  | Hs.48692  | ESTs                                     | 3.9 |
|    | 404642 |           |           |  | 3.9 |
|    | 450375 | AA009647  | Hs.8850   | a disintegrin and metalloproteinase doma | 3.9 |
|    | 430132 | AA204686  | Hs.234149 | hypothetical protein FLJ20647            | 3.9 |
| 80 | 437718 | AI927288  | Hs.196779 | ESTs                                     | 3.9 |
|    | 438490 | AW593272  | Hs.301299 | ESTs                                     | 3.9 |
|    | 429919 | AA460692  | Hs.278945 | hypothetical protein FLJ23024            | 3.9 |
|    | 413604 | R51767    |           | gb:yg73g11.r1 Soares infant brain 1N1B H | 3.9 |
|    | 425599 | AW366745  | Hs.214140 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 3.9 |
|    | 446796 | AA147829  | Hs.301431 | endothelial zinc finger protein induced  | 3.9 |
|    | 449300 | AI656959  | Hs.222165 | ESTs                                     | 3.8 |
|    | 452203 | X57522    | Hs.158164 | transporter 1, ATP-binding cassette, sub | 3.8 |

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|----|--------|-----------|-----------|--|-----|
|    | 425769 | U72513    | Hs.155486 | Human RPL13-2 pseudogene mRNA, complete    | 3.8 |
|    | 404295 |           |           |  | 3.8 |
|    | 410361 | BE391804  | Hs.62661  | guanylate binding protein 1, interferon-   | 3.8 |
|    | 428728 | NM_016625 | Hs.191381 | hypothetical protein                       | 3.8 |
| 5  | 409142 | AL136877  | Hs.50758  | SMC4 (structural maintenance of chromoso   | 3.8 |
|    | 430172 | AA468591  | Hs.161889 | ESTs                                       | 3.8 |
|    | 447499 | AW262580  | Hs.147674 | protocadherin beta 16                      | 3.8 |
|    | 405884 |           |           |  | 3.8 |
|    | 437236 | AW137817  | Hs.244353 | ESTs                                       | 3.7 |
| 10 | 418883 | BE387036  | Hs.1211   | acid phosphatase 5, tartrate resistant     | 3.7 |
|    | 444143 | AW747996  | Hs.160999 | ESTs, Moderately similar to A56194 throm   | 3.7 |
|    | 425529 | NM_014656 | Hs.158282 | KIAA0040 gene product                      | 3.7 |
|    | 425502 | R98895    | Hs.125823 | ESTs                                       | 3.7 |
|    | 419741 | NM_007019 | Hs.93002  | ubiquitin carrier protein E2-C             | 3.7 |
| 15 | 402424 |           |           |  | 3.7 |
|    | 429469 | M64590    | Hs.27     | glycine dehydrogenase (decarboxylating;    | 3.7 |
|    | 434072 | H70854    | Hs.283059 | Homo sapiens PRO1082 mRNA, complete cds    | 3.7 |
|    | 414872 | U82010    | Hs.77513  | COX10 (yeast) homolog, cytochrome c oxid   | 3.7 |
| 20 | 426071 | AW136057  | Hs.163835 | ESTs                                       | 3.7 |
|    | 419078 | M93119    | Hs.89584  | insulinoma-associated 1                    | 3.7 |
|    | 426037 | N47474    | Hs.89230  | potassium intermediate/small conductance   | 3.7 |
|    | 416547 | H62914    | Hs.268946 | ESTs, Weakly similar to PC4259 ferritin    | 3.7 |
|    | 436899 | AA764852  | Hs.291567 | ESTs                                       | 3.6 |
| 25 | 436722 | AW975977  |           | gb:EST388086 MAGE resequences, MAGN Homo   | 3.6 |
|    | 440652 | AI216751  | Hs.143977 | ESTs                                       | 3.6 |
|    | 428450 | NM_014791 | Hs.184339 | KIAA0175 gene product                      | 3.6 |
|    | 452103 | R42764    | Hs.339654 | ESTs, Weakly similar to I38022 hypotheti   | 3.6 |
|    | 409048 | H59990    | Hs.37699  | ESTs                                       | 3.6 |
| 30 | 439546 | AF088056  |           | gb:Homo sapiens full length insert cDNA    | 3.6 |
|    | 443544 | AI076315  | Hs.16359  | ESTs                                       | 3.6 |
|    | 418478 | U38945    | Hs.1174   | cyclin-dependent kinase inhibitor 2A (me   | 3.6 |
|    | 435389 | AI249107  | Hs.269901 | ESTs                                       | 3.6 |
|    | 420301 | AA767526  | Hs.22030  | paired box gene 5 (B-cell lineage specif   | 3.6 |
| 35 | 438078 | AI016377  | Hs.131693 | ESTs                                       | 3.6 |
|    | 408420 | NM_006915 | Hs.44766  | retinitis pigmentosa 2 (X-linked recessi   | 3.6 |
|    | 416871 | H98716    |           | gb:yx13d08.s1 Soares melanocyte 2NbHM Ho   | 3.5 |
|    | 424085 | NM_002914 | Hs.139226 | replication factor C (activator 1) 2 (40   | 3.5 |
|    | 446291 | BE397753  | Hs.14623  | interferon, gamma-inducible protein 30     | 3.5 |
| 40 | 432281 | AK001239  | Hs.274263 | hypothetical protein FLJ10377              | 3.5 |
|    | 436123 | AA057494  | Hs.35406  | ESTs, Highly similar to unnamed protein    | 3.5 |
|    | 411256 | AW834039  |           | gb:QV0-TT0010-091199-053-e09 TT0010 Homo   | 3.5 |
|    | 419239 | AA468183  | Hs.184598 | Homo sapiens cDNA: FLJ23241 fis, clone C   | 3.5 |
|    | 435065 | BE064391  |           | gb:RC4-BT0310-110300-015-b08 BT0310 Homo   | 3.5 |
| 45 | 435532 | AW291488  | Hs.117305 | Homo sapiens, clone IMAGE:3682908, mRNA    | 3.5 |
|    | 447101 | N72185    | Hs.44189  | ESTs                                       | 3.5 |
|    | 410530 | M25809    | Hs.64173  | ATPase, H+ transporting, lysosomal (vacu   | 3.5 |
|    | 422156 | N34524    |           | gb:yy56d10.s1 Soares_multiple_sclerosis_   | 3.5 |
| 50 | 453616 | NM_003462 | Hs.33846  | dynein, axonemal, light intermediate pol   | 3.5 |
|    | 439743 | AL389956  | Hs.283858 | Homo sapiens mRNA full length insert cDN   | 3.5 |
|    | 453884 | AA355925  | Hs.36232  | KIAA0186 gene product                      | 3.5 |
|    | 424954 | NM_000546 | Hs.1846   | tumor protein p53 (Li-Fraumeni syndrome)   | 3.5 |
|    | 420721 | AA927802  | Hs.159471 | ZAP3 protein                               | 3.5 |
|    | 426764 | AA732524  | Hs.151464 | ESTs, Weakly similar to ALUC_HUMAN !!!!    | 3.4 |
| 55 | 420649 | AI868964  | Hs.124704 | ESTs, Moderately similar to S65657 alpha   | 3.4 |
|    | 448831 | AL080123  | Hs.22182  | zinc finger protein 23 (KOX 16)            | 3.4 |
|    | 444371 | BE540274  | Hs.239    | forkhead box M1                            | 3.4 |
|    | 402604 |           |           |  | 3.4 |
|    | 442407 | AW469584  | Hs.32353  | mitogen-activated protein kinase kinase    | 3.4 |
| 60 | 414300 | AI304870  | Hs.188680 | ESTs                                       | 3.4 |
|    | 444670 | H58373    | Hs.332938 | hypothetical protein MGC5370               | 3.4 |
|    | 414550 | BE379308  |           | gb:601159567T1 NIH_MGC_53 Homo sapiens c   | 3.4 |
|    | 452211 | AI985513  | Hs.233420 | ESTs                                       | 3.4 |
|    | 414416 | AW409985  | Hs.76084  | hypothetical protein MGC2721               | 3.4 |
| 65 | 449961 | AW265634  | Hs.133100 | ESTs                                       | 3.4 |
|    | 413257 | BE075035  |           | gb:PM3-BT0584-260300-002-g05 BT0584 Homo   | 3.4 |
|    | 453857 | AL080235  | Hs.35861  | DKFZP586E1621 protein                      | 3.4 |
|    | 417404 | NM_007350 | Hs.82101  | pleckstrin homology-like domain, family    | 3.4 |
|    | 422846 | BE513934  | Hs.1583   | neutrophil cytosolic factor 1 (47kD, chr   | 3.4 |
| 70 | 446189 | H85224    | Hs.214013 | ESTs                                       | 3.4 |
|    | 437385 | AA757055  | Hs.164060 | ESTs                                       | 3.4 |
|    | 453652 | AW009640  | Hs.28368  | ESTs, Moderately similar to S65657 alpha   | 3.4 |
|    | 408298 | AI745325  | Hs.271923 | Homo sapiens cDNA: FLJ22785 fis, clone K   | 3.4 |
|    | 455778 | BE088746  |           | gb:CM2-BT0693-210300-123-d09 BT0693 Homo   | 3.3 |
| 75 | 417546 | H65569    | Hs.18845  | ESTs                                       | 3.3 |
|    | 412471 | M63193    | Hs.73946  | endothelial cell growth factor 1 (platelet | 3.3 |
|    | 454631 | AW611324  |           | gb:IL3-ST0141-131099-017-A02 ST0141 Homo   | 3.3 |
|    | 454294 | AB000734  | Hs.50640  | JAK binding protein                        | 3.3 |
|    | 457131 | AC002310  | Hs.301463 | Human Chromosome 16 BAC clone CIT987SK-A   | 3.3 |
| 80 | 410102 | AW248508  | Hs.279727 | Homo sapiens cDNA FLJ14035 fis, clone HE   | 3.3 |
|    | 449676 | AW380579  | Hs.209657 | ESTs                                       | 3.3 |
|    | 436211 | AK001581  | Hs.334828 | hypothetical protein FLJ10719; KIAA1794    | 3.3 |
|    | 453746 | AL120611  |           | gb:DKFZp761H119_r1 761 (synonym: hamy2)    | 3.3 |
|    | 452799 | AI948829  | Hs.213786 | ESTs                                       | 3.3 |

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|    | 435380 | AA679001  | Hs.192221 | ESTs                                     | 3.3 |
|    | 426746 | J03626    | Hs.2057   | uridine monophosphate synthetase (orotat | 3.3 |
|    | 453362 | H14988    | Hs.107375 | ESTs                                     | 3.3 |
| 5  | 456473 | AI202788  | Hs.25682  | Homo sapiens mRNA for KIAA1863 protein,  | 3.3 |
|    | 416426 | AA180256  | Hs.210473 | Homo sapiens cDNA FLJ14872 fis, clone PL | 3.3 |
|    | 445777 | AI580371  | Hs.145384 | ESTs                                     | 3.3 |
|    | 423757 | AL049337  | Hs.132571 | Homo sapiens mRNA; cDNA DKFZp564P016 (fr | 3.3 |
|    | 431941 | AK000106  | Hs.272227 | Homo sapiens cDNA FLJ20099 fis, clone CO | 3.3 |
| 10 | 404299 |           |           |  | 3.3 |
|    | 404108 |           |           |  | 3.3 |
|    | 425189 | H16622    |           | gb:ym26c07.r1 Soares infant brain 1NIB H | 3.3 |
|    | 449318 | AW236021  | Hs.78531  | Homo sapiens, Similar to RIKEN cDNA 5730 | 3.3 |
|    | 450193 | AI916071  | Hs.15607  | Homo sapiens Fanconi anemia complementat | 3.2 |
| 15 | 427725 | U66839    | Hs.180533 | mitogen-activated protein kinase kinase  | 3.2 |
|    | 424051 | AL110203  | Hs.138411 | Homo sapiens mRNA; cDNA DKFZp586J1922 (f | 3.2 |
|    | 418968 | NM_000078 | Hs.89538  | cholesteryl ester transfer protein, plas | 3.2 |
|    | 449248 | M33782    | Hs.23391  | Homo sapiens, Similar to transcription f | 3.2 |
|    | 439416 | W58294    | Hs.56254  | ESTs                                     | 3.2 |
| 20 | 401596 | AA172106  | Hs.110950 | Rag C protein                            | 3.2 |
|    | 408380 | AF123050  | Hs.44532  | diubiquitin                              | 3.2 |
|    | 450325 | AI935962  | Hs.26289  | ESTs                                     | 3.2 |
|    | 428730 | AA625947  | Hs.25750  | ESTs                                     | 3.2 |
|    | 457536 | AA305233  | Hs.278712 | eukaryotic translation initiation factor | 3.2 |
| 25 | 426836 | N41720    | Hs.172684 | vesicle-associated membrane protein 8 (e | 3.2 |
|    | 442710 | AI015631  | Hs.23210  | ESTs                                     | 3.2 |
|    | 435232 | NM_001262 | Hs.4854   | cyclin-dependent kinase inhibitor 2C (p1 | 3.2 |
|    | 430970 | AI018210  | Hs.144083 | ESTs                                     | 3.2 |
|    | 416192 | NM_005036 | Hs.998    | peroxisome proliferative activated recep | 3.2 |
| 30 | 445676 | H09380    | Hs.300965 | ESTs                                     | 3.2 |
|    | 451459 | AI797515  | Hs.270560 | ESTs, Moderately similar to ALU7_HUMAN A | 3.2 |
|    | 407603 | AW955705  | Hs.62604  | Homo sapiens, clone IMAGE:4299322, mRNA, | 3.2 |
|    | 413840 | AI301558  | Hs.146381 | RNA binding motif protein, X chromosome  | 3.2 |
|    | 448751 | BE551203  | Hs.201792 | ESTs                                     | 3.2 |
| 35 | 432593 | AW301003  | Hs.51483  | ESTs, Weakly similar to hypothetical pro | 3.2 |
|    | 458786 | AI457098  | Hs.280848 | ESTs                                     | 3.2 |
|    | 455909 | BE156417  | Hs.278798 | ESTs                                     | 3.2 |
|    | 419311 | AA689591  |           | gb:nv66a12.s1 NCL_CGAP_GCB1 Homo sapiens | 3.2 |
|    | 439710 | AF086543  |           | gb:Homo sapiens full length insert cDNA  | 3.2 |
| 40 | 434559 | AF147315  |           | gb:Homo sapiens full length insert cDNA  | 3.1 |
|    | 455800 | R22479    | Hs.167073 | Homo sapiens cDNA FLJ13047 fis, clone NT | 3.1 |
|    | 436703 | AW880614  | Hs.146381 | RNA binding motif protein, X chromosome  | 3.1 |
|    | 414799 | AI752416  | Hs.77326  | insulin-like growth factor binding prote | 3.1 |
|    | 437860 | AA333063  | Hs.279898 | Homo sapiens cDNA: FLJ23165 fis, clone L | 3.1 |
| 45 | 434182 | W20309    | Hs.118520 | G-protein gamma-12 subunit               | 3.1 |
|    | 417900 | BE250127  | Hs.82906  | CDC20 (cell division cycle 20, S. cerevi | 3.1 |
|    | 434769 | AA648884  | Hs.134278 | Homo sapiens cDNA FLJ12676 fis, clone NT | 3.1 |
|    | 414825 | X06370    | Hs.77432  | epidermal growth factor receptor (avian  | 3.1 |
|    | 426413 | AA377823  |           | gb:EST90805 Synovial sarcoma Homo sapien | 3.1 |
| 50 | 447959 | AI452784  | Hs.270270 | ESTs, Weakly similar to 2109260A B cell  | 3.1 |
|    | 404589 |           |           |  | 3.1 |
|    | 421764 | AI681535  | Hs.148135 | serine/threonine kinase 33               | 3.1 |
|    | 419986 | AI345455  | Hs.78915  | GA-binding protein transcription factor, | 3.1 |
|    | 416941 | BE000150  | Hs.48778  | niban protein                            | 3.1 |
| 55 | 414761 | AJ077228  | Hs.77256  | enhancer of zeste (Drosophila) homolog 2 | 3.1 |
|    | 449611 | AI970394  | Hs.197075 | ESTs                                     | 3.1 |
|    | 434746 | AA648368  | Hs.295368 | ESTs                                     | 3.1 |
|    | 434274 | AA628539  | Hs.116252 | ESTs, Moderately similar to ALU1_HUMAN A | 3.1 |
| 60 | 427899 | AA829286  | Hs.332053 | serum amyloid A1                         | 3.1 |
|    | 417642 | BE302665  | Hs.105461 | hypothetical protein FLJ20357            | 3.1 |
|    | 452472 | AW957300  | Hs.294142 | ESTs, Weakly similar to C55663 oligodend | 3.1 |
|    | 446131 | NM_000929 | Hs.290    | phospholipase A2, group V                | 3.1 |
|    | 440052 | AI633744  | Hs.195648 | ESTs, Weakly similar to I38022 hypotheti | 3.1 |
|    | 426531 | AA381071  |           | gb:EST94100 Activated T-cells XII Homo s | 3.1 |
| 65 | 422158 | L10343    | Hs.112341 | protease inhibitor 3, skin-derived (SKAL | 3.1 |
|    | 406267 |           |           |  | 3.1 |
|    | 447039 | AV661798  | Hs.282915 | ESTs                                     | 3.1 |
|    | 404802 |           |           |  | 3.1 |
|    | 406927 | M26460    |           | gb:Homo sapiens (clone 104) retinoblasto | 3.1 |
| 70 | 419314 | AW971924  | Hs.87280  | ESTs                                     | 3.0 |
|    | 435894 | AI076667  | Hs.188011 | ESTs                                     | 3.0 |
|    | 432140 | AK000404  | Hs.272688 | hypothetical protein FLJ20397            | 3.0 |
|    | 443426 | AF098158  | Hs.9329   | chromosome 20 open reading frame 1       | 3.0 |
|    | 425202 | AW962282  | Hs.152049 | ESTs, Weakly similar to I38022 hypotheti | 3.0 |
| 75 | 407047 | X55965    |           | gb:H.sapiens SOD-2 gene for manganese su | 3.0 |
|    | 418241 | M26682    | Hs.1149   | UIM domain only 1 (rhombotin 1)          | 3.0 |
|    | 446599 | Z97832    | Hs.15476  | differentially expressed in FDCP (mouse  | 3.0 |
|    | 412950 | BE018581  | Hs.245342 | hypothetical protein FLJ14642            | 3.0 |
|    | 428670 | AA431682  | Hs.134832 | ESTs                                     | 3.0 |
|    | 446975 | BE246446  | Hs.16695  | ubiquitin-activating enzyme E1-like      | 3.0 |
| 80 | 437756 | AA767537  | Hs.197096 | ESTs                                     | 3.0 |
|    | 416084 | L16991    | Hs.79006  | deoxythymidylate kinase (thymidylate kin | 3.0 |
|    | 402374 | AL135225  | Hs.301865 | dopachrome tautomerase (dopachrome della | 3.0 |
|    | 443885 | H91806    | Hs.15284  | ESTs                                     | 3.0 |

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|    |        |          |           |  |     |
|----|--------|----------|-----------|--|-----|
|    | 434008 | AA740878 | Hs.112982 | ESTs                                     | 3.0 |
|    | 452568 | AA805634 | Hs.300870 | Homo sapiens mRNA; cDNA DKFZp547M072 (fr | 3.0 |
|    | 414239 | AI288330 | Hs.182330 | ESTs                                     | 3.0 |
|    | 421013 | M62397   | Hs.1345   | mutated in colorectal cancers            | 3.0 |
| 5  | 424635 | AA420587 | Hs.115455 | Homo sapiens cDNA FLJ14259 fis, clone PL | 3.0 |
|    | 410276 | AI554545 | Hs.68301  | ESTs                                     | 3.0 |
|    | 433865 | N29852   | Hs.44104  | ESTs                                     | 3.0 |
|    | 406028 |          |           |  | 3.0 |
|    | 401626 |          |           |  | 3.0 |
| 10 | 415949 | H10562   | Hs.21691  | ESTs                                     | 3.0 |
|    | 418583 | AA604379 | Hs.86211  | hypothetical protein                     | 3.0 |
|    | 417933 | X02308   | Hs.82962  | thymidylate synthetase                   | 3.0 |
|    | 434577 | R37316   | Hs.179769 | Homo sapiens cDNA: FLJ22437 fis, clone H | 3.0 |
|    | 430437 | AI768801 | Hs.169943 | Homo sapiens cDNA FLJ13569 fis, clone PL | 3.0 |
| 15 | 427940 | AA417812 | Hs.38775  | ESTs                                     | 2.9 |
|    | 456060 | C14904   | Hs.45184  | Homo sapiens cDNA FLJ12284 fis, clone MA | 2.9 |
|    | 421988 | AW450481 | Hs.161333 | ESTs                                     | 2.9 |
|    | 448775 | AB025237 | Hs.388    | nudix (nucleoside diphosphate linked moi | 2.9 |
|    | 438598 | AI805943 | Hs.326067 | hypothetical protein MGC5178             | 2.9 |
| 20 | 429612 | AF062649 | Hs.252587 | pituitary tumor-transforming 1           | 2.9 |
|    | 451189 | AA016019 | Hs.40905  | ESTs                                     | 2.9 |
|    | 401558 |          |           |  | 2.9 |
|    | 426207 | BE390657 | Hs.30026  | HSPC182 protein                          | 2.9 |
|    | 404721 |          |           |  | 2.9 |
| 25 | 401384 |          |           |  | 2.9 |
|    | 417288 | AI984792 | Hs.108812 | hypothetical protein FLJ22004            | 2.9 |
|    | 427648 | AI376722 | Hs.180062 | proteasome (prosome, macropain) subunit, | 2.9 |
|    | 435928 | H64345   | Hs.183961 | ESTs                                     | 2.9 |
|    | 431740 | N75450   | Hs.183412 | ESTs, Moderately similar to AF116721 67  | 2.9 |
| 30 | 428242 | H55709   | Hs.2250   | leukemia inhibitory factor (cholinergic  | 2.9 |
|    | 439972 | AI348100 | Hs.124662 | ESTs                                     | 2.9 |
|    | 433112 | AA973801 | Hs.144553 | ESTs, Weakly similar to unnamed protein  | 2.9 |
|    | 423751 | AW235633 | Hs.46525  | ESTs                                     | 2.9 |
|    | 406748 | AW339106 | Hs.217493 | annexin A2                               | 2.9 |
| 35 | 422154 | T79045   | Hs.126927 | ESTs                                     | 2.9 |
|    | 405588 |          |           |  | 2.9 |
|    | 440911 | AA909536 | Hs.143562 | ESTs                                     | 2.9 |
|    | 412420 | AL035668 | Hs.73853  | bone morphogenetic protein 2             | 2.9 |
| 40 | 445043 | AW014413 | Hs.196066 | ESTs                                     | 2.9 |
|    | 410114 | AW590540 | Hs.271280 | ESTs                                     | 2.9 |
|    | 419217 | AA504571 |           | gb:aa60e12.r1 NCI_CGAP_GCB1 Homo sapiens | 2.9 |
|    | 415849 | R20529   | Hs.6806   | ESTs                                     | 2.9 |
|    | 448140 | AF146761 | Hs.20450  | BCM-like membrane protein precursor      | 2.9 |
| 45 | 453331 | AI240665 | Hs.8895   | ESTs                                     | 2.9 |
|    | 432065 | AA401039 | Hs.2903   | protein phosphatase 4 (formerly X), cata | 2.9 |
|    | 438380 | T06430   | Hs.6194   | chondroitin sulfate proteoglycan BEHAB/b | 2.9 |
|    | 454377 | AA076811 |           | gb:7B03C12 Chromosome 7 Fetal Brain cDNA | 2.9 |
|    | 421491 | H99999   | Hs.42736  | ESTs                                     | 2.9 |
|    | 452291 | AF015592 | Hs.28853  | CDC7 (cell division cycle 7, S. cerevisi | 2.8 |
| 50 | 415446 | F08898   | Hs.66075  | ESTs                                     | 2.8 |
|    | 439518 | W76326   |           | gb:zd60d04.r1 Soares_fetal_heart_NbHH19W | 2.8 |
|    | 427221 | L15409   | Hs.174007 | von Hippel-Lindau syndrome               | 2.8 |
|    | 422493 | AW474183 | Hs.250173 | hypothetical protein FLJ13158            | 2.8 |
|    | 419451 | AI907117 | Hs.90535  | synaptobrevin 2                          | 2.8 |
| 55 | 448789 | BE539108 | Hs.22051  | hypothetical protein MGC15548            | 2.8 |
|    | 424126 | AA335635 | Hs.96917  | ESTs                                     | 2.8 |
|    | 458695 | AV660159 | Hs.282284 | ESTs, Weakly similar to I38022 hypotheti | 2.8 |
|    | 418973 | AA233056 | Hs.191518 | ESTs                                     | 2.8 |
|    | 440471 | AA886146 | Hs.307944 | ESTs                                     | 2.8 |
| 60 | 421016 | AA504583 | Hs.101047 | transcription factor 3 (E2A immunoglobul | 2.8 |
|    | 433547 | AA603367 | Hs.222294 | ESTs                                     | 2.8 |
|    | 415817 | U88967   | Hs.78867  | protein tyrosine phosphatase, receptor-t | 2.8 |
|    | 421723 | AA620400 | Hs.300717 | sodium channel, voltage-gated, type III, | 2.8 |
|    | 434964 | AI638850 | Hs.130746 | ESTs                                     | 2.8 |
| 65 | 432022 | AL162042 | Hs.272348 | Homo sapiens mRNA; cDNA DKFZp761L1212 (f | 2.8 |
|    | 400517 | AF242388 | Hs.149585 | lengsin                                  | 2.8 |
|    | 433023 | AW864793 | Hs.87409  | thrombospondin 1                         | 2.8 |
|    | 448734 | BE614070 | Hs.326416 | Homo sapiens mRNA; cDNA DKFZp564H1916 (f | 2.8 |
| 70 | 406736 | AI254733 | Hs.182425 | ribosomal protein S2                     | 2.8 |
|    | 409207 | AW373564 | Hs.194637 | BANP homolog, SMAR1 homolog              | 2.8 |
|    | 440196 | N72847   | Hs.125221 | ESTs                                     | 2.8 |
|    | 403961 |          |           |  | 2.8 |
|    | 425193 | AW965689 | Hs.22509  | ESTs                                     | 2.8 |
| 75 | 425268 | AI807883 | Hs.180059 | Homo sapiens cDNA FLJ20653 fis, clone KA | 2.8 |
|    | 440483 | AI200836 | Hs.150386 | ESTs                                     | 2.8 |
|    | 412391 | AW947710 |           | gb:RC0-MT0004-130300-011-e07 MT0004 Homo | 2.8 |
|    | 448769 | N66037   | Hs.38173  | ESTs                                     | 2.8 |
|    | 411632 | AW854829 |           | gb:QV2-CT0261-201099-011-f01 CT0261 Homo | 2.8 |
| 80 | 438221 | AI798853 | Hs.122224 | ESTs, Weakly similar to ALU5_HUMAN ALU S | 2.8 |
|    | 457578 | AA578027 |           | gb:nl20h01.s1 NCI_CGAP_HSC1 Homo sapiens | 2.8 |
|    | 455510 | AA422029 | Hs.143640 | ESTs, Weakly similar to hyperpolarizatio | 2.8 |
|    | 447769 | AW873704 | Hs.320831 | Homo sapiens cDNA FLJ14597 fis, clone NT | 2.8 |
|    | 427701 | AA411101 | Hs.243886 | nuclear autoantigenic sperm protein (his | 2.8 |



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|    |        |           |           |   |     |
|----|--------|-----------|-----------|---|-----|
|    | 433800 | AI034361  | Hs.135150 | lung type-I cell membrane-associated gly  | 2.8 |
|    | 439662 | H97552    | Hs.269060 | ESTs                                      | 2.8 |
|    | 425694 | U51333    | Hs.159237 | hexokinase 3 (white cell)                 | 2.8 |
|    | 414747 | U30872    | Hs.77204  | centromere protein F (350/400kD, mitosis) | 2.8 |
| 5  | 414598 | AI094221  | Hs.135150 | lung type-I cell membrane-associated gly  | 2.8 |
|    | 447752 | M73700    | Hs.105938 | lactotransferrin                          | 2.8 |
|    | 408761 | AA057264  | Hs.238936 | ESTs, Weakly similar to (define not ava   | 2.8 |
|    | 453350 | AI917771  | Hs.51790  | hypothetical protein FLJ23338             | 2.7 |
|    | 456629 | AW891965  | Hs.279789 | histone deacetylase 3                     | 2.7 |
| 10 | 439538 | AA837323  | Hs.164047 | ESTs                                      | 2.7 |
|    | 458814 | AI498957  | Hs.170861 | ESTs, Weakly similar to Z195_HUMAN ZINC   | 2.7 |
|    | 456029 | BE255990  | Hs.218329 | hypothetical protein                      | 2.7 |
|    | 451129 | BE072881  |           | gb:RC2-BT0548-200300-012-e09 BT0548 Homo  | 2.7 |
|    | 456412 | AW749617  | Hs.280776 | tankyrase, TRF1-interacting ankyrin-rela  | 2.7 |
| 15 | 453536 | AA137000  | Hs.62573  | ESTs                                      | 2.7 |
|    | 438378 | AW970529  | Hs.86434  | hypothetical protein FLJ21816             | 2.7 |
|    | 425745 | U44060    | Hs.14427  | Homo sapiens cDNA: FLJ21800 fis, clone H  | 2.7 |
|    | 446322 | N23033    | Hs.155814 | ESTs                                      | 2.7 |
| 20 | 451592 | AI805416  | Hs.213897 | ESTs                                      | 2.7 |
|    | 429466 | M85835    | Hs.12827  | ESTs                                      | 2.7 |
|    | 429747 | M87507    | Hs.2490   | caspase 1, apoptosis-related cysteine pr  | 2.7 |
|    | 455514 | AW983871  |           | gb:RC1-HN0003-220300-021-h07 HN0003 Homo  | 2.7 |
|    | 414732 | AW410976  | Hs.77152  | minichromosome maintenance deficient (S.  | 2.7 |
| 25 | 444207 | AI565004  | Hs.79572  | cathepsin D (lysosomal aspartyl protease  | 2.7 |
|    | 427421 | AA402414  | Hs.3059   | coatomer protein complex, subunit beta    | 2.7 |
|    | 449655 | AI021987  | Hs.59970  | ESTs                                      | 2.7 |
|    | 422648 | D86983    | Hs.118893 | Melanoma associated gene                  | 2.7 |
|    | 428494 | AA233439  | Hs.184634 | hypothetical protein FLJ20005             | 2.7 |
| 30 | 406895 | X60648    | Hs.172550 | polypyrimidine tract binding protein (ha  | 2.7 |
|    | 453255 | AA278167  | Hs.19215  | Homo sapiens, clone IMAGE:3605822, mRNA   | 2.7 |
|    | 427348 | NM_014137 | Hs.177258 | PRO0650 protein                           | 2.7 |
|    | 435370 | AI964074  | Hs.225838 | ESTs                                      | 2.7 |
|    | 407862 | BE548267  | Hs.50724  | Homo sapiens cDNA FLJ10934 fis, clone OV  | 2.7 |
| 35 | 411874 | AA096106  | Hs.20403  | ESTs                                      | 2.7 |
|    | 421192 | AA833718  | Hs.204529 | KIAA1806 protein                          | 2.7 |
|    | 435899 | W89093    | Hs.189914 | ESTs                                      | 2.7 |
|    | 414603 | R58394    | Hs.25119  | ESTs, Weakly similar to YEX0_YEAST HYPOT  | 2.7 |
|    | 453462 | AL037291  | Hs.236605 | ESTs, Moderately similar to ALU4_HUMAN A  | 2.7 |
| 40 | 436554 | AI985810  | Hs.301173 | ESTs                                      | 2.7 |
|    | 427528 | AU077143  | Hs.179565 | minichromosome maintenance deficient (S.  | 2.7 |
|    | 403881 |           |           |   | 2.7 |
|    | 431779 | AW971178  | Hs.268571 | apolipoprotein C-I                        | 2.7 |
|    | 404984 |           |           |   | 2.7 |
| 45 | 448275 | BE514434  | Hs.20830  | kinesin-like 2                            | 2.7 |
|    | 446839 | BE091926  | Hs.16244  | mitotic spindle coiled-coil related prot  | 2.7 |
|    | 411927 | BE274009  | Hs.772    | glycogen synthase 1 (muscle)              | 2.7 |
|    | 404756 |           |           |   | 2.7 |
|    | 447072 | D61594    | Hs.17279  | tyrosylprotein sulfotransferase 1         | 2.7 |
| 50 | 422176 | H80977    |           | gb:yu89a11.s1 Soares fetal liver spleen   | 2.7 |
|    | 439627 | BE621702  | Hs.29076  | hypothetical protein FLJ21841             | 2.7 |
|    | 436532 | AA721522  |           | gb:nv54h12.r1 NCL_CGAP_Ew1 Homo sapiens   | 2.7 |
|    | 412833 | AW960547  | Hs.298262 | ribosomal protein S19                     | 2.7 |
|    | 457245 | AI745498  | Hs.204579 | ESTs                                      | 2.7 |
| 55 | 446861 | AI696519  | Hs.14427  | Homo sapiens cDNA: FLJ21800 fis, clone H  | 2.7 |
|    | 453263 | R91778    | Hs.99369  | ESTs                                      | 2.7 |
|    | 459385 | BE380047  |           | gb:601159362F2 NIH_MGC_53 Homo sapiens c  | 2.7 |
|    | 438764 | AA824524  | Hs.336452 | ESTs                                      | 2.7 |
|    | 429285 | AI971081  | Hs.20432  | ESTs, Weakly similar to I38022 hypotheti  | 2.7 |
| 60 | 424853 | BE549737  | Hs.132967 | Human EST clone 122887 mariner transpos   | 2.7 |
|    | 430037 | BE409649  | Hs.227789 | mitogen-activated protein kinase-activat  | 2.7 |
|    | 449892 | N73608    | Hs.50309  | ESTs                                      | 2.7 |
|    | 454201 | AB023191  | Hs.44131  | KIAA0974 protein                          | 2.7 |
|    | 452279 | AA286844  | Hs.51260  | hypothetical protein FLJ13164             | 2.7 |
| 65 | 427954 | J03060    | Hs.247551 | metaxin 1                                 | 2.7 |
|    | 400371 | U80740    |           |   | 2.7 |
|    | 452449 | AW068658  | Hs.20943  | ESTs                                      | 2.7 |
|    | 431114 | AA492400  | Hs.291015 | ESTs                                      | 2.7 |
| 70 | 417088 | M54915    | Hs.81170  | pim-1 oncogene                            | 2.7 |
|    | 447674 | BE270640  | Hs.19192  | cyclin-dependent kinase 2                 | 2.7 |
|    | 403680 |           |           |   | 2.7 |
|    | 454679 | AW813110  |           | gb:CM4-ST0189-051099-021-f05 ST0189 Homo  | 2.7 |
|    | 411968 | AI207410  | Hs.69280  | Homo sapiens, clone IMAGE:3636299, mRNA,  | 2.6 |
|    | 422240 | R60594    | Hs.29002  | KIAA1706 protein                          | 2.6 |
| 75 | 424368 | AB037766  | Hs.146085 | KIAA1345 protein                          | 2.6 |
|    | 405808 |           |           |   | 2.6 |
|    | 419700 | AF084935  | Hs.92357  | galactokinase 1                           | 2.6 |
|    | 435972 | W95088    | Hs.114198 | ESTs                                      | 2.6 |
|    | 453568 | S70782    | Hs.557    | adrenergic, alpha-1D-, receptor           | 2.6 |
| 80 | 443725 | AW245680  | Hs.9701   | growth arrest and DNA-damage-inducible,   | 2.6 |
|    | 444156 | AW500059  | Hs.86437  | ESTs, Highly similar to AF219140 1 gastr  | 2.6 |
|    | 428209 | AA424197  | Hs.98947  | ESTs, Weakly similar to S33496 trypsin [  | 2.6 |
|    | 437640 | AA764893  | Hs.272155 | ESTs, Weakly similar to I38022 hypotheti  | 2.6 |
|    | 453948 | AI970797  | Hs.64859  | ESTs                                      | 2.6 |

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|    |        |           |           |   |     |
|----|--------|-----------|-----------|---|-----|
|    | 415402 | AA164687  | Hs.177576 | mannosyl (alpha-1,3-)-glycoprotein beta-  | 2.6 |
|    | 425397 | J04088    | Hs.156346 | topoisomerase (DNA) II alpha (170kD)      | 2.6 |
|    | 418228 | AA962181  | Hs.111219 | ESTs, Moderately similar to ALU1_HUMAN A  | 2.6 |
| 5  | 401324 |           |           |   | 2.6 |
|    | 425234 | AW152225  | Hs.165909 | ESTs, Weakly similar to I38022 hypotheti  | 2.6 |
|    | 443210 | AI692549  | Hs.9451   | hypothetical protein MGC13168             | 2.6 |
|    | 457244 | AA581385  | Hs.162473 | ESTs, Weakly similar to I38022 hypotheti  | 2.6 |
|    | 417144 | AA382104  | Hs.81337  | lectin, galactoside-binding, soluble, 9   | 2.6 |
| 10 | 433933 | AI754389  | Hs.133494 | Homo sapiens clone TCCCIA00164 mRNA sequ  | 2.6 |
|    | 437437 | AA226869  | Hs.16520  | hypothetical protein DKFZp762L0311        | 2.6 |
|    | 434206 | AW136973  | Hs.288516 | ESTs, Weakly similar to S69890 mitogen I  | 2.6 |
|    | 400992 |           |           |   | 2.6 |
|    | 455530 | AW984744  |           | gb:RC1-HN0015-040400-011-d03 HN0015 Homo  | 2.6 |
| 15 | 436139 | AA765786  | Hs.120936 | ESTs                                      | 2.6 |
|    | 448330 | AL036449  | Hs.207163 | ESTs                                      | 2.6 |
|    | 412942 | AL120344  | Hs.75074  | mitogen-activated protein kinase-activat  | 2.6 |
|    | 432753 | NM_014075 | Hs.336938 | Homo sapiens PRO0593 mRNA, complete cds   | 2.6 |
|    | 433430 | AI863735  | Hs.186755 | ESTs                                      | 2.6 |
| 20 | 436693 | AW973223  | Hs.303197 | B-cell CLL/lymphoma 7C                    | 2.6 |
|    | 429482 | AF076974  | Hs.203952 | transformation/transcription domain-asso  | 2.6 |
|    | 432715 | AA247152  | Hs.200483 | ESTs, Weakly similar to KIAA1074 protein  | 2.6 |
|    | 414217 | AI309298  | Hs.279998 | Homo sapiens cDNA: FLJ23165 fis, clone L  | 2.6 |
|    | 434165 | AA971328  | Hs.95361  | myosin VIIA (Usher syndrome 1B) (autosoma | 2.6 |
| 25 | 414835 | AA156720  | Hs.185342 | ESTs                                      | 2.6 |
|    | 424489 | T48851    | Hs.149250 | D-siglec precursor,                       | 2.6 |
|    | 436496 | AA281969  | Hs.5210   | glia maturation factor, gamma             | 2.6 |
|    | 403797 |           |           |   | 2.6 |
|    | 434573 | AW372340  | Hs.159717 | ESTs                                      | 2.6 |
| 30 | 418841 | NM_002332 | Hs.89137  | low density lipoprotein-related protein   | 2.6 |
|    | 415785 | R82419    | Hs.23603  | ESTs, Moderately similar to ALU8_HUMAN A  | 2.6 |
|    | 450608 | AA010365  | Hs.193229 | ESTs                                      | 2.6 |
|    | 425304 | AA463844  | Hs.31339  | fibroblast growth factor 11               | 2.6 |
|    | 432268 | BE311856  | Hs.274230 | 3'-phosphoadenosine 5'-phosphosulfate sy  | 2.6 |
| 35 | 410607 | AA355288  | Hs.40834  | transitional epithelia response protein   | 2.6 |
|    | 427343 | AI880044  | Hs.176977 | protein kinase C binding protein 2        | 2.6 |
|    | 420917 | AW135716  | Hs.117330 | ESTs                                      | 2.6 |
|    | 414399 | L47345    | Hs.155202 | transcription elongation factor B (SIII)  | 2.6 |
|    | 446089 | AI860021  | Hs.270651 | ESTs, Moderately similar to A47582 B-cel  | 2.6 |
| 40 | 440829 | AF136407  | Hs.7446   | chromosome 6 open reading frame 5         | 2.6 |
|    | 408475 | AA315514  | Hs.47986  | hypothetical protein MGC10940             | 2.6 |
|    | 450946 | AA374569  | Hs.127698 | ESTs, Moderately similar to 2109260A B c  | 2.6 |
|    | 421462 | AF016495  | Hs.104624 | aquaporin 9                               | 2.6 |
|    | 434846 | AW295389  | Hs.119768 | ESTs                                      | 2.6 |
| 45 | 422887 | AI751848  | Hs.49215  | ESTs                                      | 2.6 |
|    | 417435 | NM_005181 | Hs.82129  | carbonic anhydrase III, muscle specific   | 2.6 |
|    | 437389 | AL359587  | Hs.271586 | hypothetical protein DKFZp762M115         | 2.5 |
|    | 408981 | AW500797  | Hs.49427  | Gem-interacting protein                   | 2.5 |
|    | 432180 | Y18418    | Hs.272822 | RuvB (E coli homolog)-like 1              | 2.5 |
| 50 | 418079 | R40058    | Hs.6911   | ESTs                                      | 2.5 |
|    | 437820 | AA769062  | Hs.323836 | ESTs, Weakly similar to altematively sp   | 2.5 |
|    | 439685 | AW956781  | Hs.293937 | ESTs, Weakly similar to FXD2_HUMAN FORKH  | 2.5 |
|    | 425681 | AB018297  | Hs.159183 | KIAA0754 protein                          | 2.5 |
|    | 435177 | AI018174  | Hs.42936  | ESTs                                      | 2.5 |
| 55 | 437323 | AA371145  | Hs.226627 | leptin receptor                           | 2.5 |
|    | 422114 | AW194851  | Hs.111801 | arsenite resistance protein ARS2          | 2.5 |
|    | 448478 | AI523218  | Hs.203456 | ESTs                                      | 2.5 |
|    | 426623 | AA382826  | Hs.132793 | ESTs                                      | 2.5 |
|    | 448764 | AI568607  | Hs.182112 | ESTs                                      | 2.5 |
| 60 | 458385 | AI051489  | Hs.246214 | ESTs                                      | 2.5 |
|    | 403726 | N28939    | Hs.13434  | Homo sapiens clone 24418 mRNA sequence    | 2.5 |
|    | 444888 | AI651039  | Hs.148559 | ESTs                                      | 2.5 |
|    | 455179 | H75490    | Hs.271930 | ESTs                                      | 2.5 |
|    | 424840 | D79987    | Hs.153479 | extra spindle poles, S. cerevisiae, homo  | 2.5 |
| 65 | 406273 | NM_000919 | Hs.83920  | peptidylglycine alpha-amidating monooxyg  | 2.5 |
|    | 418054 | NM_002318 | Hs.83354  | lysyl oxidase-like 2                      | 2.5 |
|    | 445936 | BE543594  | Hs.61478  | hypothetical protein FLJ22329             | 2.5 |
|    | 454967 | AW848276  |           | gb:IL3-CT0214-150200-074-E06 CT0214 Homo  | 2.5 |
| 70 | 442303 | AA989289  | Hs.129169 | ESTs                                      | 2.5 |
|    | 456583 | AF179897  | Hs.104105 | Meis (mouse) homolog 2                    | 2.5 |
|    | 434263 | N34895    | Hs.44548  | ESTs                                      | 2.5 |
|    | 416892 | L24498    | Hs.80409  | growth arrest and DNA-damage-inducible,   | 2.5 |
|    | 424528 | AW073971  | Hs.238954 | ESTs, Weakly similar to KIAA1204 protein  | 2.5 |
|    | 406038 | Y14443    | Hs.88219  | zinc finger protein 200                   | 2.5 |
| 75 | 413495 | Y12395    | Hs.315177 | interferon-related developmental regulat  | 2.5 |
|    | 423098 | AA321980  | Hs.204682 | ESTs                                      | 2.5 |
|    | 410817 | AI262789  | Hs.93659  | protein disulfide isomerase related prot  | 2.5 |
|    | 439841 | AF038961  | Hs.6710   | mannose-P-dolichol utilization defect 1   | 2.5 |
| 80 | 453828 | AW970960  | Hs.293821 | ESTs                                      | 2.5 |
|    | 445034 | AW293376  | Hs.143659 | ESTs                                      | 2.5 |
|    | 449620 | BE407797  | Hs.23794  | checkpoint with forkhead and ring finger  | 2.5 |
|    | 406876 | AI382286  | Hs.180842 | ribosomal protein L13                     | 2.5 |
|    | 412370 | AW946614  |           | gb:RC2-ET0021-280400-011-c05 ET0021 Homo  | 2.5 |
|    | 423642 | AW452650  | Hs.157148 | hypothetical protein MGC13204             | 2.5 |

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|    | 430357 | AW976789  | Hs.165607 | ESTs                                     | 2.5 |
|    | 414853 | U31116    | Hs.77501  | sarcoglycan, beta (43kD dystrophin-assoc | 2.5 |
|    | 416097 | BE387371  | Hs.118964 | hypothetical protein FLJ20085            | 2.5 |
| 5  | 428619 | AK002140  | Hs.187378 | hypothetical protein FLJ11278            | 2.5 |
|    | 413976 | BE295452  | Hs.75655  | procollagen-proline, 2-oxoglutarate 4-di | 2.5 |
|    | 445223 | AW291553  | Hs.254983 | ESTs                                     | 2.5 |
|    | 423926 | X03833    | Hs.1722   | interleukin 1, alpha                     | 2.5 |
|    | 410165 | BE560228  | Hs.71869  | apoptosis-associated speck-like protein  | 2.5 |
|    | 406474 |           |           |  | 2.5 |
| 10 | 433908 | AW298141  | Hs.157975 | ESTs                                     | 2.5 |
|    | 439755 | AW748482  | Hs.77873  | B7 homolog 3                             | 2.5 |
|    | 437528 | N59646    | Hs.169745 | crumbs (Drosophila) homolog 1            | 2.5 |
|    | 420734 | AW972872  | Hs.293736 | ESTs                                     | 2.5 |
|    | 415346 | Z43108    |           | gb:HSC13E071 normalized infant brain cDN | 2.5 |
| 15 | 419337 | AW291112  | Hs.209978 | ESTs                                     | 2.5 |
|    | 444606 | R09478    | Hs.18041  | ESTs                                     | 2.5 |
|    | 430061 | AB037817  | Hs.230188 | KIAA1396 protein                         | 2.5 |
|    | 413407 | AI356293  | Hs.75339  | inositol polyphosphate phosphatase-like  | 2.5 |
|    | 411965 | BE467339  | Hs.280115 | ESTs                                     | 2.5 |
| 20 | 409278 | AA346683  | Hs.52763  | anaphase-promoting complex subunit 7     | 2.5 |
|    | 403142 |           |           |  | 2.5 |
|    | 401714 |           |           |  | 2.5 |
|    | 425081 | X74794    | Hs.154443 | minichromosome maintenance deficient (S. | 2.5 |
| 25 | 416505 | H66470    | Hs.16004  | ESTs                                     | 2.5 |
|    | 431518 | AA743462  | Hs.165337 | ESTs                                     | 2.5 |
|    | 448623 | BE613468  | Hs.107515 | ESTs, Weakly similar to T00329 hypotheli | 2.5 |
|    | 428301 | AW628666  | Hs.98440  | ESTs, Weakly similar to I38022 hypotheli | 2.5 |
|    | 404366 |           |           |  | 2.5 |
| 30 | 449733 | R74546    | Hs.29438  | Homo sapiens cDNA FLJ12094 fis, clone HE | 2.5 |
|    | 459583 | AI907673  |           | gb:IL-BT152-080399-004 BT152 Homo sapien | 2.5 |
|    | 402856 | AW939659  |           | gb:RCO-DT0076-110100-031-c09 DT0076 Homo | 2.5 |
|    | 420751 | J03019    | Hs.99913  | adrenergic, beta-1-, receptor            | 2.4 |
|    | 436805 | AA731533  | Hs.270751 | ESTs                                     | 2.4 |
| 35 | 420285 | AA258124  | Hs.293878 | ESTs, Moderately similar to ZN91_HUMAN Z | 2.4 |
|    | 453496 | AA442103  | Hs.33084  | solute carrier family 2 (facilitated glu | 2.4 |
|    | 453853 | AL040600  | Hs.188083 | ESTs                                     | 2.4 |
|    | 407909 | AW103986  |           | gb:xd63e05.x1 NCL_CGAP_Ov23 Homo sapiens | 2.4 |
|    | 454530 | BE142075  |           | gb:CM3-HT0137-170999-012-f02 HT0137 Homo | 2.4 |
| 40 | 451026 | AA013218  | Hs.157492 | cer-d4 (mouse) homolog                   | 2.4 |
|    | 420779 | L12398    | Hs.99922  | dopamine receptor D4                     | 2.4 |
|    | 438322 | AA804170  | Hs.221349 | ESTs                                     | 2.4 |
|    | 455908 | BE156306  |           | gb:QV0-HT0367-150200-114-h04 HT0367 Homo | 2.4 |
|    | 419625 | U91616    | Hs.91640  | nuclear factor of kappa light polypeptid | 2.4 |
| 45 | 440773 | AA352702  | Hs.332541 | Homo sapiens, Similar to RIKEN cDNA 2700 | 2.4 |
|    | 450823 | T81223    | Hs.22011  | complement-c1q tumor necrosis factor-rel | 2.4 |
|    | 447247 | AW369351  | Hs.287955 | Homo sapiens cDNA FLJ13090 fis, clone NT | 2.4 |
|    | 429109 | AL008637  | Hs.196352 | neutrophil cytosolic factor 4 (40kD)     | 2.4 |
|    | 451802 | AI817711  | Hs.209374 | ESTs                                     | 2.4 |
| 50 | 419417 | R92491    | Hs.39429  | ESTs                                     | 2.4 |
|    | 407094 | AF000574  | Hs.22405  | leukocyte immunoglobulin-like receptor,  | 2.4 |
|    | 423567 | BE252949  | Hs.69331  | hypothetical protein FLJ13633            | 2.4 |
|    | 427501 | AI369280  | Hs.131743 | ESTs                                     | 2.4 |
|    | 451773 | Z42044    | Hs.26996  | KIAA1278 protein                         | 2.4 |
| 55 | 436845 | AA732297  | Hs.113928 | ESTs                                     | 2.4 |
|    | 431584 | AW296121  | Hs.265263 | Homo sapiens cDNA FLJ14115 fis, clone MA | 2.4 |
|    | 440614 | AA781530  | Hs.127236 | hypothetical protein FLJ12879            | 2.4 |
|    | 423721 | AF176911  | Hs.132004 | cardiotrophin-like cytokine; neurotroph  | 2.4 |
|    | 452125 | BE312642  | Hs.28077  | GDP-mannose pyrophosphorylase B          | 2.4 |
| 60 | 419508 | AW997938  | Hs.90786  | ATP-binding cassette, sub-family C (CFTR | 2.4 |
|    | 453446 | BE299996  |           | gb:600944574F1 NIH_MGC_17 Homo sapiens c | 2.4 |
|    | 419792 | AA250890  | Hs.190037 | ESTs                                     | 2.4 |
|    | 452786 | R61362    | Hs.106642 | ESTs, Weakly similar to T09052 hypotheli | 2.4 |
|    | 410447 | AW816134  |           | gb:MR3-ST0220-290100-016-e04 ST0220 Homo | 2.4 |
| 65 | 438662 | AA223599  | Hs.6351   | cleavage and polyadenylation specific fa | 2.4 |
|    | 402408 |           |           |  | 2.4 |
|    | 443950 | NM_001425 | Hs.9999   | epithelial membrane protein 3            | 2.4 |
|    | 414625 | AA335738  | Hs.76686  | glutathione peroxidase 1                 | 2.4 |
|    | 403048 |           |           |  | 2.4 |
| 70 | 432088 | AA525454  |           | gb:ni85c09.s1 NCL_CGAP_Pr20 Homo sapiens | 2.4 |
|    | 431692 | AL021331  | Hs.267749 | unc93 (C.elegans) homolog A              | 2.4 |
|    | 455023 | AW850907  |           | gb:IL3-CT0220-310100-065-H11 CT0220 Homo | 2.4 |
|    | 426249 | F05422    | Hs.168352 | nucleoporin-like protein 1               | 2.4 |
|    | 446795 | AI797713  | Hs.156471 | ESTs                                     | 2.4 |
| 75 | 414774 | X02419    | Hs.77274  | plasminogen activator, urokinase         | 2.4 |
|    | 414252 | AA346483  | Hs.126191 | ESTs                                     | 2.4 |
|    | 417918 | AA209205  | Hs.163754 | hypothetical protein FLJ12606            | 2.4 |
|    | 427550 | BE242818  | Hs.179606 | nuclear RNA helicase, DECD variant of DE | 2.4 |
|    | 404020 |           |           |  | 2.4 |
| 80 | 407846 | AA426202  | Hs.40403  | Cbp/p300-interacting transactivator, wit | 2.4 |
|    | 417222 | AI525424  | Hs.42053  | hypothetical protein MGC2383             | 2.4 |
|    | 443639 | BE269042  | Hs.9661   | proteasome (prosome, macropain) subunit, | 2.4 |
|    | 452706 | AW449390  | Hs.257150 | ESTs, Moderately similar to SUR1_HUMAN S | 2.4 |
|    | 401676 |           |           |  | 2.4 |

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|    | 428882 | AA436915  | Hs.131748 | ESTs, Moderately similar to ALU7_HUMAN A | 2.4 |
|    | 436277 | R88520    | Hs.120917 | ESTs                                     | 2.4 |
|    | 426271 | AF026547  | Hs.169047 | chondroitin sulfate proteoglycan 3 (neur | 2.4 |
| 5  | 405353 |           |           |  | 2.4 |
|    | 409193 | AA131483  |           | gb:zo08e05.r1 Stratagene neuroepithelium | 2.4 |
|    | 431431 | AL096711  | Hs.252953 | Human DNA sequence from clone RP3-403A15 | 2.4 |
|    | 407889 | R34556    | Hs.30800  | ESTs, Weakly similar to S65657 alpha-1C- | 2.4 |
|    | 453335 | AW857376  | Hs.169238 | fucosyltransferase 3 (galactoside 3(4)-L | 2.4 |
| 10 | 450621 | AW297288  | Hs.55918  | hypothetical protein FLJ11354            | 2.4 |
|    | 419652 | AL157485  | Hs.91973  | hypothetical protein                     | 2.4 |
|    | 421151 | BE174431  | Hs.63386  | ESTs                                     | 2.4 |
|    | 437846 | AA773866  | Hs.244569 | esophagus cancer-related gene-2          | 2.4 |
|    | 420681 | AA847602  | Hs.105510 | ESTs, Moderately similar to ALU2_HUMAN A | 2.4 |
| 15 | 405288 |           |           |  | 2.4 |
|    | 453527 | R49570    | Hs.180236 | ESTs                                     | 2.4 |
|    | 429875 | AI091815  |           | gb:qa58b06.s1 Soares_NhHMPu_S1 Homo sapi | 2.4 |
|    | 436360 | AI962796  | Hs.136754 | ESTs                                     | 2.4 |
|    | 418592 | X99226    | Hs.284153 | Fanconi anemia, complementation group A  | 2.4 |
| 20 | 419991 | AJ000098  | Hs.94210  | eyes absent (Drosophila) homolog 1       | 2.4 |
|    | 449539 | W80363    | Hs.58446  | ESTs                                     | 2.4 |
|    | 419870 | AW403911  | Hs.266175 | phosphoprotein associated with GEMs      | 2.4 |
|    | 404584 |           |           |  | 2.4 |
| 25 | 454276 | AW294996  | Hs.255374 | ESTs                                     | 2.4 |
|    | 423746 | AW361817  | Hs.132370 | NADPH oxidase 1                          | 2.4 |
|    | 415558 | AA885143  | Hs.125719 | ESTs                                     | 2.4 |
|    | 428141 | D50402    | Hs.182511 | solute carrier family 11 (proton-coupled | 2.4 |
|    | 406953 | L36847    |           | gb:Human (clone p17/90) rearranged iduro | 2.4 |
|    | 444471 | AB020684  | Hs.11217  | KIAA0877 protein                         | 2.4 |
| 30 | 451031 | AI360187  | Hs.4254   | ESTs                                     | 2.4 |
|    | 455302 | AW997641  |           | gb:RC6-BN0052-170200-011-D06 BN0052 Homo | 2.4 |
|    | 449063 | AI627352  | Hs.236547 | Homo sapiens, clone IMAGE:2906978, mRNA, | 2.4 |
|    | 401048 |           |           |  | 2.4 |
|    | 434420 | AA688278  | Hs.194864 | hypothetical protein FLJ22578            | 2.4 |
| 35 | 425848 | BE242709  | Hs.159637 | valyl-tRNA synthetase 2                  | 2.4 |
|    | 449086 | AI628357  | Hs.208037 | ESTs                                     | 2.4 |
|    | 415238 | R37780    | Hs.21422  | ESTs                                     | 2.4 |
|    | 448337 | AW206453  | Hs.3782   | ESTs                                     | 2.4 |
|    | 416991 | N36389    | Hs.141296 | KIAA0226 gene product                    | 2.3 |
| 40 | 412600 | L28824    | Hs.74101  | spleen tyrosine kinase                   | 2.3 |
|    | 418385 | AW590613  | Hs.301040 | Homo sapiens, clone IMAGE:3357127, mRNA, | 2.3 |
|    | 440769 | BE561793  | Hs.21446  | KIAA1716 protein                         | 2.3 |
|    | 450437 | X13956    | Hs.24998  | hypothetical protein MGC10471            | 2.3 |
|    | 412035 | N78559    | Hs.293629 | hypothetical protein MGC3121             | 2.3 |
| 45 | 406739 | AI566709  | Hs.182426 | ribosomal protein S2                     | 2.3 |
|    | 418506 | AA084248  | Hs.85339  | G protein-coupled receptor 39            | 2.3 |
|    | 410286 | AI739159  | Hs.61898  | DKFZP586N2124 protein                    | 2.3 |
|    | 443740 | R56434    | Hs.21062  | ESTs                                     | 2.3 |
|    | 405605 |           |           |  | 2.3 |
| 50 | 416913 | AW934714  |           | gb:RC1-DT0001-031299-011-a11 DT0001 Homo | 2.3 |
|    | 426509 | M31166    | Hs.2050   | pentaxin-related gene, rapidly induced b | 2.3 |
|    | 445828 | F05802    | Hs.81907  | ESTs                                     | 2.3 |
|    | 457195 | AB011099  | Hs.196647 | KIAA0527 protein                         | 2.3 |
|    | 420372 | AW960049  | Hs.293660 | Homo sapiens, clone IMAGE:3535476, mRNA, | 2.3 |
| 55 | 423198 | M81933    | Hs.1634   | cell division cycle 25A                  | 2.3 |
|    | 457730 | AW753613  |           | gb:RC1-CT0268-060100-013-a01 CT0268 Homo | 2.3 |
|    | 412014 | AI620650  | Hs.43761  | ESTs, Weakly similar to A46010 X-linked  | 2.3 |
|    | 447131 | NM_004585 | Hs.17466  | retinoic acid receptor responder (tazaro | 2.3 |
|    | 446288 | AW189209  | Hs.149708 | ESTs                                     | 2.3 |
| 60 | 436954 | AA740151  | Hs.130425 | ESTs                                     | 2.3 |
|    | 411658 | AW855598  |           | gb:CM1-CT0278-031199-032-e08 CT0278 Homo | 2.3 |
|    | 404240 |           |           |  | 2.3 |
|    | 456094 | H95091    |           | gb:yw57a09.r1 Soares_placenta_8to9weeks_ | 2.3 |
| 65 | 416951 | AA190925  | Hs.190785 | ESTs, Moderately similar to S65657 alpha | 2.3 |
|    | 406737 | AI356586  |           | gb:qy15h09.x1 NCL_CGAP_Bm23 Homo sapien  | 2.3 |
|    | 458453 | AI097452  | Hs.135095 | ESTs                                     | 2.3 |
|    | 452330 | AI879127  | Hs.191979 | KIAA1733 protein                         | 2.3 |
|    | 408523 | AW833259  | Hs.314287 | ESTs                                     | 2.3 |
| 70 | 455470 | AW947992  |           | gb:PMO-MT0011-240300-001-c09 MT0011 Homo | 2.3 |
|    | 436323 | R17697    | Hs.140963 | ESTs, Weakly similar to I38022 hypotheti | 2.3 |
|    | 450000 | AI952797  | Hs.10888  | hypothetical protein FLJ21709            | 2.3 |
|    | 416171 | H23896    | Hs.125790 | leucine-rich repeat-containing 2         | 2.3 |
|    | 419134 | T89863    | Hs.221771 | ESTs                                     | 2.3 |
|    | 445933 | AV655733  | Hs.293860 | spinsler-like protein                    | 2.3 |
| 75 | 422089 | AA523172  | Hs.103135 | ESTs, Weakly similar to SFR4_HUMAN SPLIC | 2.3 |
|    | 449911 | AI262106  | Hs.12653  | ESTs                                     | 2.3 |
|    | 417079 | U65590    | Hs.81134  | interleukin 1 receptor antagonist        | 2.3 |
|    | 411742 | AW247593  | Hs.71819  | eukaryotic translation initiation factor | 2.3 |
|    | 435615 | Y15065    | Hs.4975   | potassium voltage-gated channel, KQT-lik | 2.3 |
| 80 | 423491 | AA191765  | Hs.129673 | eukaryotic translation initiation factor | 2.3 |
|    | 407182 | AA312551  | Hs.230157 | ESTs                                     | 2.3 |
|    | 411448 | AA178955  | Hs.271439 | ESTs, Weakly similar to I38022 hypotheti | 2.3 |
|    | 438644 | AI126162  | Hs.129037 | ESTs                                     | 2.3 |
|    | 432691 | U29725    | Hs.3080   | mitogen-activated protein kinase 7       | 2.3 |

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|    | 452198 | AI097560  | Hs.61210  | ESTs, Weakly similar to I38022 hypothe    | 2.3 |
|    | 411125 | AA151647  | Hs.68877  | cytochrome b-245, alpha polypeptide       | 2.3 |
|    | 404054 |           |           |   | 2.3 |
| 5  | 430458 | AA479300  | Hs.225706 | ESTs, Weakly similar to I38022 hypothe    | 2.3 |
|    | 440210 | AW674562  | Hs.125296 | ESTs                                      | 2.3 |
|    | 446727 | AB011095  | Hs.15032  | KIAA0523 protein                          | 2.3 |
|    | 453775 | NM_002916 | Hs.35120  | replication factor C (activator 1) 4 (37  | 2.3 |
|    | 438379 | N23018    | Hs.171391 | C-terminal binding protein 2              | 2.3 |
| 10 | 449919 | AI674685  | Hs.200141 | ESTs                                      | 2.3 |
|    | 415293 | R49462    | Hs.106541 | ESTs                                      | 2.3 |
|    | 441126 | NM_000429 | Hs.323715 | methionine adenosyltransferase 1, alpha   | 2.3 |
|    | 408203 | AA053137  | Hs.42390  | nasopharyngeal carcinoma susceptibility   | 2.3 |
|    | 434941 | AW073202  | Hs.334825 | Homo sapiens cDNA FLJ14752 fis, clone NT  | 2.3 |
| 15 | 450748 | AI733093  | Hs.130016 | ESTs                                      | 2.3 |
|    | 404185 |           |           |   | 2.3 |
|    | 418327 | U70370    | Hs.84136  | paired-like homeodomain transcription fa  | 2.3 |
|    | 451370 | AI791929  | Hs.300782 | ESTs                                      | 2.3 |
|    | 400034 |           |           |   | 2.3 |
| 20 | 407723 | AW071161  | Hs.252873 | ESTs                                      | 2.3 |
|    | 431320 | AW969474  | Hs.183070 | ESTs                                      | 2.3 |
|    | 429271 | AF039850  | Hs.198515 | dead ringer (Drosophila)-like 1           | 2.3 |
|    | 453707 | AW003879  | Hs.126522 | Homo sapiens, clone MGC:16722, mRNA, com  | 2.3 |
|    | 419225 | U70073    |           | gb:HSU70073 Human Homo sapiens cDNA cton  | 2.3 |
| 25 | 444656 | AI277924  | Hs.145199 | ESTs                                      | 2.3 |
|    | 405741 |           |           |   | 2.3 |
|    | 400917 |           |           |   | 2.3 |
|    | 432567 | AA736777  | Hs.293770 | ESTs                                      | 2.3 |
|    | 437949 | U78519    | Hs.41654  | ESTs, Weakly similar to A46010 X-linked   | 2.3 |
| 30 | 450514 | AC005785  | Hs.25059  | A kinase (PRKA) anchor protein 8          | 2.3 |
|    | 418400 | BE243026  | Hs.301989 | KIAA0246 protein                          | 2.3 |
|    | 444019 | BE173977  | Hs.10098  | putative nucleolar RNA helicase           | 2.3 |
|    | 405326 |           |           |   | 2.3 |
|    | 412077 | N51107    | Hs.47199  | ESTs, Weakly similar to FLJ000004 protein | 2.3 |
| 35 | 427547 | W19744    | Hs.180059 | Homo sapiens cDNA FLJ20653 fis, clone KA  | 2.3 |
|    | 414528 | AA148950  | Hs.188835 | ESTs                                      | 2.3 |
|    | 414854 | BE546797  | Hs.51483  | ESTs, Weakly similar to hypothetical pro  | 2.3 |
|    | 420352 | BE258835  |           | gb:601117374F1 NIH_MGC_16 Homo sapiens c  | 2.3 |
|    | 439467 | AW292275  | Hs.158365 | ESTs                                      | 2.3 |
| 40 | 402627 |           |           |   | 2.3 |
|    | 451711 | AK000461  | Hs.26890  | cat eye syndrome chromosome region, cand  | 2.3 |
|    | 424308 | AW975531  | Hs.154443 | minichromosome maintenance deficient (S   | 2.3 |
|    | 423869 | BE409301  | Hs.134012 | C1q-related factor                        | 2.3 |
|    | 405915 |           |           |   | 2.3 |
| 45 | 431503 | NM_012129 | Hs.258576 | claudin 12                                | 2.3 |
|    | 423306 | W88562    | Hs.108198 | ESTs                                      | 2.3 |
|    | 443232 | AF161521  | Hs.9081   | phenylalanyl-tRNA synthetase beta-subuni  | 2.3 |
|    | 433064 | D79991    | Hs.30002  | SH3-containing protein SH3GLB2; KIAA1848  | 2.3 |
|    | 434437 | AI912566  | Hs.187813 | ESTs                                      | 2.3 |
|    | 436191 | BE407866  | Hs.170253 | hypothetical protein FLJ23282             | 2.3 |
| 50 | 420006 | H14429    | Hs.94300  | serologically defined colon cancer antig  | 2.3 |
|    | 447942 | F12628    | Hs.334786 | hypothetical protein MGC16040             | 2.3 |
|    | 403166 |           |           |   | 2.3 |
|    | 422119 | AI277829  | Hs.111862 | KIAA0590 gene product                     | 2.3 |
|    | 403751 |           |           |   | 2.3 |
| 55 | 426451 | AI908165  | Hs.169946 | GATA-binding protein 3                    | 2.3 |
|    | 427413 | BE547647  | Hs.177781 | hypothetical protein MGC5618              | 2.3 |
|    | 409091 | AW970386  | Hs.269423 | ESTs                                      | 2.3 |
|    | 440491 | R35252    | Hs.24944  | ESTs, Weakly similar to 2109260A B cell   | 2.3 |
| 60 | 427722 | AK000123  | Hs.180479 | hypothetical protein FLJ20116             | 2.3 |
|    | 405747 |           |           |   | 2.3 |
|    | 438210 | AA780519  | Hs.311601 | EST                                       | 2.3 |
|    | 404652 |           |           |   | 2.3 |
|    | 423524 | AF055989  | Hs.129738 | potassium voltage-gated channel, Shaw-re  | 2.2 |
| 65 | 426793 | X89887    | Hs.172350 | HIR (histone cell cycle regulation defec  | 2.2 |
|    | 444424 | AI654684  | Hs.196377 | ESTs                                      | 2.2 |
|    | 434031 | BE384165  | Hs.23723  | pseudouridylate synthase 1                | 2.2 |
|    | 427650 | AW501245  | Hs.252259 | ribosomal protein S3                      | 2.2 |
|    | 435220 | D50030    | Hs.104    | HGF activator                             | 2.2 |
|    | 438279 | AA805166  | Hs.154762 | HIV-1 rev binding protein 2               | 2.2 |
| 70 | 424668 | D83702    | Hs.151573 | cryptochrome 1 (photolyase-like)          | 2.2 |
|    | 429961 | BE246829  | Hs.226770 | DKFZP566C0424 protein                     | 2.2 |
|    | 442065 | AI831229  | Hs.128417 | hypothetical protein FLJ14009             | 2.2 |
|    | 415198 | AW009480  | Hs.943    | natural killer cell transcript 4          | 2.2 |
|    | 420536 | AL117455  | Hs.275438 | histone deacetylase 7A                    | 2.2 |
| 75 | 411263 | BE297802  | Hs.69360  | kinesin-like 6 (mitotic centromere-assoc  | 2.2 |
|    | 443753 | AW367578  | Hs.134749 | ESTs                                      | 2.2 |
|    | 423243 | AA351938  | Hs.23964  | sin3-associated polypeptide, 18kD         | 2.2 |
|    | 446572 | AV659151  | Hs.282961 | ESTs                                      | 2.2 |
|    | 412247 | AF022375  | Hs.73793  | vascular endothelial growth factor        | 2.2 |
| 80 | 421040 | AA715026  | Hs.135280 | ESTs                                      | 2.2 |
|    | 426212 | S71824    | Hs.167988 | neural cell adhesion molecule 1           | 2.2 |
|    | 455584 | BE007420  |           | gb:PM3-BN0142-200300-001-c04 BN0142 Homo  | 2.2 |
|    | 406851 | AA609784  | Hs.180255 | major histocompatibility complex, class   | 2.2 |

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|    |        |           |           |   |     |
|----|--------|-----------|-----------|---|-----|
|    | 444153 | AK001610  | Hs.10414  | hypothetical protein FLJ10748             | 2.2 |
|    | 419575 | U43431    | Hs.91175  | topoisomerase (DNA) III alpha             | 2.2 |
|    | 418672 | L44284    | Hs.159743 | ESTs                                      | 2.2 |
| 5  | 456261 | AA210718  | Hs.104157 | ESTs, Weakly similar to KIAA0694 protein  | 2.2 |
|    | 415737 | AA167626  | Hs.118743 | ESTs                                      | 2.2 |
|    | 447554 | AI391598  | Hs.36119  | ESTs, Weakly similar to ALU1_HUMAN ALU S  | 2.2 |
|    | 405159 |           |           |   | 2.2 |
|    | 442177 | AW661820  | Hs.211413 | ESTs                                      | 2.2 |
| 10 | 446139 | H77395    | Hs.39749  | ESTs                                      | 2.2 |
|    | 458339 | AW976853  | Hs.172843 | ESTs                                      | 2.2 |
|    | 401876 |           |           |   | 2.2 |
|    | 439566 | AF086387  |           | gb:Homo sapiens full length insert cDNA   | 2.2 |
|    | 425079 | H09963    | Hs.2257   | vitronectin (serum spreading factor, som  | 2.2 |
| 15 | 441837 | AA361743  | Hs.179881 | core-binding factor, beta subunit         | 2.2 |
|    | 430644 | AB015419  | Hs.247710 | preprolactin-releasing peptide            | 2.2 |
|    | 431474 | AL133990  | Hs.190642 | ESTs                                      | 2.2 |
|    | 407739 | NM_002285 | Hs.38070  | lymphoid nuclear protein related to AF4   | 2.2 |
|    | 424244 | AV647184  | Hs.143601 | hypothetical protein hCLA-iso             | 2.2 |
| 20 | 438057 | AW294544  | Hs.125785 | ESTs, Weakly similar to CORB MOUSE CORNI  | 2.2 |
|    | 412715 | NM_000947 | Hs.74519  | primase, polypeptide 2A (58kD)            | 2.2 |
|    | 422365 | AF035537  | Hs.115521 | REV3 (yeast homolog)-like, catalytic sub  | 2.2 |
|    | 404170 |           |           |   | 2.2 |
|    | 406902 | M32074    |           | gb:Human retinoic acid receptor gamma 2   | 2.2 |
| 25 | 437902 | AA770599  | Hs.144055 | ESTs                                      | 2.2 |
|    | 401012 |           |           |   | 2.2 |
|    | 446502 | AI302654  | Hs.208024 | ESTs                                      | 2.2 |
|    | 442554 | AW467376  | Hs.129640 | ESTs                                      | 2.2 |
|    | 443021 | AA368546  | Hs.8904   | Ig superfamily protein                    | 2.2 |
| 30 | 421141 | AW117261  | Hs.125914 | ESTs                                      | 2.2 |
|    | 443070 | BE388662  | Hs.8984   | Homo sapiens chromosome 14 BAC 98L12      | 2.2 |
|    | 446566 | H95741    | Hs.17914  | membrane-spanning 4-domains, subfamily A  | 2.2 |
|    | 427695 | R88483    | Hs.172862 | ESTs                                      | 2.2 |
|    | 426503 | AA380153  |           | gb:EST93093 Skin tumor I Homo sapiens cD  | 2.2 |
| 35 | 431468 | AW248431  | Hs.256526 | nuclear prelamins A recognition factor    | 2.2 |
|    | 416185 | AW975861  | Hs.47367  | KIAA1785 protein                          | 2.2 |
|    | 437319 | BE410958  | Hs.56406  | Homo sapiens cDNA FLJ13549 fis, clone PL  | 2.2 |
|    | 402064 |           |           |   | 2.2 |
|    | 413335 | AI613318  | Hs.48442  | ESTs                                      | 2.2 |
| 40 | 408212 | AA297567  | Hs.43728  | hypothetical protein                      | 2.2 |
|    | 406169 |           |           |   | 2.2 |
|    | 451099 | R52795    | Hs.25954  | interleukin 13 receptor, alpha 2          | 2.2 |
|    | 407335 | AA631047  | Hs.158761 | Homo sapiens cDNA FLJ13054 fis, clone NT  | 2.2 |
|    | 409715 | W42591    | Hs.23892  | ESTs                                      | 2.2 |
| 45 | 431921 | N46466    | Hs.58879  | ESTs                                      | 2.2 |
|    | 443823 | BE089782  | Hs.9877   | hypothetical protein                      | 2.2 |
|    | 432458 | AI968598  | Hs.78768  | malignant cell expression-enhanced gene/  | 2.2 |
|    | 419726 | U50330    | Hs.1274   | bone morphogenetic protein 1              | 2.2 |
|    | 423178 | AI033140  | Hs.124983 | Homo sapiens mRNA; cDNA DKFZp564C142 (fr  | 2.2 |
| 50 | 451089 | AA903705  | Hs.4190   | Homo sapiens cDNA: FLJ23269 fis, clone C  | 2.2 |
|    | 415216 | AI825905  | Hs.193211 | Homo sapiens cDNA FLJ11421 fis, clone HE  | 2.2 |
|    | 442242 | AV647908  | Hs.90424  | Homo sapiens cDNA: FLJ23285 fis, clone H  | 2.2 |
|    | 441830 | AA383104  | Hs.42954  | hypothetical protein DKFZp564D0372        | 2.2 |
|    | 406660 | X65371    | Hs.172550 | polypyrimidine tract binding protein (the | 2.2 |
| 55 | 443378 | AW392550  | Hs.9280   | proteasome (prosome, macropain) subunit,  | 2.2 |
|    | 432558 | R97268    | Hs.177269 | ESTs                                      | 2.2 |
|    | 408146 | R45621    | Hs.81057  | hypothetical protein MGC2718              | 2.2 |
|    | 419865 | NM_007020 | Hs.93502  | U1-snRNP binding protein homolog (70kD)   | 2.2 |
|    | 439444 | AI277652  | Hs.54578  | ESTs, Weakly similar to I38022 hypotheti  | 2.2 |
| 60 | 438407 | AI457122  | Hs.129673 | eukaryotic translation initiation factor  | 2.2 |
|    | 450184 | W31096    | Hs.237617 | Homo sapiens, clone IMAGE:3447394, mRNA,  | 2.2 |
|    | 409130 | BE076601  | Hs.75658  | phosphorylase, glycogen; brain            | 2.2 |
|    | 428844 | AW972635  | Hs.301904 | hypothetical protein FLJ12671             | 2.2 |
|    | 429489 | AF008203  | Hs.204039 | aristalless-like homeobox 3               | 2.2 |
| 65 | 433042 | AW193534  | Hs.281895 | Homo sapiens cDNA FLJ11660 fis, clone HE  | 2.2 |
|    | 440658 | H29142    | Hs.143032 | ESTs, Weakly similar to neuronal thread   | 2.2 |
|    | 408204 | AA454501  | Hs.43666  | protein tyrosine phosphatase type IVA, m  | 2.2 |
|    | 427498 | NM_003926 | Hs.178728 | methyl-CpG binding domain protein 3       | 2.2 |
|    | 408006 | H57654    | Hs.303345 | ESTs, Weakly similar to I38022 hypotheti  | 2.2 |
| 70 | 445703 | AV654845  | Hs.27     | glycine dehydrogenase (decarboxylating;   | 2.2 |
|    | 431446 | AW294929  | Hs.255369 | Homo sapiens cDNA FLJ10265 fis, clone HE  | 2.2 |
|    | 456660 | AA909249  | Hs.112282 | solute carrier family 30 (zinc transport  | 2.2 |
|    | 433099 | NM_002504 | Hs.3187   | nuclear transcription factor, X-box bind  | 2.2 |
|    | 415857 | AA866115  | Hs.127797 | Homo sapiens cDNA FLJ11381 fis, clone HE  | 2.2 |
| 75 | 415245 | N59650    | Hs.27252  | ESTs                                      | 2.2 |
|    | 443657 | R14973    |           | gb:yf42f10.s1 Soares fetal liver spleen   | 2.2 |
|    | 402521 | AW501216  | Hs.108945 | KIAA0515 protein                          | 2.2 |
|    | 414819 | BE177320  | Hs.156148 | hypothetical protein FLJ13231             | 2.2 |
|    | 446530 | AV658909  | Hs.282642 | ESTs                                      | 2.2 |
| 80 | 415797 | AI291896  | Hs.72800  | ESTs                                      | 2.2 |
|    | 414812 | X72755    | Hs.77367  | monokine induced by gamma interferon      | 2.2 |
|    | 453028 | AB006532  | Hs.31442  | RecQ protein-like 4                       | 2.2 |
|    | 412133 | U83460    | Hs.73614  | solute carrier family 31 (copper transpo  | 2.2 |
|    | 407881 | AW072003  | Hs.40968  | heparan sulfate (glucosamine) 3-O-sulfot  | 2.2 |

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|----|--------|-----------|-----------|---|-----|
|    | 437033 | AW248364  | Hs.5409   | RNA polymerase I subunit                  | 2.2 |
|    | 422732 | AA577455  | Hs.24937  | transformer-2 alpha (htra-2 alpha)        | 2.2 |
|    | 416388 | AI417358  | Hs.73677  | ESTs                                      | 2.2 |
|    | 452849 | AF044924  | Hs.30792  | hook2 protein                             | 2.2 |
| 5  | 446615 | BE513202  | Hs.15589  | PPAR binding protein                      | 2.2 |
|    | 428361 | NM_015905 | Hs.183858 | transcriptional intermediary factor 1     | 2.2 |
|    | 446279 | AA490770  | Hs.182382 | ESTs                                      | 2.2 |
|    | 422938 | NM_001809 | Hs.1594   | centromere protein A (17kD)               | 2.2 |
|    | 403969 |           |           |   | 2.2 |
| 10 | 410423 | AW402432  | Hs.63489  | protein tyrosine phosphatase, non-recept  | 2.2 |
|    | 429736 | AF125304  | Hs.212680 | tumor necrosis factor receptor superfam   | 2.2 |
|    | 447091 | AW089648  | Hs.157779 | ESTs, Weakly similar to CA17_HUMAN COLLA  | 2.2 |
|    | 422017 | NM_003877 | Hs.110776 | STAT induced STAT inhibitor-2             | 2.2 |
|    | 426728 | NM_007118 | Hs.171957 | triple functional domain (PTPRF) interact | 2.2 |
| 15 | 438726 | AB033103  | Hs.6385   | KIAA1277 protein                          | 2.2 |
|    | 453315 | BE544203  | Hs.24831  | ESTs                                      | 2.2 |
|    | 423244 | AL039379  | Hs.209602 | ESTs, Weakly similar to ubiquitous TPR m  | 2.2 |
|    | 433610 | AA806822  | Hs.112547 | ESTs                                      | 2.2 |
|    | 429451 | BE409861  | Hs.202833 | heme oxygenase (decycling) 1              | 2.2 |
| 20 | 417980 | R32235    |           | gb:yh67f08.r1 Soares placenta Nb2HP Homo  | 2.2 |
|    | 406347 |           |           |   | 2.2 |
|    | 414406 | BE297904  |           | gb:601177814F1 NIH_MGC_17 Homo sapiens c  | 2.2 |
|    | 401827 |           |           |   | 2.2 |
| 25 | 446913 | AA430650  | Hs.16529  | transmembrane 4 superfamily member (tetr  | 2.2 |
|    | 452294 | AI871925  | Hs.117895 | ESTs, Moderately similar to A47582 B-cel  | 2.2 |
|    | 404084 |           |           |   | 2.2 |
|    | 456786 | AK002084  | Hs.132851 | hypothetical protein FLJ11222             | 2.2 |
|    | 435031 | AI632091  | Hs.116877 | ESTs                                      | 2.2 |
| 30 | 442609 | AL020996  | Hs.8518   | selenoprotein N                           | 2.1 |
|    | 439732 | AW629604  | Hs.167641 | hypothetical protein from EUROIMAGE 1703  | 2.1 |
|    | 421506 | BE302795  | Hs.105097 | thymidine kinase 1, soluble               | 2.1 |
|    | 439253 | AF086064  | Hs.332252 | ESTs                                      | 2.1 |
|    | 409669 | AW177551  | Hs.220255 | hypothetical protein MGC13098             | 2.1 |
| 35 | 429574 | BE268321  | Hs.208912 | hypothetical protein MGC861               | 2.1 |
|    | 437470 | AL390147  | Hs.134742 | hypothetical protein DKFZp547D065         | 2.1 |
|    | 408945 | AW015089  | Hs.4964   | DKFZP586J1624 protein                     | 2.1 |
|    | 447687 | AI627947  | Hs.150186 | hypothetical protein DKFZp566K1946        | 2.1 |
|    | 459584 | AI910884  | Hs.207898 | ESTs                                      | 2.1 |
| 40 | 439130 | AA306090  | Hs.124707 | ESTs                                      | 2.1 |
|    | 428180 | AI129767  | Hs.182674 | guanine nucleotide binding protein (G pr  | 2.1 |
|    | 442028 | AI239437  | Hs.48945  | ESTs                                      | 2.1 |
|    | 430968 | AW972830  |           | gb:EST384925 MAGE resequences, MAGL Homo  | 2.1 |
|    | 443609 | AV650231  | Hs.282941 | ESTs, Highly similar to A Chain A, Human  | 2.1 |
| 45 | 417164 | AA338283  | Hs.81361  | heterogeneous nuclear ribonucleoprotein   | 2.1 |
|    | 444534 | AW271626  | Hs.42294  | ESTs                                      | 2.1 |
|    | 438391 | AI262248  | Hs.25027  | ESTs                                      | 2.1 |
|    | 442003 | AW297497  | Hs.201891 | ESTs                                      | 2.1 |
|    | 456278 | BE300369  | Hs.289038 | hypothetical protein MGC4126              | 2.1 |
| 50 | 416976 | BE243985  | Hs.80680  | major vault protein                       | 2.1 |
|    | 417810 | D28419    | Hs.82609  | hydroxymethylbilane synthase              | 2.1 |
|    | 445242 | BE156478  | Hs.21108  | ESTs, Weakly similar to ALU1_HUMAN ALU S  | 2.1 |
|    | 452712 | AW838616  |           | gb:RC5-LT0054-140200-013-D01 LT0054 Homo  | 2.1 |
|    | 434926 | BE543269  | Hs.50252  | mitochondrial ribosomal protein L32       | 2.1 |
| 55 | 421564 | AB007864  | Hs.105850 | KIAA0404 protein                          | 2.1 |
|    | 424927 | AW973666  | Hs.153850 | hypothetical protein C321D2.4             | 2.1 |
|    | 432742 | AA564453  | Hs.162339 | ESTs                                      | 2.1 |
|    | 435958 | H98180    | Hs.117975 | ESTs                                      | 2.1 |
|    | 421531 | AA713505  | Hs.291769 | ESTs                                      | 2.1 |
| 60 | 410431 | BE261320  | Hs.158196 | transcriptional adaptor 3 (ADA3, yeast h  | 2.1 |
|    | 420503 | AI570943  | Hs.337546 | ESTs                                      | 2.1 |
|    | 448127 | AI478416  | Hs.282883 | ESTs, Weakly similar to ALU1_HUMAN ALU S  | 2.1 |
|    | 452897 | BE066058  | Hs.269233 | ESTs, Moderately similar to I78885 serin  | 2.1 |
|    | 447112 | HI7800    | Hs.7154   | ESTs                                      | 2.1 |
|    | 406577 |           |           |   | 2.1 |
| 65 | 437162 | AW005505  | Hs.5464   | thyroid hormone receptor coactivating pr  | 2.1 |
|    | 451460 | AI797550  | Hs.209652 | ESTs                                      | 2.1 |
|    | 447402 | HS4520    | Hs.18490  | hypothetical protein FLJ20452             | 2.1 |
|    | 435828 | AA700705  | Hs.13852  | ESTs                                      | 2.1 |
| 70 | 436396 | AI683487  | Hs.152213 | wingless-type MMTV integration site fami  | 2.1 |
|    | 420582 | BE047878  | Hs.99093  | Homo sapiens chromosome 19, cosmid R2837  | 2.1 |
|    | 452020 | AA722012  | Hs.255757 | ESTs, Weakly similar to AT2A_HUMAN POTEN  | 2.1 |
|    | 415586 | Z45481    |           | gb:HSC2QE041 normalized infant brain cDN  | 2.1 |
|    | 452620 | AA436504  | Hs.119286 | ESTs                                      | 2.1 |
| 75 | 457066 | BE244613  | Hs.158272 | ESTs, Weakly similar to CA13 MOUSE COLLA  | 2.1 |
|    | 435472 | AW972330  | Hs.283022 | triggering receptor expressed on myeloid  | 2.1 |
|    | 431741 | AA514783  | Hs.191701 | ESTs                                      | 2.1 |
|    | 446840 | AW294828  | Hs.209203 | ESTs                                      | 2.1 |
|    | 440818 | AI147060  | Hs.146726 | ESTs                                      | 2.1 |
| 80 | 410174 | AA306007  | Hs.59461  | DKFZP434C245 protein                      | 2.1 |
|    | 400822 |           |           |   | 2.1 |
|    | 412760 | AW379030  | Hs.41324  | ESTs                                      | 2.1 |
|    | 410653 | BE383768  | Hs.65238  | 95 kDa retinoblastoma protein binding pr  | 2.1 |
|    | 426925 | NM_001196 | Hs.315689 | Homo sapiens cDNA: FLJ22373 fis, clone H  | 2.1 |

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|    | 424242 | AA337476  | Hs.293984 | hypothetical protein MGC13102            | 2.1 |
|    | 452560 | BE077084  | Hs.336432 | ESTs                                     | 2.1 |
|    | 456437 | AI924228  | Hs.115185 | ESTs, Moderately similar to PC4259 fem   | 2.1 |
|    | 458922 | BE501831  | Hs.282053 | ESTs                                     | 2.1 |
| 5  | 439231 | AW581935  | Hs.141480 | Homo sapiens mRNA; cDNA DKFZp434N079 (fr | 2.1 |
|    | 419488 | AA316241  | Hs.90691  | nucleophosmin/nucleoplasmin 3            | 2.1 |
|    | 411829 | AW865749  |           | gb:QV3-SN0021-100500-185-c03 SN0021 Homo | 2.1 |
|    | 457192 | AL135682  | Hs.22452  | Homo sapiens mRNA for KIAA1737 protein,  | 2.1 |
|    | 422128 | AW881145  |           | gb:QV0-OT0033-010400-182-a07 OT0033 Homo | 2.1 |
| 10 | 452571 | W31518    | Hs.34665  | ESTs                                     | 2.1 |
|    | 423699 | H41850    | Hs.131846 | PCAF associated factor 65 alpha          | 2.1 |
|    | 406610 |           |           |  | 2.1 |
|    | 453638 | AW814996  |           | gb:MR1-ST0206-170400-024-h09 ST0206 Homo | 2.1 |
|    | 418855 | AA362858  |           | gb:EST72900 Ovary II Homo sapiens cDNA 5 | 2.1 |
| 15 | 437523 | D63880    | Hs.5719   | chromosome condensation-related SMC-asso | 2.1 |
|    | 410908 | AA121686  | Hs.10592  | ESTs                                     | 2.1 |
|    | 420221 | N25991    | Hs.43725  | ESTs                                     | 2.1 |
|    | 424739 | AA346108  | Hs.221610 | ESTs                                     | 2.1 |
|    | 425398 | AL049689  | Hs.156369 | hypothetical protein similar to tenascin | 2.1 |
| 20 | 424901 | Z11933    | Hs.182505 | POU domain, class 3, transcription facto | 2.1 |
|    | 411096 | U80034    | Hs.68583  | mitochondrial intermediate peptidase     | 2.1 |
|    | 415635 | F13168    |           | gb:HSC3JF101 normalized infant brain cDN | 2.1 |
|    | 418181 | U37012    | Hs.83727  | cleavage and polyadenylation specific fa | 2.1 |
|    | 407103 | AA424881  | Hs.256301 | hypothetical protein MGC13170            | 2.1 |
| 25 | 454389 | AW752571  |           | gb:IL3-CT0213-170100-055-F02 CT0213 Homo | 2.1 |
|    | 400021 |           |           |  | 2.1 |
|    | 439228 | N51700    |           | gb:yy72d01.s1 Soares_multiple_sclerosis_ | 2.1 |
|    | 456505 | AA504595  | Hs.111418 | ESTs                                     | 2.1 |
|    | 405258 |           |           |  | 2.1 |
| 30 | 444645 | AI184564  | Hs.101654 | ESTs                                     | 2.1 |
|    | 430246 | AI269069  | Hs.109268 | hypothetical protein FLJ12552            | 2.1 |
|    | 458687 | AW024815  | Hs.170088 | GLUT4 enhancer factor                    | 2.1 |
|    | 403857 |           |           |  | 2.1 |
|    | 400258 |           |           |  | 2.1 |
| 35 | 422221 | AA306649  | Hs.169370 | FYN oncogene related to SRC, FGR, YES    | 2.1 |
|    | 441054 | AA913591  | Hs.126480 | ESTs                                     | 2.1 |
|    | 452700 | AI859390  | Hs.288940 | five-span transmembrane protein MB3      | 2.1 |
|    | 454606 | AW809752  |           | gb:MR4-ST0124-181299-020-b06 ST0124 Homo | 2.1 |
|    | 448954 | AB014564  | Hs.22616  | KIAA0664 protein                         | 2.1 |
| 40 | 443148 | AI034357  | Hs.211194 | ESTs, Weakly similar to ALU8_HUMAN ALU S | 2.1 |
|    | 453486 | AL039201  | Hs.173554 | ubiquinol-cytochrome c reductase core pr | 2.1 |
|    | 437695 | AA769202  | Hs.192142 | ESTs                                     | 2.1 |
|    | 425449 | XS2056    | Hs.157441 | spleen focus forming virus (SFFV) provir | 2.1 |
|    | 447270 | AC002551  | Hs.331    | general transcription factor IIC, polyp  | 2.1 |
| 45 | 435677 | AA694142  | Hs.293726 | ESTs, Weakly similar to TSGA RAT TESTIS  | 2.1 |
|    | 436382 | AW977063  | Hs.250181 | ESTs                                     | 2.1 |
|    | 435837 | AI689210  | Hs.187276 | Homo sapiens cDNA FLJ11431 fis, clone HE | 2.1 |
|    | 458287 | AA987556  | Hs.12867  | ESTs                                     | 2.1 |
|    | 423794 | BE551781  | Hs.231895 | ESTs                                     | 2.1 |
| 50 | 408049 | AW076098  | Hs.74316  | desmoplakin (DPI, DPII)                  | 2.1 |
|    | 402721 |           |           |  | 2.1 |
|    | 451999 | AW176401  | Hs.27424  | DEAD/H (Asp-Glu-Ala-Asp/His) box polypep | 2.1 |
|    | 417541 | AI992191  | Hs.180040 | hypothetical protein FLJ22439            | 2.1 |
|    | 414857 | AW402389  | Hs.920    | modulator recognition factor I           | 2.1 |
| 55 | 435760 | AF231922  | Hs.213004 | chromosome 21 open reading frame 62      | 2.1 |
|    | 428086 | AL110193  | Hs.224137 | hypothetical protein                     | 2.1 |
|    | 447853 | AI434204  | Hs.164285 | ESTs, Weakly similar to AFG1_YEAST AFG1  | 2.1 |
|    | 419034 | NM_002110 | Hs.89555  | hemopoietic cell kinase                  | 2.1 |
|    | 431019 | NM_005249 | Hs.2714   | forkhead box G1B                         | 2.1 |
| 60 | 421064 | AI245432  | Hs.101382 | tumor necrosis factor, alpha-induced pro | 2.1 |
|    | 416435 | AI431301  | Hs.179703 | KIAA0129 gene product                    | 2.1 |
|    | 437014 | AA808757  | Hs.222531 | ESTs, Weakly similar to S59501 interfero | 2.1 |
|    | 459369 | T83080    |           | gb:yd40e03.r1 Soares fetal liver spleen  | 2.1 |
|    | 402239 |           |           |  | 2.1 |
| 65 | 412280 | AW205116  | Hs.272814 | hypothetical protein DKFZp434E1723       | 2.1 |
|    | 426012 | AA367507  | Hs.75874  | pregnancy-associated plasma protein A    | 2.1 |
|    | 438885 | AI886558  | Hs.184987 | ESTs                                     | 2.1 |
|    | 426076 | AW962714  |           | gb:EST374787 MAGE resequences, MAGG Homo | 2.1 |
|    | 404561 |           |           |  | 2.1 |
| 70 | 442932 | AA457211  | Hs.8858   | bromodomain adjacent to zinc finger doma | 2.1 |
|    | 408175 | W29089    | Hs.19066  | hypothetical protein DKFZp667O2416       | 2.1 |
|    | 423867 | AA331886  |           | gb:EST35757 Embryo, 8 week I Homo sapien | 2.1 |
|    | 458604 | W37944    | Hs.4007   | Sarcolemmal-associated protein           | 2.1 |
|    | 409650 | T08490    | Hs.288969 | HSCARG protein                           | 2.1 |
| 75 | 401729 |           |           |  | 2.1 |
|    | 433675 | AW977653  | Hs.75319  | ribonucleotide reductase M2 polypeptide  | 2.1 |
|    | 456741 | W37608    | Hs.184492 | ESTs                                     | 2.1 |
|    | 417037 | BE083936  | Hs.80976  | antigen identified by monoclonal antibod | 2.1 |
|    | 415079 | R43179    | Hs.22895  | hypothetical protein FLJ23548            | 2.1 |
| 80 | 439262 | AA832333  | Hs.333045 | ESTs                                     | 2.1 |
|    | 403108 |           |           |  | 2.1 |
|    | 436718 | AW015227  | Hs.289053 | hypothetical protein FLJ14733            | 2.1 |
|    | 440696 | AI762757  | Hs.187660 | putative Rab5 GDP/GTP exchange factor ho | 2.1 |



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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
| 5  | 409745 | AA077391  |           | gb:7B14E12 Chromosome 7 Fetal Brain cDNA | 2.1 |
|    | 453485 | BE620712  | Hs.33026  | hypothetical protein PP2447              | 2.1 |
|    | 418177 | N44967    | Hs.5663   | ESTs                                     | 2.1 |
|    | 457292 | AI921270  | Hs.334882 | hypothetical protein FLJ14251            | 2.1 |
|    | 454434 | AA083558  | Hs.261286 | ESTs                                     | 2.1 |
| 10 | 406085 |           |           |  | 2.1 |
|    | 424441 | X14850    | Hs.147097 | H2A histone family, member X             | 2.1 |
|    | 422726 | U11690    | Hs.1572   | faciogenital dysplasia (Aarskog-Scott sy | 2.1 |
|    | 424576 | BE154142  | Hs.96833  | ESTs                                     | 2.1 |
|    | 423660 | AL045228  | Hs.130831 | Homo sapiens mRNA; cDNA DKFZp434L137 (fr | 2.1 |
| 15 | 403509 | AF231919  | Hs.18759  | KIAA0539 gene product                    | 2.1 |
|    | 441940 | AW298115  | Hs.128152 | ESTs                                     | 2.1 |
|    | 439190 | AW978693  | Hs.293811 | ESTs                                     | 2.1 |
|    | 417791 | AW965339  | Hs.111471 | ESTs                                     | 2.1 |
|    | 423701 | AA329856  | Hs.143022 | ESTs                                     | 2.1 |
| 20 | 427239 | BE270447  | Hs.174070 | ubiquitin carrier protein                | 2.1 |
|    | 459642 | BE243103  |           | gb:TCAP2E0949 Pediatric acute myelogeno  | 2.1 |
|    | 450385 | AI631024  | Hs.24948  | synuclein, alpha interacting protein (sy | 2.1 |
|    | 425159 | NM_004341 | Hs.154868 | carbamoyl-phosphate synthetase 2, aspart | 2.1 |
|    | 425591 | AW294734  | Hs.279727 | Homo sapiens cDNA FLJ14035 fis, clone HE | 2.1 |
| 25 | 445101 | T75202    | Hs.12314  | Homo sapiens mRNA; cDNA DKFZp596C1019 (f | 2.1 |
|    | 412811 | H06382    | Hs.21400  | ESTs                                     | 2.1 |
|    | 426369 | AF134157  | Hs.169487 | Kreisler (mouse) maf-related leucine zip | 2.1 |
|    | 435924 | AW029203  | Hs.191952 | ESTs                                     | 2.1 |
|    | 418388 | R72332    | Hs.29258  | Homo sapiens cDNA FLJ11364 fis, clone HE | 2.1 |
| 30 | 452235 | AL039743  | Hs.28514  | testes development-related NYD-SP21      | 2.1 |
|    | 452313 | Y00486    | Hs.28914  | adenine phosphoribosyltransferase        | 2.1 |
|    | 450704 | H85157    | Hs.40696  | ESTs                                     | 2.1 |
|    | 427539 | AA405205  | Hs.97960  | ESTs, Weakly similar to T51146 ring-box  | 2.1 |
|    | 402028 |           |           |  | 2.1 |
| 35 | 405362 |           |           |  | 2.1 |
|    | 414718 | H95348    | Hs.107987 | ESTs                                     | 2.1 |
|    | 433424 | R68252    | Hs.163566 | ESTs                                     | 2.1 |
|    | 444875 | AI200759  | Hs.44737  | ESTs                                     | 2.0 |
|    | 449523 | NM_000579 | Hs.54443  | chemokine (C-C motif) receptor 5         | 2.0 |
| 40 | 456072 | H54381    |           | gb:yq89a03.s1 Soares fetal liver spleen  | 2.0 |
|    | 436331 | AI239495  | Hs.120189 | ESTs                                     | 2.0 |
|    | 448418 | Z43704    | Hs.21192  | Homo sapiens clone 25155 mRNA sequence   | 2.0 |
|    | 447250 | AI878909  | Hs.17883  | protein phosphatase 1G (formerly 2C), ma | 2.0 |
|    | 448192 | R43915    | Hs.4958   | ESTs                                     | 2.0 |
| 45 | 448966 | AW372914  | Hs.86149  | phosphoinositol 3-phosphate-binding prot | 2.0 |
|    | 408605 | AF025374  | Hs.46465  | T-cell, immune regulator 1               | 2.0 |
|    | 410790 | AW803357  |           | gb:IL2-UM0079-090300-050-A08 UM0079 Homo | 2.0 |
|    | 436872 | X15624    |           | gb:Human H1 RNA                          | 2.0 |
|    | 432238 | AL133057  | Hs.274135 | Homo sapiens mRNA; cDNA DKFZp434K1815 (f | 2.0 |
| 50 | 446307 | T50083    | Hs.9094   | ESTs                                     | 2.0 |
|    | 436588 | AA759233  | Hs.126506 | ESTs                                     | 2.0 |
|    | 452487 | AW207659  | Hs.6630   | Homo sapiens cDNA FLJ13329 fis, clone OV | 2.0 |
|    | 430420 | AW140027  | Hs.26373  | Homo sapiens cDNA: FLJ23449 fis, clone H | 2.0 |
|    | 432036 | AF224266  | Hs.272373 | interleukin 20                           | 2.0 |
| 55 | 414460 | L00727    | Hs.898    | dystrophin myotonic-protein kinase       | 2.0 |
|    | 433507 | AI817336  | Hs.191791 | ESTs                                     | 2.0 |
|    | 427964 | AA418082  | Hs.98286  | ESTs, Weakly similar to T20655 hypotheti | 2.0 |
|    | 443108 | W86975    | Hs.203707 | ESTs                                     | 2.0 |
|    | 434504 | AI887341  | Hs.121590 | hypothetical protein FLJ12827            | 2.0 |
| 60 | 454310 | AW818390  | Hs.175613 | homolog of Xenopus Claspin               | 2.0 |
|    | 443566 | AI290284  | Hs.159872 | ESTs                                     | 2.0 |
|    | 449722 | BE280074  | Hs.23960  | cyclin B1                                | 2.0 |
|    | 452682 | AA456193  | Hs.9071   | progesterone membrane binding protein    | 2.0 |
|    | 412362 | AW945484  | Hs.184252 | ESTs, Weakly similar to ALU8_HUMAN ALU S | 2.0 |
| 65 | 429341 | X73874    | Hs.2393   | phosphorylase kinase, alpha 1 (muscle)   | 2.0 |
|    | 435863 | AF255346  | Hs.62919  | Jun dimerization protein p21SNFT         | 2.0 |
|    | 400774 | R58624    | Hs.2186   | eukaryotic translation elongation factor | 2.0 |
|    | 453944 | AW975369  | Hs.292570 | Homo sapiens, clone IMAGE:3502107, mRNA, | 2.0 |
|    | 419227 | BE537383  | Hs.89739  | cholinergic receptor, nicotinic, beta po | 2.0 |
| 70 | 448529 | T26460    | Hs.22550  | ESTs                                     | 2.0 |
|    | 443206 | AB011420  | Hs.9075   | serine/threonine kinase 17a (apoptosis-i | 2.0 |
|    | 439360 | AA448488  | Hs.336629 | ribosomal protein L44                    | 2.0 |
|    | 436660 | AI658870  | Hs.184513 | ESTs                                     | 2.0 |
|    | 449030 | AI365582  | Hs.57100  | Homo sapiens mRNA for FLJ00016 protein,  | 2.0 |
| 75 | 411048 | AK001742  | Hs.67991  | hypothetical protein DKFZp434G0522       | 2.0 |
|    | 406624 | AF052762  |           | gb:Homo sapiens clone csneg8-1 immunoglo | 2.0 |
|    | 450666 | T99968    | Hs.18799  | ESTs, Weakly similar to I38022 hypotheti | 2.0 |
|    | 446143 | BE245342  | Hs.306079 | sec61 homolog                            | 2.0 |
|    | 437698 | R61837    | Hs.7990   | ESTs, Moderately similar to I84505 calci | 2.0 |
| 80 | 426607 | AA382330  | Hs.124223 | ESTs                                     | 2.0 |
|    | 449246 | AW411209  | Hs.23363  | hypothetical protein FLJ10983            | 2.0 |
|    | 422564 | AI148006  | Hs.222120 | ESTs                                     | 2.0 |
|    | 432682 | AI376400  | Hs.159588 | ESTs                                     | 2.0 |
|    | 422140 | BE295918  | Hs.112193 | mutS (E. coli) homolog 5                 | 2.0 |
|    | 408215 | BE614290  | Hs.43812  | syntaxin 10                              | 2.0 |
|    | 417129 | AI381800  | Hs.300684 | calcitonin gene-related peptide-receptor | 2.0 |
|    | 442772 | AW503680  | Hs.5957   | Homo sapiens clone 24416 mRNA sequence   | 2.0 |

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|    |             |                                       |   |  |     |
|----|-------------|---------------------------------------|---|--|-----|
| 5  | 434928      | AW015595                              | Hs.4267   | Homo sapiens clones 24714 and 24715 mRNA   | 2.0 |
|    | 411380      | AW841619                              |   | gb:RC1-CN0017-120200-012-b09 CN0017 Homo   | 2.0 |
|    | 430603      | AA148164                              | Hs.247280   | HBV associated factor                      | 2.0 |
|    | 425905      | AB032959                              | Hs.318584   | novel C3HC4 type Zinc finger (ring finger) | 2.0 |
|    | 401125      |                                       |   |  | 2.0 |
| 10 | 412939      | AW411491                              | Hs.2186   | eukaryotic translation elongation factor   | 2.0 |
|    | 448740      | BE250632                              | Hs.8026   | sestrin 2                                  | 2.0 |
|    | 454390      | AB020713                              | Hs.56966  | KIAA0906 protein                           | 2.0 |
|    | 415012      | NM_004383                             | Hs.77793  | c-src tyrosine kinase                      | 2.0 |
|    | 410407      | X66839                                | Hs.63287  | carbonic anhydrase IX                      | 2.0 |
| 15 | 403478      |                                       |   |  | 2.0 |
|    | 456485      | AI393037                              | Hs.97871  | Homo sapiens, clone IMAGE:3845253, mRNA,   | 2.0 |
|    | 430294      | AI538226                              | Hs.32976  | guanine nucleotide binding protein 4       | 2.0 |
|    | 411669      | BE612676                              | Hs.303116   | stromal cell-derived factor 2-like 1       | 2.0 |
|    | 451944      | AW445218                              | Hs.210876   | ESTs                                       | 2.0 |
| 20 | 436395      | AJ227900                              |   | gb:Homo sapiens partial mRNA; ID EE2-16B   | 2.0 |
|    | 456457      | AA252905                              | Hs.194477   | E3 ubiquitin ligase SMURF2                 | 2.0 |
|    | 449123      | D50920                                | Hs.23106  | KIAA0130 gene product                      | 2.0 |
|    | 409214      | AW405967                              | Hs.333388   | Homo sapiens, clone IMAGE:3957135, mRNA,   | 2.0 |
|    | 437619      | AW351491                              | Hs.334853   | hypothetical protein FLJ23544              | 2.0 |
| 25 | 453348      | BE272318                              | Hs.8595   | hypothetical protein FLJ12438              | 2.0 |
|    | 424382      | AA351898                              | Hs.23539  | ESTs                                       | 2.0 |
|    | 447079      | AA280057                              | Hs.105280   | ESTs, Weakly similar to dJ963K23.2 [H.s]   | 2.0 |
|    | 449501      | AI652924                              | Hs.231942   | ESTs                                       | 2.0 |
|    | 422893      | X98411                                | Hs.121555   | myosin IF                                  | 2.0 |
| 30 | 412125      | Y17114                                | Hs.73393  | eyes absent (Drosophila) homolog 4         | 2.0 |
|    | 434845      | BE267057                              | Hs.325321   | hypothetical protein R32184_1              | 2.0 |
|    | 410422      | AL042014                              | Hs.334698   | Homo sapiens, clone MGC:15203, mRNA, com   | 2.0 |
|    | 430255      | AK000703                              | Hs.323822   | Homo sapiens mRNA for KIAA1551 protein,    | 2.0 |
|    | 451656      | BE327088                              | Hs.212752   | ESTs                                       | 2.0 |
| 35 | 442068      | BE312873                              | Hs.314932   | ESTs                                       | 2.0 |
|    | 446846      | AW197626                              | Hs.271901   | ESTs, Moderately similar to S08586 finge   | 2.0 |
|    | 442690      | AI014727                              | Hs.160047   | ESTs, Weakly similar to B28096 line-1 pr   | 2.0 |
|    | 454277      | AW295069                              | Hs.31743  | ESTs, Weakly similar to Z157_HUMAN ZINC    | 2.0 |
|    | 426910      | AA470023                              | Hs.190089   | ESTs, Moderately similar to ALU1_HUMAN A   | 2.0 |
| 40 | 402798      |                                       |   |  | 2.0 |
|    | 404554      |                                       |   |  | 2.0 |
|    | TABLE 9B:   |                                       |   |  |     |
|    | Pkey:       | Unique Eos probeset identifier number |   |  |     |
|    | CAT number: | Gene cluster number                   |   |  |     |
|    | Accession:  | Genbank accession numbers             |   |  |     |
| 45 | Pkey        | CAT Number                            | Accession   |  |     |
|    | 407909      | 1025254_1                             | AW103986 BE156395 BE156391 BE156190 BE156184 BE156388 BE156394  |  |     |
|    | 408432      | 1058667_1                             | AW195262 R27868 AW811262  |  |     |
|    | 409193      | 110747_1                              | AA131483 AA065156 AA076448  |  |     |
|    | 409745      | 115237_1                              | AA077391 AI347618 AI361453 AI088754 AW207491 AW960912 AA921874 AA286833 AA150722 BE152353 AW188822 BE152450             |  |     |
| 50 | 410447      | 1203929_1                             | AW816134 BE063456 AW748795 BE150839   |  |     |
|    | 410790      | 1221131_1                             | AW803357 AW803423 AW812233 R06814   |  |     |
|    | 411256      | 1236790_1                             | AW834039 AW834040 AW834047 AW845410 BE003128 AW852479   |  |     |
|    | 411380      | 1242343_1                             | AW841619 AW851958 AW851851 AW851985   |  |     |
|    | 411632      | 1252361_1                             | AW854829 AW854805 AW854841 AW854825 AW854822 AW854830 AW854835 AW854826   |  |     |
| 55 | 411658      | 1252987_1                             | AW855598 AW855608 BE148763 BE148764 AW855645 AW855615 AW855596 AW855610 AW855601 AW855605                               |  |     |
|    | 411829      | 1260309_1                             | AW865749 BE179419 BE179492  |  |     |
|    | 412225      | 1284108_1                             | AW902042 N77591   |  |     |
|    | 412370      | 1291952_1                             | AW946614 AW946622 AW946663 AW946667 AW946615 AW946619   |  |     |
|    | 412391      | 1292625_1                             | AW947710 AW947698 AW947697 AW947713   |  |     |
| 60 | 413257      | 1355963_1                             | BE075035 BE074999 BE075006 BE075005 BE075032 BE075008 BE075037  |  |     |
|    | 413604      | 1379715_1                             | R51767 BE152515 Z44834 H23397   |  |     |
|    | 414406      | 1443333_1                             | BE297904 BE294312   |  |     |
|    | 414550      | 1460990_1                             | BE379808  |  |     |
|    | 415346      | 1534581_1                             | Z43108 F06295 R13085  |  |     |
| 65 | 415406      | 1536026_1                             | T26510 F07926 R53367  |  |     |
|    | 415586      | 1540116_1                             | Z45481 F12393 T74437  |  |     |
|    | 415635      | 1540853_1                             | F13168 R21289 T77628  |  |     |
|    | 416871      | 1626761_1                             | H98716 N90792 N24283  |  |     |
|    | 416913      | 163001_1                              | AW934714 BE161007 BE162500 AW749902 AW749864 BE162498 BE161005 AA190449 AW513465 BE161006 BE162499                      |  |     |
| 70 | 417980      | 1712954_1                             | R32235 R32247 R32219  |  |     |
|    | 418333      | 173_2                                 | W92113 AA702794 BE044316 W91984 AA679375 T94184 AA679335 BE503126 AW502118 BE467367 AA584550 AW139964 R93353 AW088477   |  |     |
|    |             |                                       | AI887846 AW502624 W81697 W81696 AA447817 AA447667 F13631 AW268271 AA055366 AW629027 AA677404 AA831618 AI124782 AA889402 |  |     |
|    |             |                                       | AA765804 AA765530 AA055698 AA594019 AI267368 AA456946 R93354 AF264524 AW668618 AA601493                                 |  |     |
|    | 418856      | 179649_1                              | AA362858 AW863761 AA229428  |  |     |
| 75 | 419217      | 182954_1                              | AA504571 AA235243 AA411737 AW969068 AA406543  |  |     |
|    | 419225      | 1830274_1                             | U70073  |  |     |
|    | 419311      | 183793_1                              | AA689591 AW974261 AA236240 AI077451 AA631399 AW974262   |  |     |
|    | 420352      | 192979_1                              | BE258835 AW968316 AA258918 AW843305 R14744 AI580388 BE071923 R36280   |  |     |
|    | 422128      | 211994_1                              | AW881145 AA490718 M85637 AA304575 T06067 AA331991   |  |     |
| 80 | 422156      | 212379_1                              | N34524 AA305071 AW954803 AA502335 AI433430 AI203597 AW026670 AW265323 AW850787 AA317554 AW993643 AW835572 AW385512      |  |     |
|    |             |                                       | AI334966 W32951 H62656 H53902 R88904 AW835732   |  |     |
|    | 422176      | 212714_1                              | H80977 BE147695 AA305496 AW962366 AA436754  |  |     |
|    | 423756      | 231725_1                              | AA828125 AA834883 AA330555  |  |     |
|    | 423867      | 232732_1                              | AA331886 AW962659 AW962655 T89841   |  |     |

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|    |        |           |  |
|----|--------|-----------|--|
| 5  | 425189 | 247825_1  | H16622 R17322 AA351959   |
|    | 425517 | 252729_1  | AF121179 BE162736 AA358827   |
|    | 426076 | 260504_1  | AW962714 AA369277 AA369278   |
|    | 426413 | 266650_1  | AA377823 AW954494 AI022688   |
|    | 426503 | 268283_1  | AA380153 AA380233 AW963529   |
|    | 426531 | 268760_1  | AA381071 AA381084 AA380862   |
|    | 429875 | 310034_1  | AI091815 AA460162 AA460761   |
|    | 430968 | 326269_1  | AW972830 AA527647 AA489820 AA570362  |
| 10 | 432088 | 341195_1  | AA525454 H74039 R89502 T77379  |
|    | 433532 | 368950_1  | AW975367 AA598607 AA742735   |
|    | 434559 | 38889_1   | AF147315 AW173079 T53029   |
|    | 435065 | 399329_1  | BE064391 BE064395 AA663613 N99644  |
|    | 436190 | 41555_1   | AK001059 AA633055  |
|    | 436395 | 41905_1   | AJ227900 AI094933 AW051119 F00947  |
| 15 | 436532 | 421802_1  | AA721522 AW975443 T93070   |
|    | 436722 | 425758_1  | AW975977 AA729469 AA747132   |
|    | 436872 | 42851_1   | X15624   |
|    | 437034 | 431713_1  | AA742643 AA808575 AW976668   |
| 20 | 439086 | 46852_1   | AF085947 H70981 H78989   |
|    | 439228 | 47001_1   | N51700 AF086051 N51792   |
|    | 439518 | 47334_1   | W76326 AF086341 W72300   |
|    | 439546 | 47360_1   | AF088056 W76297 W72448   |
|    | 439566 | 47387_1   | AF086387 W77884 W72711   |
|    | 439710 | 47550_1   | AF086543 W96291 W96225   |
| 25 | 443657 | 576685_1  | R14973 R14967 AI081006   |
|    | 444168 | 593829_1  | AW379879 AI126285 H12014   |
|    | 444386 | 604004_1  | BE065183 AI144398 BE065367   |
|    | 451129 | 859870_1  | BE072881 BE072946 AI762181   |
| 30 | 452712 | 928309_1  | AW838616 AW838660 BE144343 AI914520 AW888910 BE184854 BE184784   |
|    | 453446 | 967533_1  | BE299996 BE297115 BE270415 BE295214 BE296526   |
|    | 453638 | 975649_1  | AW814996 AL047199 AW850979   |
|    | 453746 | 979731_1  | AL120611 BE006190 BE006189   |
|    | 454377 | 114761_1  | AA076811 AW814764  |
| 35 | 454389 | 115682_1  | AW752571 AW847602 AA077979   |
|    | 454606 | 1226149_2 | AW809752 AW810271 AW809944 AW810319 AW810215 AW810368 AW810167   |
|    | 454630 | 1227352_1 | BE142075 BE142148 BE142189 AW816249 BE142147 BE142002 BE142406 BE142094 BE142020 BE142074 BE142347 BE142000 BE142375 |
|    |        |           | AW811189 BE142133  |
| 40 | 454631 | 1227443_1 | AW811324 AW811325 AW811326 AW811333 AW811329 AW811328 AW811332 AW811339 AW811335                                     |
|    | 454679 | 1228929_1 | AW813110 AW813113  |
|    | 454967 | 1247021_1 | AW848276 AW848416 AW848160 AW847945 AW847947 AW848063 AW848113   |
|    | 455023 | 1249188_1 | AW850907 AW850901 AW850877   |
|    | 455302 | 1276542_1 | AW997641 AW891777  |
|    | 455470 | 1292849_1 | AW947992 AW947967 AW947950 AW947957 AW947953 AW947973 AW947966 AW947971 AW947947 AW947970 AW947995 AW947979 AW947952 |
| 45 |        |           | AW947956   |
|    | 455514 | 1321649_1 | AW983871 BE090302 AW983867 AW983845 AW983860 AW983853 AW983852   |
|    | 455530 | 1322298_1 | AW984744 AW984759  |
|    | 455584 | 1334741_1 | BE007420 BE007419 BE007421 BE007422  |
|    | 455778 | 1364506_1 | BE088746 BE088802 BE088755 BE088876 BE088947 BE088881 BE088952   |
| 50 | 455908 | 1382301_1 | BE156306 BE156188 BE156298 BE156377 BE156374   |
|    | 456072 | 1470256_1 | H54381 H54463 BE393262   |
|    | 456094 | 1504780_1 | H95091 C01228  |
|    | 457374 | 328758_1  | AA493662 AW897396 BE154814   |
|    | 457578 | 359618_1  | AA578027   |
| 55 | 457730 | 393905_1  | AW753613 AW753857 BE150374 BE150693 BE150394 AA808851 AA650159 AA654653 BE150419                                     |

## TABLE 9C:

Pkey: Unique number corresponding to an Eos probeset  
 Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.  
 Strand: Indicates DNA strand from which exons were predicted.  
 Nt\_position: Indicates nucleotide positions of predicted exons.

| Pkey   | Ref     | Strand | Nt_position                         |
|--------|---------|--------|-------------------------------------|
| 400822 | 7465000 | Plus   | 185223-186402,186878-187275         |
| 400859 | 9757499 | Minus  | 91888-92018,98131-98294,99474-99570 |
| 400917 | 7283186 | Minus  | 173258-173631                       |
| 400992 | 8096828 | Plus   | 140390-140822                       |
| 401012 | 7230838 | Minus  | 736-1137                            |
| 401048 | 7232177 | Plus   | 132430-132761                       |
| 401125 | 8570296 | Minus  | 126863-126984                       |
| 401324 | 9863791 | Plus   | 234057-234174                       |
| 401384 | 6850939 | Minus  | 58360-58545                         |
| 401558 | 7139678 | Plus   | 103510-104090                       |
| 401626 | 8575943 | Minus  | 238100-238432                       |
| 401676 | 9965536 | Plus   | 3891-4691                           |
| 401714 | 6715702 | Plus   | 96484-96681                         |
| 401729 | 8134856 | Minus  | 90651-90878                         |
| 401827 | 2262095 | Plus   | 94725-94860,98452-98660             |
| 401876 | 8099107 | Plus   | 95913-96641                         |
| 402028 | 7139781 | Plus   | 88749-89237                         |
| 402064 | 8117294 | Plus   | 100159-100350,100445-100912         |
| 402239 | 7690131 | Plus   | 38175-38304,42133-42266             |
| 402408 | 9796239 | Minus  | 110326-110491                       |

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|    |        |         |       |   |
|----|--------|---------|-------|---|
| 5  | 402424 | 9796344 | Minus | 64925-65073   |
|    | 402516 | 9798099 | Minus | 195342-195511   |
|    | 402604 | 9909420 | Plus  | 20393-20767   |
|    | 402627 | 9931216 | Plus  | 12136-12272,16487-16628,17654-17798,18494-18621,18933-19089,20669-20790,21134-21298,22866-22973,23686-23820,26626-26895,29279-29469 |
| 10 | 402721 | 8969253 | Minus | 144428-144715   |
|    | 402798 | 3355547 | Plus  | 23596-23867   |
|    | 402856 | 9801288 | Minus | 90119-90411   |
|    | 403048 | 4210991 | Plus  | 44275-44592,49656-49955   |
| 15 | 403108 | 8980955 | Plus  | 93253-93667   |
|    | 403142 | 9444521 | Plus  | 89286-90131   |
|    | 403166 | 9838127 | Minus | 67762-67940,68695-68856,70394-70507   |
|    | 403478 | 9958258 | Plus  | 116458-116564   |
| 20 | 403680 | 7331517 | Minus | 157184-157415   |
|    | 403751 | 7229815 | Minus | 158794-160929   |
|    | 403790 | 8084957 | Minus | 87826-87947,89835-90002   |
|    | 403797 | 8099896 | Minus | 123065-125008   |
| 25 | 403857 | 7708910 | Minus | 2524-3408   |
|    | 403881 | 7710245 | Minus | 107250-107685,108924-109213   |
|    | 403961 | 7596976 | Minus | 110393-110603   |
|    | 403969 | 8569909 | Plus  | 31237-31375,32405-32506   |
| 30 | 404020 | 8655966 | Minus | 174449-174663   |
|    | 404054 | 3548785 | Plus  | 66713-69175   |
|    | 404084 | 9944055 | Plus  | 2795-2969   |
|    | 404108 | 8247074 | Minus | 63603-64942   |
| 35 | 404170 | 9930793 | Plus  | 168836-169248   |
|    | 404185 | 4572584 | Minus | 129171-129327   |
|    | 404240 | 5002624 | Minus | 116132-116407,116653-116922   |
|    | 404295 | 9856663 | Minus | 75747-75947   |
| 40 | 404299 | 5738652 | Minus | 3826-4025   |
|    | 404366 | 9964977 | Plus  | 96589-96801   |
|    | 404554 | 7243881 | Plus  | 42637-42839   |
|    | 404561 | 9795980 | Minus | 69039-70100   |
| 45 | 404584 | 9857511 | Plus  | 138651-139153   |
|    | 404589 | 9931665 | Minus | 32824-32985   |
|    | 404642 | 9796810 | Plus  | 102999-103145   |
|    | 404652 | 9796969 | Minus | 108172-108296   |
| 50 | 404721 | 9856648 | Minus | 173763-174294   |
|    | 404756 | 7706327 | Plus  | 82849-83627   |
|    | 404802 | 4581357 | Minus | 30093-30600   |
|    | 404984 | 6939882 | Plus  | 87221-87505   |
| 55 | 405159 | 9966252 | Plus  | 79659-79804   |
|    | 405258 | 7329310 | Plus  | 129930-130076   |
|    | 405288 | 6139075 | Minus | 126268-126436   |
|    | 405353 | 2811095 | Plus  | 118525-118892   |
| 60 | 405362 | 2337862 | Minus | 105008-105142,105980-106091,140445-140556,142519-142641   |
|    | 405558 | 1621110 | Plus  | 4502-4644,5983-6083   |
|    | 405588 | 5002511 | Plus  | 46180-46366   |
|    | 405605 | 5836195 | Minus | 117070-117270   |
| 65 | 405701 | 4263751 | Plus  | 93243-93364   |
|    | 405741 | 9966947 | Minus | 156747-156875,156936-157208   |
|    | 405747 | 8469069 | Minus | 153933-154060   |
|    | 405771 | 7018349 | Plus  | 91191-91254,91510-91589   |
| 70 | 405808 | 9929207 | Plus  | 109758-111166   |
|    | 405884 | 6758747 | Plus  | 62383-62583   |
|    | 405915 | 7712162 | Minus | 43717-43859   |
|    | 406028 | 8312303 | Minus | 177469-177829   |
| 75 | 406085 | 9123888 | Plus  | 18665-18843   |
|    | 406169 | 6684220 | Minus | 12620-14251   |
|    | 406267 | 7528342 | Minus | 2570-2731   |
|    | 406326 | 9212385 | Plus  | 84508-84655   |
| 80 | 406347 | 9255981 | Plus  | 90900-91091   |
|    | 406474 | 9795567 | Plus  | 52758-53211   |
|    | 406577 | 7711730 | Plus  | 11377-11509   |
|    | 406610 | 8312226 | Plus  | 13096-13334   |

TABLE 10A: ABOUT 582 GENES SIGNIFICANTLY DOWN-REGULATED IN GLIOBLASTOMA COMPARED TO NORMAL ADULT CNS TISSUES

Table 10A lists about 582 genes significantly down-regulated in glioblastoma compared to normal adult CNS tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" normal CNS to "average" glioblastoma was greater than or equal to 3. The "average" normal CNS level was set to the 75th percentile amongst various normal CNS tissues. The "average" glioblastoma level was set to the 85th percentile amongst various tumor samples. In order to remove gene-specific background levels of non-specific hybridization, the 10th percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigeneID: Unigene number  
 Unigene Title: Unigene gene title  
 R1: Ratio of 75th percentile normal central nervous system tissue to 85th percentile tumor

| Pkey   | ExAccn   | UnigeneID | Unigene Title                             | R1    |
|--------|----------|-----------|---|-------|
| 453655 | AW960427 | Hs.79059  | transforming growth factor, beta receptor | 136.7 |
| 417275 | X63578   | Hs.295449 | parvalbumin                               | 29.0  |
| 430829 | AW451999 | Hs.194024 | ESTs                                      | 25.7  |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 410657 | AF063228  | Hs.55248  | dynein, cytoplasmic, intermediate polype | 22.6 |
|    | 419954 | D14720    | Hs.93883  | myelin protein zero (Charcot-Marie-Tooth | 21.2 |
|    | 459247 | N46243    | Hs.110373 | ESTs, Highly similar to T42626 secreted  | 18.5 |
| 5  | 416133 | NM_001683 | Hs.89512  | ATPase, Ca++ transporting, plasma membra | 15.5 |
|    | 416018 | AW138239  | Hs.78977  | proprotein convertase subtilisin/kexin t | 15.2 |
|    | 417167 | AW206437  | Hs.4290   | ESTs                                     | 14.8 |
|    | 433940 | H05129    | Hs.7459   | cyclic AMP-regulated phosphoprotein, 21  | 13.4 |
|    | 413324 | V00571    | Hs.75294  | corticotropin releasing hormone          | 13.1 |
| 10 | 439830 | AA846665  | Hs.151489 | ESTs, Weakly similar to XE7_HUMAN PROTEI | 12.6 |
|    | 408068 | AW148652  | Hs.167398 | ESTs                                     | 12.6 |
|    | 412636 | NM_004415 | Hs.74316  | desmoplakin (DPI, DPII)                  | 12.5 |
|    | 429096 | AB011106  | Hs.196012 | KIAA0534 protein                         | 12.2 |
|    | 412638 | AA910199  | Hs.203838 | ESTs                                     | 12.2 |
|    | 423690 | AA329648  | Hs.23804  | ESTs, Weakly similar to PN0099 son3 prot | 12.1 |
| 15 | 456844 | AI264155  | Hs.152981 | CDP-diacylglycerol synthase (phosphatida | 11.9 |
|    | 418318 | U47732    | Hs.84072  | transmembrane 4 superfamily member 3     | 10.9 |
|    | 442593 | R39804    | Hs.31951  | ESTs                                     | 10.8 |
|    | 446353 | AI290919  | Hs.153651 | ESTs                                     | 10.4 |
|    | 420290 | AW977318  | Hs.194480 | ESTs                                     | 10.3 |
| 20 | 414220 | BE298094  |           | gb:601118231F1 NIH_MGC_17 Homo sapiens c | 10.3 |
|    | 414290 | AI568801  | Hs.71721  | ESTs                                     | 10.2 |
|    | 426365 | AA376667  | Hs.10283  | RNA binding motif protein 8B             | 10.0 |
|    | 414937 | R38698    | Hs.12382  | ESTs                                     | 10.0 |
| 25 | 419643 | F06066    | Hs.91791  | chromosome 11 open reading frame 25      | 9.5  |
|    | 407173 | T64349    |           | gb:yc10d08.s1 Stratagene lung (937210) H | 9.5  |
|    | 412454 | R55745    | Hs.167330 | ESTs                                     | 9.5  |
|    | 439366 | AF100143  | Hs.6540   | fibroblast growth factor 13              | 9.4  |
|    | 415315 | F12240    | Hs.250655 | prothymosin, alpha (gene sequence 28)    | 9.3  |
| 30 | 441790 | AW294909  | Hs.132208 | ESTs                                     | 9.2  |
|    | 448117 | H49129    | Hs.172982 | ESTs                                     | 9.1  |
|    | 400661 |           |           |  | 9.0  |
|    | 433558 | AA833757  | Hs.201769 | ESTs, Weakly similar to T24435 hypotheti | 9.0  |
|    | 412453 | R20205    | Hs.167330 | ESTs                                     | 9.0  |
| 35 | 408920 | AL120071  | Hs.48998  | fibronectin leucine rich transmembrane p | 8.9  |
|    | 409031 | AA376836  | Hs.76728  | ESTs                                     | 8.7  |
|    | 428106 | BE620016  | Hs.182470 | PTD010 protein                           | 8.3  |
|    | 446544 | AI631932  | Hs.7047   | ESTs, Weakly similar to Unknown [H.sapie | 8.2  |
|    | 423479 | NM_014326 | Hs.129208 | death-associated protein kinase 2        | 8.2  |
| 40 | 439480 | AL038511  | Hs.125316 | ESTs, Weakly similar to S33990 finger pr | 8.2  |
|    | 418036 | Z37976    | Hs.83337  | latent transforming growth factor beta b | 8.0  |
|    | 456490 | U83171    | Hs.97203  | small inducible cytokine subfamily A (Cy | 8.0  |
|    | 410200 | AA082557  | Hs.101915 | Stargardt disease 3 (autosomal dominant) | 8.0  |
|    | 414602 | AW630088  | Hs.76550  | Homo sapiens mRNA; cDNA DKFZp564B1264 (f | 8.0  |
| 45 | 408428 | NM_014787 | Hs.44896  | DnaJ (Hsp40) homolog, subfamily B, membe | 7.9  |
|    | 437073 | AI885608  | Hs.94122  | ESTs                                     | 7.9  |
|    | 408434 | AW195317  | Hs.107716 | hypothetical protein FLJ22344            | 7.9  |
|    | 438150 | AA037534  | Hs.79059  | transforming growth factor, beta recepto | 7.9  |
|    | 440209 | H05049    | Hs.22269  | neurexin 3                               | 7.8  |
| 50 | 408119 | W26213    | Hs.101672 | ESTs, Weakly similar to T00331 hypotheti | 7.8  |
|    | 417421 | AL138201  | Hs.82120  | nuclear receptor subfamily 4, group A, m | 7.8  |
|    | 410587 | AA370706  | Hs.86412  | chromosome 9 open reading frame 5        | 7.8  |
|    | 429611 | AI889077  | Hs.211388 | Homo sapiens BAC clone CTB-60N22 from 7q | 7.7  |
|    | 405800 |           |           |  | 7.7  |
| 55 | 421750 | AK000768  | Hs.107872 | hypothetical protein FLJ20761            | 7.7  |
|    | 426356 | BE536836  | Hs.98682  | hypothetical protein FKSG32              | 7.7  |
|    | 423440 | R25234    | Hs.143434 | contactin 1                              | 7.7  |
|    | 445148 | AI214510  | Hs.146304 | ESTs                                     | 7.6  |
|    | 416294 | D86980    | Hs.79170  | KIAA0227 protein                         | 7.6  |
| 60 | 424087 | N69333    | Hs.143434 | contactin 1                              | 7.6  |
|    | 437479 | R61866    | Hs.101277 | ESTs                                     | 7.5  |
|    | 405071 |           |           |  | 7.5  |
|    | 421224 | AW402154  | Hs.125812 | ESTs                                     | 7.4  |
|    | 442025 | AW887434  | Hs.11810  | CDA11 protein                            | 7.4  |
| 65 | 459476 | BE185844  |           | gb:IL5-HT0731-110500-087-c08 HT0731 Homo | 7.2  |
|    | 430573 | AA744550  | Hs.136345 | ESTs                                     | 7.1  |
|    | 401836 |           |           |  | 7.1  |
|    | 448958 | AB020651  | Hs.22653  | KIAA0844 protein                         | 7.1  |
|    | 430152 | AB001325  | Hs.234642 | aquaporin 3                              | 7.1  |
| 70 | 419474 | AW968619  | Hs.155849 | ESTs                                     | 7.1  |
|    | 401780 |           |           |  | 7.1  |
|    | 446052 | AA358760  |           | gb:EST67699 Fetal lung II Homo sapiens c | 7.0  |
|    | 423605 | AF047825  | Hs.129887 | cadherin 19, type 2                      | 7.0  |
|    | 433098 | AW190593  | Hs.151143 | ESTs                                     | 7.0  |
| 75 | 449511 | AI436187  | Hs.296261 | guanine nucleotide binding protein (G pr | 6.9  |
|    | 451285 | AW137912  | Hs.227583 | Homo sapiens chromosome X map Xp11.23 L- | 6.8  |
|    | 428414 | AL049980  | Hs.184216 | DKFZP564C152 protein                     | 6.8  |
|    | 419273 | BE271180  | Hs.293490 | ESTs, Weakly similar to I38022 hypotheti | 6.8  |
|    | 443155 | R54485    | Hs.23772  | ESTs                                     | 6.8  |
| 80 | 450561 | R49674    | Hs.25909  | ESTs                                     | 6.8  |
|    | 433068 | NM_006456 | Hs.288215 | sialyltransferase                        | 6.8  |
|    | 440729 | AA904739  | Hs.128204 | ESTs                                     | 6.8  |
|    | 448426 | BE018315  | Hs.280776 | tankyrase, TRF1-interacting ankyrin-rela | 6.7  |
|    | 423589 | AA328082  | Hs.209569 | ESTs                                     | 6.6  |

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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
|    | 415681 | AI379882  | Hs.72630  | ESTs                                     | 6.5 |
|    | 413510 | F13044    |           | gb:HSC3HH101 normalized infant brain cDN | 6.4 |
|    | 427992 | Y15014    | Hs.181353 | UDP-Gal:betaGlcNAc beta 1,3-galactosyltr | 6.4 |
| 5  | 453344 | BE349075  | Hs.44571  | ESTs                                     | 6.4 |
|    | 450642 | R39773    | Hs.7130   | copine IV                                | 6.4 |
|    | 432251 | AW972983  | Hs.232165 | polycythemia rubra vera 1; cell surface  | 6.4 |
|    | 429322 | D86984    | Hs.199243 | KIAA0231 protein                         | 6.4 |
|    | 444927 | AW016637  | Hs.199425 | ESTs                                     | 6.4 |
|    | 447482 | AB033059  | Hs.18705  | KIAA1233 protein                         | 6.4 |
| 10 | 400332 | S66407    | Hs.248032 | FLT4                                     | 6.3 |
|    | 440703 | AL137663  | Hs.7378   | Homo sapiens mRNA; cDNA DKFZp434G227 (fr | 6.3 |
|    | 446129 | AW244073  | Hs.145946 | ESTs                                     | 6.3 |
|    | 454076 | AW204712  | Hs.61957  | ESTs                                     | 6.3 |
|    | 425526 | AA359933  |           | gb:EST69040 Fetal lung II Homo sapiens c | 6.3 |
| 15 | 421913 | AI934365  | Hs.109439 | osteoglycin (osteoinductive factor, mime | 6.3 |
|    | 434273 | AA913143  | Hs.26303  | ESTs                                     | 6.2 |
|    | 408480 | AI350337  | Hs.164568 | fibroblast growth factor 7 (keratinocyte | 6.2 |
|    | 451301 | AI769514  | Hs.209890 | EST                                      | 6.2 |
| 20 | 430754 | AW862610  | Hs.157068 | ESTs                                     | 6.2 |
|    | 438356 | AA805530  | Hs.48527  | ESTs                                     | 6.2 |
|    | 422743 | BE304678  | Hs.119598 | ribosomal protein L3                     | 6.2 |
|    | 453355 | AW295374  | Hs.31412  | Homo sapiens cDNA FLJ11422 fis, clone HE | 6.2 |
|    | 425388 | AW081394  | Hs.97103  | ESTs                                     | 6.2 |
| 25 | 452502 | AI904296  |           | gb:PM-BT046-220199-286_1 BT046 Homo sapi | 6.1 |
|    | 402546 |           |           |  | 6.1 |
|    | 457534 | AI761307  | Hs.232226 | ESTs                                     | 6.1 |
|    | 408165 | AL137573  | Hs.43143  | Homo sapiens mRNA; cDNA DKFZp564A2463 (f | 6.1 |
|    | 404958 |           |           |  | 6.1 |
| 30 | 432501 | BE546532  | Hs.25682  | Homo sapiens mRNA for KIAA1863 protein,  | 6.1 |
|    | 442979 | AW440782  | Hs.174743 | ESTs                                     | 6.1 |
|    | 422262 | AL022315  | Hs.113987 | lectin, galactoside-binding, soluble, 2  | 6.0 |
|    | 408713 | NM_001248 | Hs.47042  | ectonucleoside triphosphate diphosphohyd | 6.0 |
|    | 454065 | BE394588  |           | gb:601311808F1 NIH_MGC_44 Homo sapiens c | 6.0 |
| 35 | 430004 | U27768    | Hs.227571 | regulator of G-protein signalling 4      | 5.9 |
|    | 401521 |           |           |  | 5.9 |
|    | 425087 | R62424    | Hs.126059 | ESTs                                     | 5.9 |
|    | 446298 | AF187813  | Hs.14637  | kidney- and liver-specific gene          | 5.9 |
|    | 417761 | R13727    | Hs.21435  | ESTs                                     | 5.9 |
| 40 | 424806 | AA382523  | Hs.105689 | MSTP031 protein                          | 5.9 |
|    | 441695 | T12411    | Hs.183745 | hypothetical protein FLJ13456            | 5.9 |
|    | 457483 | AB034694  | Hs.272558 | endomucin-1                              | 5.9 |
|    | 417175 | R44558    | Hs.94002  | ESTs                                     | 5.8 |
|    | 437483 | AL390174  |           | gb:Homo sapiens mRNA; cDNA DKFZp547J184  | 5.8 |
|    | 436427 | AI344378  | Hs.143399 | ESTs                                     | 5.8 |
| 45 | 411939 | AI365585  | Hs.146246 | ESTs                                     | 5.8 |
|    | 459053 | AI807052  | Hs.210361 | ESTs                                     | 5.7 |
|    | 411052 | AW814950  |           | gb:MR1-ST0206-130400-023-d06 ST0206 Homo | 5.7 |
|    | 431063 | Z98949    | Hs.326843 | hypothetical protein bk125H2.1           | 5.7 |
| 50 | 450382 | AA397658  | Hs.60257  | Homo sapiens cDNA FLJ13598 fis, clone PL | 5.7 |
|    | 408478 | NM_000806 | Hs.45740  | gamma-aminobutyric acid (GABA) A recepto | 5.7 |
|    | 442676 | AI733585  | Hs.130897 | ESTs                                     | 5.7 |
|    | 446443 | AV659082  | Hs.134228 | ESTs                                     | 5.7 |
|    | 400865 |           |           |  | 5.7 |
| 55 | 459080 | AW192083  | Hs.290855 | ESTs                                     | 5.6 |
|    | 407952 | AI215902  | Hs.88845  | ESTs, Highly similar to T50835 hypothesi | 5.6 |
|    | 431984 | AL080239  | Hs.272284 | Human DNA sequence from clone GS1-256O22 | 5.6 |
|    | 425705 | AF007833  | Hs.159265 | kruppel-related zinc finger protein hckr | 5.6 |
|    | 442238 | AW135374  | Hs.270949 | ESTs, Moderately similar to F41925 hypot | 5.6 |
|    | 422994 | AW891802  | Hs.296276 | ESTs                                     | 5.6 |
| 60 | 457148 | AF091035  | Hs.184527 | KIAA0118 protein                         | 5.6 |
|    | 428356 | AL046991  | Hs.10338  | ESTs                                     | 5.6 |
|    | 415927 | AL120168  | Hs.78919  | Kell blood group precursor (McLeod pheno | 5.5 |
|    | 402092 |           |           |  | 5.5 |
| 65 | 440526 | AI832243  | Hs.211471 | ESTs                                     | 5.5 |
|    | 444409 | AI792140  | Hs.49265  | ESTs                                     | 5.5 |
|    | 417877 | AI025829  | Hs.86320  | ESTs                                     | 5.4 |
|    | 458238 | AW071521  | Hs.333541 | beta-amyloid binding protein precursor   | 5.4 |
|    | 430702 | U56979    | Hs.250651 | H factor 1 (complement)                  | 5.4 |
| 70 | 456189 | H91010    | Hs.44940  | ESTs                                     | 5.4 |
|    | 427424 | AA402453  | Hs.113011 | ESTs                                     | 5.4 |
|    | 437354 | AA749215  | Hs.291886 | ESTs                                     | 5.4 |
|    | 455617 | BE078070  |           | gb:CM1-BT0614-160300-149-f02 BT0614 Homo | 5.4 |
|    | 429290 | AF203032  | Hs.198760 | neurofilament, heavy polypeptide (200kD) | 5.3 |
| 75 | 427861 | AA813185  | Hs.98183  | ESTs                                     | 5.3 |
|    | 408556 | U49516    | Hs.46362  | 5-hydroxytryptamine (serotonin) receptor | 5.3 |
|    | 444209 | AI753134  | Hs.146494 | ESTs                                     | 5.3 |
|    | 422831 | R02504    | Hs.332943 | ESTs                                     | 5.3 |
|    | 403180 |           |           |  | 5.3 |
| 80 | 418026 | BE379727  | Hs.83213  | fatty acid binding protein 4, adipocyte  | 5.3 |
|    | 430339 | W28608    | Hs.239625 | integral membrane protein 2B             | 5.2 |
|    | 431596 | T34708    | Hs.272927 | Sec23 (S. cerevisiae) homolog A          | 5.2 |
|    | 431930 | AB035301  | Hs.272211 | cadherin 7, type 2                       | 5.2 |
|    | 437403 | AI208149  | Hs.121196 | ESTs                                     | 5.2 |

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|    | 438285 | AA782845  | Hs.22790  | ESTs                                     | 5.2 |
|    | 439901 | N73885    | Hs.124169 | ESTs                                     | 5.2 |
|    | 438507 | AA809052  | Hs.211275 | ESTs                                     | 5.2 |
|    | 449222 | AW293984  | Hs.197621 | ESTs                                     | 5.2 |
| 5  | 402834 | AK001507  | Hs.306084 | Homo sapiens clone FLB6914 PRO1821 mRNA, | 5.2 |
|    | 419042 | T81429    | Hs.221065 | ESTs                                     | 5.2 |
|    | 436777 | AA731199  | Hs.293130 | ESTs                                     | 5.2 |
|    | 445071 | AI280246  | Hs.149504 | ESTs                                     | 5.1 |
|    | 408016 | AW136827  | Hs.256096 | ESTs                                     | 5.1 |
| 10 | 412047 | AA934589  | Hs.49696  | ESTs                                     | 5.1 |
|    | 436953 | AW959074  | Hs.23648  | Homo sapiens cDNA FLJ13097 fis, clone NT | 5.1 |
|    | 436773 | AW078629  | Hs.82110  | PC4 and SFRS1 interacting protein 1      | 5.1 |
|    | 409263 | AA069573  | Hs.50319  | ESTs                                     | 5.1 |
|    | 453830 | AA534296  | Hs.20953  | ESTs                                     | 5.1 |
| 15 | 459580 | AA022888  | Hs.176065 | ESTs                                     | 5.1 |
|    | 417616 | R07728    | Hs.268668 | ESTs                                     | 5.1 |
|    | 423457 | F08208    | Hs.283844 | similar to rat tricarboxylate carrier-li | 5.1 |
|    | 441535 | AL135735  | Hs.7885   | phosphatidylinositol binding clathrin as | 5.0 |
|    | 416490 | AF090116  | Hs.79348  | regulator of G-protein signalling 7      | 5.0 |
| 20 | 417284 | N62889    | Hs.107242 | Homo sapiens cDNA FLJ12965 fis, clone NT | 5.0 |
|    | 447135 | T58148    |           | gb:yb98g06.s1 Stratagene lung (937210) H | 5.0 |
|    | 448605 | AL109678  | Hs.21597  | Homo sapiens mRNA full length insert cDN | 5.0 |
|    | 442240 | AI791883  | Hs.292719 | ESTs                                     | 4.9 |
| 25 | 459399 | BE407712  | Hs.153998 | creatine kinase, mitochondrial 1 (ubiqui | 4.9 |
|    | 427972 | AA864870  | Hs.181304 | putative gene product                    | 4.9 |
|    | 432944 | AA570687  | Hs.38512  | ESTs                                     | 4.9 |
|    | 440198 | BE560093  |           | gb:601345159F1 NIH_MGC_8 Homo sapiens cD | 4.9 |
|    | 444047 | AI097452  | Hs.135095 | ESTs                                     | 4.9 |
| 30 | 416040 | AW819158  | Hs.289044 | Homo sapiens cDNA FLJ12048 fis, clone HE | 4.9 |
|    | 444922 | AI921750  | Hs.144871 | Homo sapiens cDNA FLJ13752 fis, clone PL | 4.8 |
|    | 436670 | AI690021  | Hs.201536 | ESTs                                     | 4.8 |
|    | 448072 | AI459306  | Hs.24508  | ESTs                                     | 4.8 |
|    | 408936 | AL138043  | Hs.293549 | ESTs                                     | 4.8 |
| 35 | 412622 | AW664708  | Hs.171959 | ESTs                                     | 4.8 |
|    | 414943 | D80647    | Hs.124193 | ESTs                                     | 4.8 |
|    | 429254 | H10133    | Hs.91846  | hypothetical protein DKFZp761C121        | 4.8 |
|    | 453567 | AI742835  | Hs.33368  | hypothetical protein FLJ11175            | 4.8 |
|    | 407906 | AA369665  | Hs.41185  | Homo sapiens mRNA; cDNA DKFZp564O1262 (f | 4.8 |
| 40 | 441028 | AI333660  | Hs.17558  | Homo sapiens cDNA FLJ14446 fis, clone HE | 4.7 |
|    | 405130 |           |           |  | 4.7 |
|    | 455225 | AW996689  |           | gb:QV3-BN0046-150400-151-g09 BN0046 Homo | 4.7 |
|    | 446218 | AV657159  |           | gb:AV657159 GLC Homo sapiens cDNA clone  | 4.7 |
|    | 443347 | AI052543  | Hs.133244 | melanoma-derived leucine zipper, extra-n | 4.7 |
| 45 | 402176 |           |           |  | 4.7 |
|    | 416577 | BE063207  | Hs.79381  | grancalcin                               | 4.7 |
|    | 436221 | AK001781  | Hs.296543 | Homo sapiens cDNA FLJ10919 fis, clone OV | 4.7 |
|    | 420480 | AL137361  | Hs.98173  | hypothetical protein                     | 4.7 |
|    | 400800 | Y10262    | Hs.46925  | eyes absent (Drosophila) homolog 3       | 4.6 |
| 50 | 435161 | AF124150  | Hs.272091 | ESTs                                     | 4.6 |
|    | 404793 |           |           |  | 4.6 |
|    | 430895 | U66581    | Hs.248121 | G protein-coupled receptor 22            | 4.6 |
|    | 438571 | AW020775  | Hs.56022  | ESTs                                     | 4.6 |
|    | 445924 | AI264671  | Hs.164166 | ESTs                                     | 4.6 |
| 55 | 444585 | AW170015  | Hs.6594   | ESTs                                     | 4.6 |
|    | 421044 | AF061871  | Hs.311736 | Human DNA sequence from clone RP1-238D15 | 4.6 |
|    | 418274 | AI458587  | Hs.128677 | Human DNA sequence from clone RP1-50024  | 4.6 |
|    | 425475 | W56339    | Hs.107057 | ESTs                                     | 4.6 |
|    | 434311 | BE543469  | Hs.265263 | Homo sapiens cDNA FLJ14115 fis, clone MA | 4.5 |
| 60 | 414272 | AI651603  | Hs.46988  | ESTs                                     | 4.5 |
|    | 445235 | AI64022   | Hs.138207 | ESTs                                     | 4.5 |
|    | 414327 | BE408145  | Hs.185254 | ESTs, Weakly similar to T24435 hypotheti | 4.5 |
|    | 414630 | BE410857  |           | gb:601301177F1 NIH_MGC_21 Homo sapiens c | 4.5 |
|    | 414456 | H74314    |           | gb:yu56e10.r1 Soares fetal liver spleen  | 4.5 |
|    | 401024 |           |           |  | 4.5 |
| 65 | 414699 | AI815523  | Hs.76930  | synuclein, alpha (non A4 component of am | 4.5 |
|    | 423449 | AI497900  | Hs.33067  | ESTs                                     | 4.5 |
|    | 405138 |           |           |  | 4.5 |
|    | 413544 | BE147225  |           | gb:PM2-HT0225-031299-003-f11 HT0225 Homo | 4.5 |
| 70 | 453880 | AI803166  | Hs.28462  | ESTs, Weakly similar to I38022 hypotheti | 4.5 |
|    | 433521 | T66087    | Hs.112482 | Homo sapiens unknown mRNA sequence       | 4.4 |
|    | 441184 | AA922009  | Hs.150269 | ESTs                                     | 4.4 |
|    | 429676 | AB028977  | Hs.225974 | KIAA1054 protein                         | 4.4 |
|    | 445481 | AW661846  | Hs.148835 | ESTs                                     | 4.4 |
| 75 | 452340 | NM_002202 | Hs.505    | ISL1 transcription factor, LIM/homeodoma | 4.4 |
|    | 404769 |           |           |  | 4.4 |
|    | 444331 | AW193342  | Hs.24144  | ESTs                                     | 4.4 |
|    | 429726 | AW628326  | Hs.27151  | ESTs                                     | 4.4 |
|    | 449093 | AB035356  | Hs.22998  | neurexin 1                               | 4.4 |
| 80 | 451959 | AA056203  | Hs.27337  | hypothetical protein FLJ20623            | 4.4 |
|    | 415716 | N59294    | Hs.179662 | nucleosome assembly protein 1-like 1     | 4.4 |
|    | 417888 | R23053    |           | gb:yh31a05.r1 Soares placenta Nb2HP Homo | 4.4 |
|    | 419656 | AB002314  | Hs.92025  | KIAA0316 gene product                    | 4.4 |
|    | 425864 | U56420    | Hs.159903 | olfactory receptor, family 5, subfamily  | 4.4 |

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|    | 435078 | AW518888  | Hs.40937  | ESTs                                     | 4.4 |
|    | 413493 | BE144444  |           | gb:MR0-HT0168-141199-002-f09 HT0168 Homo | 4.3 |
|    | 432712 | AB016247  | Hs.288031 | sterol-C5-desaturase (fungal ERG3, delta | 4.3 |
|    | 459650 | R25754    | Hs.301185 | ESTs                                     | 4.3 |
| 5  | 404828 |           |           |  | 4.3 |
|    | 423782 | AI472209  | Hs.323117 | ESTs                                     | 4.3 |
|    | 426867 | AA460967  | Hs.22668  | ESTs                                     | 4.3 |
|    | 426802 | AA385182  | Hs.46699  | ESTs                                     | 4.3 |
| 10 | 457353 | X65633    | Hs.248144 | melanocortin 2 receptor (adrenocorticotr | 4.3 |
|    | 412112 | BE180342  |           | gb:RC3-HT0622-130400-012-a07 HT0622 Homo | 4.3 |
|    | 401522 | N47812    | Hs.306198 | CGI-35 protein                           | 4.3 |
|    | 419055 | AI365384  | Hs.11571  | Homo sapiens cDNA FLJ11570 fis, clone HE | 4.3 |
|    | 410171 | H07892    | Hs.12431  | ESTs                                     | 4.3 |
| 15 | 419564 | U08989    | Hs.91139  | solute carrier family 1 (neuronal/epithe | 4.3 |
|    | 458789 | AL157468  | Hs.325825 | Homo sapiens cDNA FLJ20848 fis, clone AD | 4.3 |
|    | 455040 | AW852286  |           | gb:QV0-CT0225-100400-187-d08 CT0225 Homo | 4.3 |
|    | 438533 | AI440266  | Hs.170673 | ESTs, Weakly similar to T24832 hypotheti | 4.3 |
|    | 459005 | AA447679  | Hs.144558 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 4.2 |
| 20 | 418489 | U76421    | Hs.85302  | adenosine deaminase, RNA-specific, B1 (h | 4.2 |
|    | 433389 | AF038171  |           | gb:Homo sapiens clone 23671 mRNA sequenc | 4.2 |
|    | 454356 | AW390363  | Hs.11522  | hypothetical protein from Xq28           | 4.2 |
|    | 442339 | BE299668  | Hs.227591 | ESTs, Weakly similar to 1901303A Leu zip | 4.2 |
|    | 421249 | AA285362  |           | gb:HTH277 HTCDL1 Homo sapiens cDNA 5'/3' | 4.2 |
| 25 | 443998 | AI620661  | Hs.296276 | ESTs                                     | 4.2 |
|    | 452197 | AW023595  | Hs.232048 | ESTs                                     | 4.2 |
|    | 451117 | AA015752  | Hs.205173 | ESTs                                     | 4.2 |
|    | 404501 | AW247252  | Hs.75514  | nucleoside phosphorylase                 | 4.2 |
|    | 410378 | R23324    | Hs.41693  | DnaJ (Hsp40) homolog, subfamily B, membe | 4.2 |
| 30 | 422528 | AB011182  | Hs.118087 | KIAA0610 protein                         | 4.2 |
|    | 440323 | AA970614  | Hs.127992 | ESTs                                     | 4.1 |
|    | 425767 | AF054176  | Hs.159483 | chromosome 1 open reading frame 7        | 4.1 |
|    | 434460 | AA478486  | Hs.3852   | KIAA0368 protein                         | 4.1 |
|    | 410362 | H04811    | Hs.93164  | proprotein convertase subtilisin/kexin t | 4.1 |
| 35 | 413121 | T96090    | Hs.142678 | ESTs                                     | 4.1 |
|    | 409403 | AA668224  | Hs.6634   | Homo sapiens cDNA: FLJ22547 fis, clone H | 4.1 |
|    | 450235 | AA007512  | Hs.17538  | ESTs                                     | 4.1 |
|    | 449754 | H00820    | Hs.30977  | ESTs, Weakly similar to B34087 hypotheti | 4.1 |
|    | 421813 | BE048255  |           | gb:tz49b05.y1 NCI_CGAP_Bm52 Homo sapien  | 4.1 |
| 40 | 408496 | AI683802  | Hs.136182 | ESTs                                     | 4.1 |
|    | 430261 | AA305127  | Hs.237225 | hypothetical protein HT023               | 4.1 |
|    | 434101 | AA625205  | Hs.259599 | KIAA1622 protein                         | 4.1 |
|    | 451837 | T92157    | Hs.16970  | ESTs                                     | 4.1 |
|    | 411772 | BE170301  |           | gb:QV4-HT0536-040500-193-f05 HT0536 Homo | 4.1 |
| 45 | 437630 | AI252782  | Hs.153026 | SWAP-70 protein                          | 4.1 |
|    | 430212 | AA469153  |           | gb:nc67f04.s1 NCI_CGAP_Pr1 Homo sapiens  | 4.0 |
|    | 400216 |           |           |  | 4.0 |
|    | 429830 | AI537278  | Hs.225841 | DKFZP434D193 protein                     | 4.0 |
|    | 453165 | S74727    | Hs.32042  | aspartoacylase (aminoacylase 2, Canavan  | 4.0 |
| 50 | 418047 | R37633    | Hs.4847   | ESTs                                     | 4.0 |
|    | 405354 |           |           |  | 4.0 |
|    | 427931 | AW206512  | Hs.186996 | ESTs                                     | 4.0 |
|    | 428775 | AA434579  | Hs.143691 | ESTs                                     | 4.0 |
|    | 449422 | AA001373  | Hs.59821  | ESTs                                     | 4.0 |
| 55 | 453864 | AW021407  | Hs.21068  | hypothetical protein                     | 4.0 |
|    | 456407 | AW968614  |           | gb:EST380590 MAGE resequences, MAGJ Homo | 4.0 |
|    | 441869 | NM_003947 | Hs.8004   | huntingtin-associated protein interactin | 4.0 |
|    | 420784 | T65158    | Hs.102399 | ESTs, Moderately similar to S65657 alpha | 4.0 |
|    | 425195 | AA352026  | Hs.94319  | VPS10 domain receptor protein            | 4.0 |
| 60 | 429528 | H09604    | Hs.13268  | ESTs                                     | 4.0 |
|    | 410087 | F12079    | Hs.332579 | ESTs                                     | 4.0 |
|    | 409840 | AW502122  |           | gb:UI-HF-BR0p-ajr-c-08-0-UI.r1 NIH_MGC_5 | 4.0 |
|    | 452854 | AA437061  | Hs.14060  | prokineticin 1 precursor                 | 4.0 |
|    | 419910 | AA662913  | Hs.190173 | ESTs, Weakly similar to A46010 X-linked  | 4.0 |
|    | 427443 | AA402713  | Hs.97872  | ESTs                                     | 4.0 |
| 65 | 414990 | C17758    | Hs.221652 | Homo sapiens cDNA FLJ14323 fis, clone PL | 3.9 |
|    | 412678 | AA115575  | Hs.114914 | ESTs                                     | 3.9 |
|    | 405629 |           |           |  | 3.9 |
|    | 420299 | AI058871  | Hs.15276  | ESTs                                     | 3.9 |
| 70 | 453098 | Z25935    | Hs.86379  | ESTs                                     | 3.9 |
|    | 435752 | AF230801  |           | gb:Homo sapiens growth hormone receptor  | 3.9 |
|    | 441005 | Z41305    | Hs.303172 | Homo sapiens mRNA: cDNA DKFZp547G133 (fr | 3.9 |
|    | 414516 | AI307802  | Hs.135560 | ESTs, Weakly similar to T43458 hypotheti | 3.9 |
|    | 442257 | AW503831  | Hs.323370 | Human EST clone 25267 mariner transposon | 3.9 |
|    | 422563 | BE299342  | Hs.19348  | hypothetical protein FLJ13119            | 3.9 |
| 75 | 406697 | M21388    | Hs.123017 | Human unproductively rearranged Ig mu-ch | 3.9 |
|    | 443850 | AW014723  | Hs.334612 | ESTs                                     | 3.9 |
|    | 412677 | AW029608  | Hs.17384  | ESTs                                     | 3.9 |
|    | 422788 | AL117352  | Hs.120828 | Human DNA sequence from clone RPS-876B10 | 3.9 |
| 80 | 405377 |           |           |  | 3.9 |
|    | 414376 | BE393856  | Hs.66915  | ESTs, Weakly similar to 16.7Kd protein [ | 3.9 |
|    | 453341 | AI758912  | Hs.296341 | adenylyl cyclase-associated protein 2    | 3.9 |
|    | 431960 | AW241821  | Hs.301927 | c6.1A                                    | 3.9 |
|    | 416854 | H40164    | Hs.80295  | Purkinje cell protein 4                  | 3.9 |



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|    | 427264 | AA400117  | Hs.125747 | ESTs                                     | 3.9 |
|    | 422746 | NM_004484 | Hs.119651 | glypican 3                               | 3.9 |
|    | 452346 | BE243534  |           | gb:TCBAP1D0885 Pediatric pre-B cell acut | 3.9 |
| 5  | 414666 | NM_004466 | Hs.76828  | glypican 5                               | 3.8 |
|    | 418217 | AI910647  | Hs.13442  | ESTs                                     | 3.8 |
|    | 419118 | AA234223  | Hs.139204 | ESTs                                     | 3.8 |
|    | 445017 | AI205493  | Hs.176860 | ESTs                                     | 3.8 |
|    | 405867 |           |           |  | 3.8 |
| 10 | 422760 | BE409561  |           | gb:601299865F1 NIH_MGC_21 Homo sapiens c | 3.8 |
|    | 453863 | X02544    | Hs.572    | orosomucoid 1                            | 3.8 |
|    | 457821 | H47166    | Hs.124322 | ESTs, Weakly similar to A47582 B-cell gr | 3.8 |
|    | 457330 | AB013818  | Hs.247220 | peroxisome biogenesis factor 10          | 3.8 |
|    | 435600 | AL047034  | Hs.119747 | ESTs                                     | 3.8 |
| 15 | 456083 | U46922    | Hs.77252  | fragile histidine triad gene             | 3.8 |
|    | 413341 | H78472    | Hs.191325 | ESTs, Weakly similar to T18967 hypotheti | 3.8 |
|    | 449057 | AB037784  | Hs.22941  | KIAA1363 protein                         | 3.8 |
|    | 421855 | F06504    | Hs.27384  | ESTs, Moderately similar to ALU4_HUMAN A | 3.8 |
|    | 414764 | AW013887  | Hs.72047  | ESTs                                     | 3.8 |
|    | 404391 |           |           |  | 3.7 |
| 20 | 433629 | R13140    | Hs.13359  | ESTs                                     | 3.7 |
|    | 424738 | AI963740  | Hs.46826  | ESTs                                     | 3.7 |
|    | 401315 |           |           |  | 3.7 |
|    | 407706 | AA191085  | Hs.26612  | ESTs, Moderately similar to S23650 retro | 3.7 |
| 25 | 440530 | AA888646  | Hs.174187 | ESTs                                     | 3.7 |
|    | 433930 | AA620338  | Hs.273781 | ESTs                                     | 3.7 |
|    | 409662 | AW452320  | Hs.279726 | ESTs                                     | 3.7 |
|    | 437268 | AI754847  | Hs.227571 | regulator of G-protein signalling 4      | 3.7 |
|    | 445688 | AI248205  | Hs.153244 | ESTs                                     | 3.7 |
| 30 | 408593 | R19566    | Hs.197617 | ESTs                                     | 3.7 |
|    | 417091 | AA193283  | Hs.291990 | ESTs                                     | 3.7 |
|    | 448556 | AW885606  | Hs.5064   | ESTs                                     | 3.7 |
|    | 423135 | N67655    | Hs.26411  | ESTs                                     | 3.7 |
|    | 400135 |           |           |  | 3.7 |
| 35 | 459150 | BE155356  |           | gb:PM1-HT0350-160300-009-d06 HT0350 Homo | 3.7 |
|    | 457221 | AW383197  | Hs.218260 | ESTs                                     | 3.7 |
|    | 451660 | AI807927  | Hs.249601 | ESTs                                     | 3.7 |
|    | 401600 | BE247275  | Hs.151787 | U5 snRNP-specific protein, 116 kD        | 3.7 |
|    | 446818 | AI342668  | Hs.279765 | ESTs                                     | 3.7 |
| 40 | 447795 | AW295151  | Hs.163612 | ESTs                                     | 3.7 |
|    | 427562 | R56424    | Hs.26534  | ESTs                                     | 3.6 |
|    | 412258 | AA376768  | Hs.324841 | hypothetical protein FLJ22622            | 3.6 |
|    | 454339 | AW381980  |           | gb:QV4-HT0316-091199-028-d05 HT0316 Homo | 3.6 |
|    | 439274 | AF086092  | Hs.48372  | ESTs                                     | 3.6 |
| 45 | 452381 | H23329    | Hs.290880 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 3.6 |
|    | 422897 | AA679784  | Hs.4290   | ESTs                                     | 3.6 |
|    | 429656 | X05608    | Hs.211584 | neurofilament, light polypeptide (58kD)  | 3.6 |
|    | 421908 | AW935200  | Hs.285814 | sprouty (Drosophila) homolog 4           | 3.6 |
|    | 407978 | AW385129  | Hs.41717  | phosphodiesterase 1A, calmodulin-depende | 3.6 |
| 50 | 426452 | AW614271  | Hs.121647 | ESTs, Highly similar to AC006014.8 simil | 3.6 |
|    | 400685 |           |           |  | 3.6 |
|    | 417154 | AI674701  | Hs.21388  | ESTs                                     | 3.6 |
|    | 447176 | Z42549    | Hs.160893 | ESTs                                     | 3.6 |
|    | 423893 | AL031709  | Hs.134846 | Human DNA sequence from clone 316G12 on  | 3.6 |
| 55 | 449231 | BE410360  | Hs.298573 | KIAA1720 protein                         | 3.6 |
|    | 411607 | AW853498  |           | gb:RC1-CT0252-170200-025-h02 CT0252 Homo | 3.6 |
|    | 405977 |           |           |  | 3.6 |
|    | 441470 | BE503874  | Hs.301986 | ESTs                                     | 3.6 |
| 60 | 423568 | NM_005256 | Hs.129818 | growth arrest-specific 2                 | 3.6 |
|    | 441235 | AI884586  | Hs.135570 | Homo sapiens cDNA: FLJ21268 fis, clone C | 3.6 |
|    | 450236 | AW162998  | Hs.24684  | KIAA1376 protein                         | 3.6 |
|    | 425364 | AF052150  | Hs.155959 | Homo sapiens clone 24533 mRNA sequence   | 3.6 |
|    | 426775 | AA384564  | Hs.108829 | ESTs                                     | 3.6 |
|    | 414831 | M31158    | Hs.77439  | protein kinase, cAMP-dependent, regulato | 3.6 |
| 65 | 416876 | AW501916  | Hs.117897 | ESTs                                     | 3.6 |
|    | 400878 |           |           |  | 3.6 |
|    | 425153 | AW023193  | Hs.27046  | ESTs                                     | 3.6 |
|    | 432222 | AI204995  |           | gb:an03c03.x1 Stratagene schizo brain S1 | 3.5 |
|    | 415047 | F13142    |           | gb:HSC3JD031 normalized infant brain cDN | 3.5 |
|    | 401532 |           |           |  | 3.5 |
| 70 | 446495 | D60923    | Hs.153460 | ESTs                                     | 3.5 |
|    | 431325 | AW026751  | Hs.5794   | ESTs, Weakly similar to 2109260A B cell  | 3.5 |
|    | 445898 | AF070623  | Hs.13423  | Homo sapiens clone 24468 mRNA sequence   | 3.5 |
|    | 455901 | BE155527  |           | gb:PM1-HT0350-190400-013-b08 HT0350 Homo | 3.5 |
| 75 | 416421 | AA134006  | Hs.79306  | eukaryotic translation initiation factor | 3.5 |
|    | 455697 | BE067952  |           | gb:CM0-BT0365-061299-122-g09 BT0365 Homo | 3.5 |
|    | 405678 |           |           |  | 3.5 |
|    | 418207 | C14685    | Hs.34772  | ESTs                                     | 3.5 |
|    | 425383 | D63407    | Hs.156007 | Down syndrome critical region gene 1-lik | 3.5 |
| 80 | 417027 | AA192306  | Hs.23926  | triadin                                  | 3.5 |
|    | 408367 | AK001178  | Hs.44424  | homolog of rat orphan transporter v7-3   | 3.5 |
|    | 417702 | R09935    | Hs.191146 | ESTs                                     | 3.5 |
|    | 445687 | W80382    | Hs.149297 | ESTs                                     | 3.5 |
|    | 408776 | AA057365  | Hs.63356  | ESTs, Weakly similar to I38022 hypotheti | 3.5 |

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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
|    | 413164 | BE068494  |           | gb:MR1-BT0371-050500-009-a12 BT0371 Homo | 3.5 |
|    | 414593 | BE386764  |           | gb:601273249F1 NIH_MGC_20 Homo sapiens c | 3.5 |
|    | 453220 | AB033089  | Hs.32452  | Homo sapiens mRNA for KIAA1263 protein,  | 3.5 |
|    | 415621 | A1648602  | Hs.55468  | ESTs                                     | 3.5 |
| 5  | 454437 | A1248173  | Hs.191460 | hypothetical protein MGC12936            | 3.5 |
|    | 446066 | A1343931  | Hs.149383 | ESTs                                     | 3.5 |
|    | 423374 | AB037770  | Hs.127656 | KIAA1349 protein                         | 3.5 |
|    | 419347 | C15944    | Hs.90005  | superiorcervical ganglia, neural specifi | 3.5 |
| 10 | 418516 | NM_006218 | Hs.85701  | phosphoinositide-3-kinase, catalytic, al | 3.5 |
|    | 451776 | W45679    | Hs.169854 | hypothetical protein SP192               | 3.5 |
|    | 432305 | M62402    | Hs.274313 | insulin-like growth factor binding prote | 3.5 |
|    | 456995 | T89832    | Hs.170278 | ESTs                                     | 3.5 |
|    | 403323 |           |           | ESTs                                     | 3.5 |
| 15 | 425022 | M95724    | Hs.154207 | centromere protein C 1                   | 3.5 |
|    | 439394 | AA149250  | Hs.56105  | ESTs                                     | 3.4 |
|    | 433803 | A1823593  | Hs.27688  | ESTs                                     | 3.4 |
|    | 450715 | A1266484  | Hs.31570  | ESTs, Weakly similar to KIAA1324 protein | 3.4 |
|    | 411474 | AW848427  |           | gb:IL3-CT0214-150200-075-H10 CT0214 Homo | 3.4 |
| 20 | 415076 | NM_000857 | Hs.77890  | guanylate cyclase 1, soluble, beta 3     | 3.4 |
|    | 423826 | U20325    | Hs.1707   | cocaine- and amphetamine-regulated trans | 3.4 |
|    | 459495 | BE544158  |           | gb:601076707F1 NIH_MGC_12 Homo sapiens c | 3.4 |
|    | 427173 | BE255017  | Hs.97540  | ESTs                                     | 3.4 |
|    | 408112 | AW451982  | Hs.248613 | ESTs                                     | 3.4 |
|    | 446092 | N33522    | Hs.145894 | ESTs                                     | 3.4 |
| 25 | 416868 | A1656856  | Hs.292597 | ESTs                                     | 3.4 |
|    | 458234 | BE551408  | Hs.127195 | ESTs                                     | 3.4 |
|    | 419555 | AA244416  |           | gb:nc07d11.s1 NCL_CGAP_Pr1 Homo sapiens  | 3.4 |
|    | 414314 | BE312991  |           | gb:601150275F1 NIH_MGC_19 Homo sapiens c | 3.4 |
| 30 | 400425 | AY004252  | Hs.287385 | PR domain containing 12                  | 3.4 |
|    | 414366 | BE549143  |           | gb:601076456F1 NIH_MGC_12 Homo sapiens c | 3.4 |
|    | 434053 | AW445136  | Hs.134946 | ESTs                                     | 3.4 |
|    | 449997 | A1683052  | Hs.201577 | KIAA1829 protein                         | 3.4 |
|    | 433461 | A1636047  | Hs.197623 | ESTs                                     | 3.4 |
| 35 | 428006 | AA418743  | Hs.98306  | KIAA1862 protein                         | 3.4 |
|    | 424695 | U58331    | Hs.151899 | sarcoglycan, delta (35kD dystrophin-asso | 3.4 |
|    | 443294 | A1733625  | Hs.133053 | ESTs                                     | 3.4 |
|    | 428212 | AW444451  | Hs.134812 | ESTs                                     | 3.4 |
|    | 457673 | AA551569  | Hs.272034 | hypothetical protein PRO2822             | 3.4 |
| 40 | 446390 | AA233393  | Hs.14992  | hypothetical protein FLJ11151            | 3.3 |
|    | 428536 | A1143139  | Hs.2288   | visinin-like 1                           | 3.3 |
|    | 426597 | AA382250  | Hs.145601 | ESTs                                     | 3.3 |
|    | 410366 | A1267589  | Hs.302689 | hypothetical protein                     | 3.3 |
|    | 458258 | AW406546  | Hs.127971 | ESTs                                     | 3.3 |
|    | 401738 |           |           |  | 3.3 |
| 45 | 409038 | T97490    | Hs.50002  | small inducible cytokine subfamily A (Cy | 3.3 |
|    | 425785 | T27017    | Hs.159528 | Homo sapiens clone 24400 mRNA sequence   | 3.3 |
|    | 433328 | AW298159  | Hs.23644  | ESTs, Weakly similar to S65824 reverse t | 3.3 |
|    | 414541 | BE293116  | Hs.76392  | aldehyde dehydrogenase 1 family, member  | 3.3 |
| 50 | 434998 | AW975157  | Hs.26037  | ESTs                                     | 3.3 |
|    | 456359 | A1967991  | Hs.93574  | homeo box D3                             | 3.3 |
|    | 426527 | NM_001037 | Hs.170238 | sodium channel, voltage-gated, type I, b | 3.3 |
|    | 454267 | AA437199  | Hs.656    | cell division cycle 25C                  | 3.3 |
|    | 400302 | N48056    | Hs.1915   | folate hydrolase (prostate-specific memb | 3.3 |
| 55 | 434077 | AF116659  | Hs.321151 | Homo sapiens PRO1412 mRNA, complete cds  | 3.3 |
|    | 436602 | A1793222  | Hs.166817 | ESTs                                     | 3.3 |
|    | 449204 | AB000099  | Hs.23251  | Down syndrome critical region gene 4     | 3.3 |
|    | 417935 | R53697    | Hs.170044 | ESTs                                     | 3.3 |
|    | 423310 | AA325225  | Hs.124023 | Homo sapiens cDNA FLJ14218 fis, clone NT | 3.3 |
| 60 | 436624 | T64297    | Hs.5241   | fatty acid binding protein 1, liver      | 3.3 |
|    | 453406 | A1192987  | Hs.61784  | hypothetical protein FLJ14451            | 3.3 |
|    | 420164 | AW339037  | Hs.24908  | ESTs                                     | 3.3 |
|    | 447826 | AW779317  | Hs.258556 | ESTs                                     | 3.3 |
|    | 419875 | AA853410  | Hs.93557  | proenkephalin                            | 3.3 |
|    | 444612 | AW138111  | Hs.22902  | ESTs                                     | 3.3 |
| 65 | 418504 | BE159718  | Hs.85335  | Homo sapiens mRNA; cDNA DKFZp564D1462 (f | 3.2 |
|    | 415242 | R45986    | Hs.295014 | ESTs                                     | 3.2 |
|    | 418188 | AW139413  | Hs.151880 | ESTs                                     | 3.2 |
|    | 430355 | NM_006219 | Hs.239818 | phosphoinositide-3-kinase, catalytic, be | 3.2 |
| 70 | 421640 | AW966652  |           | gb:EST378726 MAGE resequences, MAGI Homo | 3.2 |
|    | 432359 | AA076049  | Hs.274415 | Homo sapiens cDNA FLJ10229 fis, clone HE | 3.2 |
|    | 408806 | AW847814  | Hs.289005 | Homo sapiens cDNA: FLJ21532 fis, clone C | 3.2 |
|    | 400409 | AF153341  | Hs.283954 | Homo sapiens winged helix/forkhead trans | 3.2 |
|    | 446015 | T30968    | Hs.13531  | hypothetical protein FLJ10971            | 3.2 |
| 75 | 425495 | AA358454  | Hs.78026  | ESTs, Weakly similar to similar to ankyr | 3.2 |
|    | 403092 |           |           |  | 3.2 |
|    | 452971 | A1873878  | Hs.91789  | ESTs                                     | 3.2 |
|    | 454186 | BE141030  |           | gb:MR0-HT0067-201099-002-h11 HT0067 Homo | 3.2 |
|    | 401485 |           |           |  | 3.2 |
|    | 401949 |           |           |  | 3.2 |
| 80 | 457452 | AW972675  |           | gb:EST384766 MAGE resequences, MAGL Homo | 3.2 |
|    | 454100 | A1693231  | Hs.126043 | chromosome 21 open reading frame 51      | 3.2 |
|    | 448440 | AA173467  | Hs.62402  | p21/Cdc42/Rac1-activated kinase 1 (yeast | 3.2 |
|    | 421200 | AA264811  | Hs.264433 | ESTs                                     | 3.2 |

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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
|    | 430142 | NM_000437 | Hs.234392 | platelet-activating factor acetylhydrola | 3.2 |
|    | 433197 | AB040889  | Hs.281022 | KIAA1456 protein                         | 3.2 |
|    | 443509 | AV645470  |           | gb:AV645470 GLC Homo sapiens cDNA clone  | 3.2 |
| 5  | 440827 | AI733110  | Hs.128128 | ESTs                                     | 3.2 |
|    | 432799 | NM_016161 | Hs.278950 | alpha-1,4-N-acetylglucosaminyltransferas | 3.2 |
|    | 409257 | AW370362  |           | gb:RC1-BT0255-181099-012-d07 BT0255 Homo | 3.2 |
|    | 459235 | BE246010  | Hs.271468 | Homo sapiens mRNA for FLJ000038 protein, | 3.2 |
|    | 416789 | AA223439  | Hs.79933  | cyclin I                                 | 3.2 |
| 10 | 429809 | AL162010  | Hs.223603 | Homo sapiens mRNA; cDNA DKFZp761D09121 ( | 3.2 |
|    | 420156 | AW449258  | Hs.6187   | ESTs                                     | 3.2 |
|    | 455577 | BE006341  |           | gb:RC2-BN0127-240300-011-b05 BN0127 Homo | 3.2 |
|    | 400617 | AF151064  | Hs.36069  | hypothetical protein                     | 3.2 |
|    | 437129 | ALD49327  | Hs.302057 | Homo sapiens mRNA; cDNA DKFZp564E016 (fr | 3.2 |
| 15 | 451820 | AW058357  | Hs.337353 | ESTs                                     | 3.2 |
|    | 457535 | AA609685  | Hs.278672 | membrane component, chromosome 11, surfa | 3.2 |
|    | 419956 | AL137939  | Hs.40096  | ESTs                                     | 3.1 |
|    | 456235 | AA203637  |           | gb:zx58b12.r1 Soares_fetal_liver_spleen_ | 3.1 |
|    | 423930 | AA332697  | Hs.42721  | ESTs                                     | 3.1 |
|    | 403796 |           |           |  | 3.1 |
| 20 | 414085 | AA114016  | Hs.75746  | aldehyde dehydrogenase 1 family, member  | 3.1 |
|    | 445886 | AI793176  | Hs.145596 | ESTs                                     | 3.1 |
|    | 414401 | AI760159  | Hs.124833 | ESTs                                     | 3.1 |
|    | 441573 | BE563966  | Hs.6529   | ESTs, Weakly similar to I78885 serine/th | 3.1 |
| 25 | 450725 | R71389    | Hs.175951 | ESTs                                     | 3.1 |
|    | 458805 | AI282933  | Hs.23294  | hypothetical protein FLJ14393            | 3.1 |
|    | 417868 | AI078534  | Hs.122592 | ESTs                                     | 3.1 |
|    | 458391 | AI792628  | Hs.133273 | ESTs                                     | 3.1 |
|    | 423346 | AI267677  | Hs.127416 | synaptotjanin 1                          | 3.1 |
| 30 | 454486 | AW857077  |           | gb:RC1-CT0302-140300-016-f04 CT0302 Homo | 3.1 |
|    | 408341 | AW182952  | Hs.249957 | ESTs                                     | 3.1 |
|    | 410669 | AW805749  | Hs.318885 | superoxide dismutase 2, mitochondrial    | 3.1 |
|    | 404907 |           |           |  | 3.1 |
|    | 434910 | AI333863  | Hs.215474 | ESTs, Moderately similar to alternatvel  | 3.1 |
| 35 | 436990 | AI149729  | Hs.120557 | ESTs                                     | 3.1 |
|    | 441921 | AI733376  | Hs.164478 | hypothetical protein FLJ21939 similar to | 3.1 |
|    | 454673 | AW812807  |           | gb:RC3-ST0186-070100-016-c04 ST0186 Homo | 3.1 |
|    | 429470 | AI878901  | Hs.203862 | guanine nucleotide binding protein (G pr | 3.1 |
|    | 404345 | AA730407  | Hs.159156 | protocadherin 11                         | 3.1 |
| 40 | 408217 | AI433201  | Hs.279860 | tumor protein, translationally-controlle | 3.1 |
|    | 417313 | AA195602  |           | gb:zr32f09.r1 Soares_NhHMPu_S1 Homo sapi | 3.1 |
|    | 427322 | AK002017  | Hs.176227 | hypothetical protein FLJ11155            | 3.1 |
|    | 411003 | AA181018  | Hs.13056  | hypothetical protein FLJ13920            | 3.1 |
|    | 425339 | AA936330  | Hs.198113 | ESTs                                     | 3.1 |
| 45 | 426716 | NM_006379 | Hs.171921 | sema domain, immunoglobulin domain (Ig), | 3.1 |
|    | 449078 | AK001256  | Hs.22975  | KIAA1576 protein                         | 3.1 |
|    | 429608 | U49250    | Hs.210862 | T-box, brain, 1                          | 3.1 |
|    | 442308 | AA989402  | Hs.111    | fibroblast growth factor 9 (glia-activat | 3.1 |
|    | 428465 | AW970976  | Hs.293653 | ESTs                                     | 3.1 |
| 50 | 411666 | AF106564  | Hs.71346  | neurofilament 3 (150kD medium)           | 3.1 |
|    | 447965 | AW292577  | Hs.94445  | ESTs                                     | 3.1 |
|    | 413918 | AW015898  | Hs.71245  | ESTs                                     | 3.1 |
|    | 419682 | HI3139    | Hs.92282  | paired-like homeodomain transcription fa | 3.1 |
|    | 425810 | AI923627  | Hs.31903  | ESTs                                     | 3.1 |
| 55 | 427865 | AA416931  | Hs.126065 | ESTs                                     | 3.1 |
|    | 429060 | AW139155  | Hs.194995 | hypothetical protein DKFZp434O0320       | 3.1 |
|    | 430708 | U78308    | Hs.278485 | olfactory receptor, family 1, subfamily  | 3.1 |
|    | 448084 | AI467800  | Hs.271000 | ESTs, Weakly similar to I38022 hypotheti | 3.1 |
|    | 454506 | AW847346  |           | gb:RC0-CT0205-240999-021-e01 CT0205 Homo | 3.1 |
| 60 | 414629 | AA345824  | Hs.76688  | carboxylesterase 1 (monocyte/macrophage  | 3.0 |
|    | 422963 | M79141    | Hs.13234  | ESTs                                     | 3.0 |
|    | 417696 | BE241624  | Hs.82401  | CD69 antigen (p60, early T-cell activati | 3.0 |
|    | 448175 | BE296174  | Hs.225160 | hypothetical protein FLJ13102            | 3.0 |
|    | 414686 | BE409757  | Hs.23189  | ESTs, Moderately similar to TBB2_HUMAN T | 3.0 |
| 65 | 458360 | AI027207  | Hs.132253 | ESTs                                     | 3.0 |
|    | 451829 | AW964081  | Hs.247377 | ESTs                                     | 3.0 |
|    | 445179 | AI949743  | Hs.224768 | ESTs                                     | 3.0 |
|    | 433090 | AI720050  | Hs.145362 | immortalization-upregulated protein      | 3.0 |
|    | 432018 | AA524447  | Hs.152377 | ESTs                                     | 3.0 |
| 70 | 407988 | N47760    | Hs.285107 | hypothetical protein FLJ13397            | 3.0 |
|    | 405911 |           |           |  | 3.0 |
|    | 418808 | AI821836  | Hs.10359  | ESTs                                     | 3.0 |
|    | 431900 | AW972048  | Hs.192534 | ESTs                                     | 3.0 |
|    | 452893 | HI8017    | Hs.22869  | ESTs, Moderately similar to KIAA1395 pro | 3.0 |
| 75 | 423952 | AW877787  | Hs.136102 | KIAA0853 protein                         | 3.0 |
|    | 412000 | AW576555  | Hs.15780  | ATP-binding cassette, sub-family A (ABC1 | 3.0 |
|    | 405793 |           |           |  | 3.0 |
|    | 410711 | AB002316  | Hs.65746  | KIAA0318 protein                         | 3.0 |
|    | 411279 | AW884776  |           | gb:QV4-OT0067-010300-121-d01 OT0067 Homo | 3.0 |
| 80 | 423957 | AW978309  | Hs.136235 | Homo sapiens cDNA FLJ13542 fis, clone PL | 3.0 |
|    | 427071 | AA397958  | Hs.192719 | ESTs                                     | 3.0 |
|    | 434961 | AW974956  |           | gb:EST387061 MAGE resequences, MAGN Homo | 3.0 |

TABLE 10B:

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Pkey: Unique Eos probeset identifier number  
 CAT number: Gene cluster number  
 Accession: Genbank accession numbers

|    |        |            |  |
|----|--------|------------|--|
| 5  | Pkey   | CAT Number | Accession  |
|    | 409257 | 1112994_1  | AW370362 AW809101  |
|    | 409840 | 1156071_1  | AW502122 AW502125 AW501663 AW501720  |
|    | 411052 | 1230374_1  | AW814950 R98513 H69459 BE175242 H54583   |
| 10 | 411279 | 1237516_1  | AW884776 AW935737 AW835261 AW835247 AW835246 AW835263 AW835240 AW835258  |
|    | 411474 | 1247047_2  | AW848427 AW848890 AW848159 AW848118 AW848634 AW848285 AW848086 AW848485 AW848283 AW848162                            |
|    | 411607 | 1251251_1  | AW853498 AW853442 AW853590 AW853433 AW853592   |
|    | 411772 | 1257386_1  | BE170301 AW861539 AW904851 BE154336 BE154090 BE154275  |
|    | 412112 | 1277883_1  | BE180342 BE180347 AW901900 BE180222 BE180218 BE180226 BE180413 BE180416 AW901899 BE180228 AW901897 BE180224 AW901898 |
| 15 |        |            | BE180223 BE180219 BE180346 BE180343 BE180418 BE180225 BE180221 BE180341 AW901894 BE180217 BE180227 AW901891 BE180345 |
|    | 413164 | 1351422_1  | AW893614 AW893615 H85799 H83501 BE180220   |
| 20 |        |            | BE068494 BE068414 BE068332 BE068347 BE068706 BE068623 BE068450 BE068480 BE068350 BE068295 BE068498 BE068765 BE068328 |
|    |        |            | BE068778 BE068671 BE068526 BE068493 BE068433 BE068740 BE068306 BE068631 BE068580 BE068445 BE068567 BE068521 BE068549 |
|    |        |            | BE068392 BE068307 BE068692 BE068473 BE068754 BE068476 BE068685 BE068626 BE068591 BE068745 BE068434 BE068759 BE068628 |
|    |        |            | BE068723 BE068529 BE068689 BE068383 BE068422 BE068470 BE068522 BE068618 BE068354 BE068748 BE068683 BE068303 BE068602 |
|    |        |            | BE068739 BE068374 BE068302 BE068625 BE068596 BE068663 BE068429 BE068605 BE068693 BE068672 BE068401 BE068579 BE068329 |
|    |        |            | BE068390 BE068419 BE068393 BE068447 BE068675 BE068311 BE068540 BE068301 BE068543 BE068719 BE068369 BE068324 BE068588 |
|    |        |            | BE068568 BE068317 BE068384 BE068547 BE068674 BE068436 BE068321 BE068361 BE068676 BE068499 BE068299 BE068352 BE068410 |
|    |        |            | BE068293 BE068418 BE068552 BE068598 BE068327 BE068550 BE068712 BE068661 BE068733 BE068525 BE068752 BE068357 BE068330 |
|    |        |            | BE068565 BE068538 BE068340 BE068537 BE068761 BE068632 BE068758   |
| 25 | 413493 | 1373555_1  | BE144444 BE144430  |
|    | 413510 | 1374377_1  | F13044 T77009 BE145525 BE145493  |
|    | 413544 | 1375671_1  | BE147225 BE147205 BE147234   |
|    | 414220 | 1426940_1  | BE298094 BE267860  |
|    | 414314 | 1435028_1  | BE312991 BE272945  |
| 30 | 414366 | 1438636_1  | BE549143 BE390613 BE277344   |
|    | 414456 | 1447655_1  | H74314 BE299593  |
|    | 414593 | 1464909_1  | BE386764 BE387560  |
|    | 414630 | 1468083_1  | BE410857 BE390605  |
|    | 415047 | 1517450_1  | F13142 Z42926 F06135 F06147 H08517 D51360 T75341   |
| 35 | 417313 | 166644_1   | AA195602 W01148 N40632   |
|    | 417888 | 1706092_1  | R23053 R79884 R76271   |
|    | 419555 | 185884_1   | AA244416 AA244401  |
|    | 421249 | 200649_1   | AA285362 AW752386 AW847156 AA285373 AW879575 AW879558  |
| 40 | 421640 | 204833_1   | AW966652 AW966653 AA294989 AA385977  |
|    | 421813 | 207654_1   | BE048255 AA313083 AA298419   |
|    | 422760 | 221034_1   | BE409561 BE162756 AW732798   |
|    | 425526 | 252776_1   | AA359933 AA358889 AW955306 AW962995 AW837746 AW837755 AW837697   |
|    | 430212 | 314437_1   | AA469153 AI718503 AA469225   |
|    | 432222 | 343347_1   | AI204995 AW827539 AW969908 AW440776 AA528756   |
| 45 | 433389 | 36497_1    | AF038171 Z43209 F07347   |
|    | 434961 | 396357_1   | AW974956 AA781075 AA654944   |
|    | 435752 | 41050_1    | AF230801 AF230800 AA401795 AA398260  |
|    | 437483 | 43756_1    | AL390174 AW898817  |
| 50 | 440198 | 48824_-2   | BE560093   |
|    | 443509 | 57199_1    | AV645470 T84636 T82805   |
|    | 446052 | 65988_1    | AA358760 AA158850 AW062737 AW062738 AV656291   |
|    | 446218 | 66686_1    | AV657159 BE145509 BE145512 BE145505 BE145507   |
|    | 447135 | 70963_1    | T58148 AW516579 AW059603   |
|    | 452346 | 912206_1   | BE243534 BE243752 AI880228 L44326  |
| 55 | 452502 | 919733_1   | AI904296 BE007223 R30687   |
|    | 454065 | 998401_1   | BE394588 AW024754 BE183166 BE183167  |
|    | 454186 | 1049791_1  | BE141030 BE141474 BE141457 BE141753 BE141024 BE141761 AW177583 AW177579 AW177582 AW177581 AW177587 AW807582 AW177581 |
|    |        |            | BE141477 BE141520 BE141456 BE141492 BE141028 BE141775 BE141489 BE141751 AW177599 BE141750 AW177597 BE141512 BE141450 |
|    |        |            | BE141749 AW177598  |
| 60 | 454339 | 1122972_1  | AW381980 BE152244 BE152235 BE152238 BE152232   |
|    | 454486 | 1215703_1  | AW857077 AW861268 AW847383 AW795787  |
|    | 454506 | 1219857_1  | AW847346 AW847395 AW847408 AW847385 AW847342 AW847396 AW847339 AW801718 AW801787                                     |
|    | 454673 | 1228669_1  | AW812807 AW812815 AW812802   |
|    | 455040 | 1250028_1  | AW852286 AW851934 AW852096 AW852274  |
| 65 | 455225 | 1262318_1  | AW996689 AW996380 AW996453 BE085650 AW868687 BE085595  |
|    | 455577 | 1333898_1  | BE006341 BE006307 BE006311   |
|    | 455617 | 1345117_1  | BE078070 BE061030 BE077927   |
|    | 455697 | 1351148_1  | BE067952 BE067945 BE067942 BE067943 BE067949 BE067954 BE067944 BE067953 BE067956 BE067946                            |
|    | 455901 | 1381569_1  | BE155527 BE155503 BE155188 BE155126  |
| 70 | 456235 | 168686_1   | AA203637 AA832266 H67452   |
|    | 456407 | 184986_1   | AW968614 AA243209 AA281411   |
|    | 457452 | 339381_1   | AW972675 AA541366 AA523039   |
|    | 459150 | 919196_1   | BE155356 BE153488 BE153461 BE155059 BE155210 BE155413 BE153577 BE153688 BE155063 BE155347 AI903640 BE155492          |

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TABLE 10C:

Pkey: Unique number corresponding to an Eos probeset  
 Ref: Sequence source. The 7 digit numbers in this column are Genbank identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.

80

Strand: Indicates DNA strand from which exons were predicted.  
 Nt\_position: Indicates nucleotide positions of predicted exons.

| Pkey   | Ref     | Strand | Nt_position |
|--------|---------|--------|-------------|
| 400661 | 8118474 | Plus   | 84912-85187 |

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|    |        |         |       |   |
|----|--------|---------|-------|---|
| 5  | 400685 | 8118768 | Minus | 72969-73050,73713-73800   |
|    | 400865 | 1945037 | Minus | 44482-45526   |
|    | 400878 | 9864757 | Plus  | 31493-32842   |
|    | 401024 | 8117489 | Plus  | 60551-60802   |
|    | 401315 | 9212516 | Minus | 198960-199619   |
|    | 401485 | 7341723 | Plus  | 68009-68209,68841-69077   |
|    | 401521 | 7705251 | Plus  | 9127-9234   |
|    | 401532 | 7798785 | Plus  | 124414-124950,125050-125418   |
| 10 | 401738 | 2982169 | Minus | 41547-41757   |
|    | 401780 | 7249190 | Minus | 28397-28617,28920-29045,29135-29296,29411-29567,29705-29787,30224-30573 |
|    | 401836 | 7534063 | Plus  | 71981-72084   |
|    | 401949 | 3492889 | Plus  | 160728-161660   |
|    | 402092 | 7249154 | Minus | 107533-108094   |
|    | 402176 | 7543687 | Minus | 10-750  |
| 15 | 402546 | 7637348 | Plus  | 24673-25170   |
|    | 403092 | 8954241 | Plus  | 174720-175016,175104-175406,175508-175813                               |
|    | 403180 | 7523976 | Minus | 63603-63759   |
|    | 403323 | 8348082 | Minus | 120366-120845   |
|    | 403796 | 8099896 | Minus | 75073-77664   |
| 20 | 404391 | 3135305 | Minus | 26030-26173,27852-27997   |
|    | 404769 | 8099713 | Minus | 175801-176823   |
|    | 404793 | 7232206 | Minus | 61087-61590   |
|    | 404828 | 6580415 | Minus | 26291-27253   |
| 25 | 404907 | 7331453 | Minus | 102880-103828   |
|    | 404958 | 7407941 | Minus | 2731-4531   |
|    | 405071 | 7708797 | Minus | 11115-11552   |
|    | 405130 | 8516045 | Plus  | 150235-150449   |
|    | 405138 | 8576241 | Plus  | 90303-90516   |
| 30 | 405354 | 2642452 | Plus  | 52213-53089   |
|    | 405377 | 5649375 | Plus  | 216656-216848   |
|    | 405629 | 4508116 | Minus | 101678-101866   |
|    | 405678 | 4079670 | Plus  | 151821-152027   |
|    | 405793 | 1405887 | Minus | 89197-89453   |
| 35 | 405800 | 2791346 | Plus  | 19271-19813   |
|    | 405867 | 6758731 | Minus | 74553-75173   |
|    | 405911 | 6758795 | Plus  | 101008-101643   |
|    | 405977 | 8247789 | Minus | 135548-136177   |

|    |   |  |  |  |  |
|----|---|--|--|--|--|
| 40 | TABLE 11A: ABOUT 533 CNS-ENRICHED GENES SIGNIFICANTLY DOWN-REGULATED IN GLIOBLASTOMA COMPARED TO NORMAL ADULT CNS TISSUES   |  |  |  |  |
|    | Table 11A lists about 533 CNS-enriched genes significantly down-regulated in glioblastoma compared to normal adult CNS tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" normal CNS to "average" glioblastoma was greater than or equal to 2. The "average" normal CNS level was set to the 75th percentile amongst various normal CNS tissues. The "average" glioblastoma level was set to the 85th percentile amongst various tumor samples. To enrich for CNS specific genes, the ratio of "average" CNS to "average" non-CNS normal adult tissues was calculated to be greater than or equal to 2. The "average" CNS level was set to the 85th percentile amongst various CNS tissues. The "average" normal non-CNS adult tissue level was set to the 85th percentile amongst various non-CNS normal tissues. In order to remove gene-specific background levels of non-specific hybridization, the 10th percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratios were evaluated. |  |  |  |  |
| 45 | Pkey: Unique Eos probeset identifier number   |  |  |  |  |
|    | ExAccn: Exemplar Accession number, Genbank accession number   |  |  |  |  |
| 50 | UnigeneID: Unigene number   |  |  |  |  |
|    | Unigene Title: Unigene gene title   |  |  |  |  |
|    | R1: Ratio of 75th percentile normal central nervous system tissue to 85th percentile tumor  |  |  |  |  |
|    | R2: Ratio of 85th percentile central nervous system tissue to 85th percentile normal body tissue  |  |  |  |  |

|    |        |           |           |   |      |      |
|----|--------|-----------|-----------|---|------|------|
| 55 | Pkey   | ExAccn    | UnigeneID | Unigene Title                             | R1   | R2   |
|    | 417275 | X63578    | Hs.295449 | parvalbumin                               | 29.0 | 30.0 |
|    | 430829 | AW451999  | Hs.194024 | ESTs                                      | 25.7 | 6.2  |
|    | 410657 | AF063228  | Hs.65248  | dynein, cytoplasmic, intermediate polype  | 22.6 | 25.8 |
|    | 419954 | D14720    | Hs.93883  | myelin protein zero (Charcot-Marie-Tooth) | 21.2 | 30.3 |
| 60 | 416133 | NM_001683 | Hs.89512  | ATPase, Ca++ transporting, plasma membra  | 15.5 | 16.8 |
|    | 416018 | AW138239  | Hs.78977  | proprotein convertase subtilisin/kexin t  | 15.2 | 18.0 |
|    | 417167 | AW206437  | Hs.4290   | ESTs                                      | 14.8 | 17.7 |
|    | 433940 | H05129    | Hs.7459   | cyclic AMP-regulated phosphoprotein, 21   | 13.4 | 18.1 |
|    | 413324 | V00571    | Hs.75294  | corticotropin releasing hormone           | 13.1 | 18.0 |
| 65 | 439830 | AA846666  | Hs.151489 | ESTs, Weakly similar to XE7_HUMAN PROTEI  | 12.6 | 16.5 |
|    | 408068 | AW148652  | Hs.167398 | ESTs                                      | 12.6 | 16.9 |
|    | 429096 | AB011106  | Hs.196012 | KIAA0534 protein                          | 12.2 | 21.1 |
|    | 412638 | AA910199  | Hs.203838 | ESTs                                      | 12.2 | 16.0 |
|    | 442593 | R39804    | Hs.31961  | ESTs                                      | 10.8 | 15.0 |
| 70 | 446353 | A1290919  | Hs.153661 | ESTs                                      | 10.4 | 13.2 |
|    | 426365 | AA376667  | Hs.10283  | RNA binding motif protein 8B              | 10.0 | 5.9  |
|    | 414937 | R38698    | Hs.12382  | ESTs                                      | 10.0 | 10.8 |
|    | 419643 | F06066    | Hs.91791  | chromosome 11 open reading frame 25       | 9.5  | 10.9 |
|    | 412454 | R55745    | Hs.167330 | ESTs                                      | 9.5  | 14.1 |
| 75 | 439366 | AF100143  | Hs.6540   | fibroblast growth factor 13               | 9.4  | 12.3 |
|    | 441790 | AW294909  | Hs.132208 | ESTs                                      | 9.2  | 3.2  |
|    | 448117 | H49129    | Hs.172982 | ESTs                                      | 9.1  | 12.8 |
|    | 433558 | AA833757  | Hs.201769 | ESTs, Weakly similar to T24435 hypothei   | 9.0  | 14.7 |
|    | 412453 | R20205    | Hs.167330 | ESTs                                      | 9.0  | 13.7 |
| 80 | 408920 | AL120071  | Hs.48998  | fibronectin leucine rich transmembrane p  | 8.9  | 17.3 |
|    | 409031 | AA376836  | Hs.76728  | ESTs                                      | 8.7  | 8.6  |
|    | 446544 | AI631932  | Hs.7047   | ESTs, Weakly similar to Unknown [H.sapie  | 8.2  | 20.0 |
|    | 439480 | AL038511  | Hs.125316 | ESTs, Weakly similar to S33990 finger pr  | 8.2  | 8.3  |

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|    |        |           |           |  |     |      |
|----|--------|-----------|-----------|--|-----|------|
|    | 410200 | AA082557  | Hs.101915 | Stargardt disease 3 (autosomal dominant) | 8.0 | 8.9  |
|    | 408428 | NM_014787 | Hs.44896  | DnaJ (Hsp40) homolog, subfamily B, membe | 7.9 | 9.6  |
|    | 437073 | AI885608  | Hs.94122  | ESTs                                     | 7.9 | 11.3 |
| 5  | 408434 | AW195317  | Hs.107716 | hypothetical protein FLJ22344            | 7.9 | 16.4 |
|    | 440209 | H05049    | Hs.22269  | neurexin 3                               | 7.8 | 34.3 |
|    | 408119 | W26213    | Hs.101672 | ESTs, Weakly similar to T00331 hypotheti | 7.8 | 9.0  |
|    | 429611 | AI889077  | Hs.211388 | Homo sapiens BAC clone CTB-60N22 from 7q | 7.7 | 5.0  |
|    | 423440 | R25234    | Hs.143434 | contactin 1                              | 7.7 | 9.9  |
| 10 | 445148 | AI214510  | Hs.146304 | ESTs                                     | 7.6 | 9.1  |
|    | 416294 | D86980    | Hs.79170  | KIAA0227 protein                         | 7.6 | 7.6  |
|    | 424087 | N69333    | Hs.143434 | contactin 1                              | 7.6 | 10.3 |
|    | 437479 | R61866    | Hs.101277 | ESTs                                     | 7.5 | 9.3  |
|    | 430573 | AA744550  | Hs.136345 | ESTs                                     | 7.1 | 2.8  |
| 15 | 448958 | AB020651  | Hs.22653  | KIAA0844 protein                         | 7.1 | 10.4 |
|    | 419474 | AW968619  | Hs.155849 | ESTs                                     | 7.1 | 3.0  |
|    | 423605 | AF047825  | Hs.129887 | cadherin 19, type 2                      | 7.0 | 6.9  |
|    | 433098 | AW190593  | Hs.151143 | ESTs                                     | 7.0 | 9.2  |
|    | 449511 | AI436187  | Hs.296251 | guanine nucleotide binding protein (G pr | 6.9 | 3.1  |
| 20 | 428414 | AL049980  | Hs.184216 | DKFZP564C152 protein                     | 6.8 | 5.0  |
|    | 443155 | R54485    | Hs.23772  | ESTs                                     | 6.8 | 3.5  |
|    | 450561 | R49674    | Hs.25909  | ESTs                                     | 6.8 | 8.1  |
|    | 433068 | NM_006456 | Hs.288215 | sialyltransferase                        | 6.8 | 2.0  |
|    | 423589 | AA328082  | Hs.209569 | ESTs                                     | 6.6 | 10.5 |
| 25 | 415681 | FI379882  | Hs.72630  | ESTs                                     | 6.5 | 9.0  |
|    | 413510 | F13044    |           | gb:HSC3HH101 normalized infant brain cDN | 6.4 | 7.1  |
|    | 427992 | Y15014    | Hs.181353 | UDP-Gal:betaGlcNAc beta 1,3-galactosyltr | 6.4 | 9.5  |
|    | 450642 | R39773    | Hs.7130   | copine IV                                | 6.4 | 5.7  |
|    | 429322 | D86984    | Hs.199243 | KIAA0231 protein                         | 6.4 | 8.2  |
| 30 | 447482 | AB033059  | Hs.18705  | KIAA1233 protein                         | 6.4 | 2.3  |
|    | 446129 | AW244073  | Hs.145946 | ESTs                                     | 6.3 | 8.3  |
|    | 421913 | AI934365  | Hs.109439 | osteoglycin (osteoinductive factor, mime | 6.3 | 2.1  |
|    | 434273 | AA913143  | Hs.26303  | ESTs                                     | 6.2 | 10.3 |
|    | 408480 | AI350337  | Hs.164568 | fibroblast growth factor 7 (keratinocyte | 6.2 | 3.5  |
| 35 | 451301 | AI769514  | Hs.209890 | EST                                      | 6.2 | 12.4 |
|    | 438356 | AA805530  | Hs.48527  | ESTs                                     | 6.2 | 8.1  |
|    | 426388 | AW081394  | Hs.97103  | ESTs                                     | 6.2 | 8.6  |
|    | 452502 | AI904296  |           | gb:PM-BT046-220199-286_1 BT046 Homo sapi | 6.1 | 2.8  |
| 40 | 408165 | AL137573  | Hs.43143  | Homo sapiens mRNA; cDNA DKFZp564A2463 (f | 6.1 | 6.3  |
|    | 442979 | AW440782  | Hs.174743 | ESTs                                     | 6.1 | 6.3  |
|    | 408713 | NM_001248 | Hs.47042  | ectonucleoside triphosphate diphosphohyd | 6.0 | 3.8  |
|    | 430004 | U27768    | Hs.227571 | regulator of G-protein signalling 4      | 5.9 | 21.4 |
|    | 425087 | R62424    | Hs.126059 | ESTs                                     | 5.9 | 8.1  |
|    | 441695 | T12411    | Hs.183745 | hypothetical protein FLJ13456            | 5.9 | 3.1  |
| 45 | 417175 | R44558    | Hs.94002  | ESTs                                     | 5.8 | 12.5 |
|    | 437483 | AL390174  |           | gb:Homo sapiens mRNA; cDNA DKFZp547J184  | 5.8 | 2.2  |
|    | 436427 | AI344378  | Hs.143399 | ESTs                                     | 5.8 | 13.8 |
|    | 450382 | AA397658  | Hs.60257  | Homo sapiens cDNA FLJ13598 fis, clone PL | 5.7 | 4.4  |
|    | 408478 | NM_000906 | Hs.45740  | gamma-aminobutyric acid (GABA) A recepto | 5.7 | 12.5 |
| 50 | 442676 | AI733585  | Hs.130897 | ESTs                                     | 5.7 | 6.8  |
|    | 446443 | AV659082  | Hs.134228 | ESTs                                     | 5.7 | 6.4  |
|    | 459080 | AW192083  | Hs.290855 | ESTs                                     | 5.6 | 15.6 |
|    | 431984 | AL080239  | Hs.272284 | Human DNA sequence from clone GS1-256022 | 5.6 | 8.2  |
|    | 428356 | AL046991  | Hs.10338  | ESTs                                     | 5.6 | 6.2  |
| 55 | 417877 | AI025829  | Hs.86320  | ESTs                                     | 5.4 | 4.9  |
|    | 429290 | AF203032  | Hs.198760 | neurofilament, heavy polypeptide (200kD) | 5.3 | 13.1 |
|    | 408556 | U49516    | Hs.46362  | 5-hydroxytryptamine (serotonin) receptor | 5.3 | 6.6  |
|    | 431930 | AB035301  | Hs.272211 | cadherin 7, type 2                       | 5.2 | 6.0  |
|    | 438285 | AA782845  | Hs.22790  | ESTs                                     | 5.2 | 7.3  |
| 60 | 439901 | N73885    | Hs.124169 | ESTs                                     | 5.2 | 2.7  |
|    | 449222 | AW293984  | Hs.197621 | ESTs                                     | 5.2 | 8.1  |
|    | 408016 | AW136827  | Hs.256096 | ESTs                                     | 5.1 | 2.5  |
|    | 436953 | AW959074  | Hs.23648  | Homo sapiens cDNA FLJ13097 fis, clone NT | 5.1 | 3.0  |
|    | 436773 | AW078629  | Hs.82110  | PC4 and SFRS1 interacting protein 1      | 5.1 | 7.3  |
| 65 | 409263 | AA069573  | Hs.50319  | ESTs                                     | 5.1 | 12.9 |
|    | 453830 | AA534296  | Hs.20953  | ESTs                                     | 5.1 | 3.4  |
|    | 441535 | AL135735  | Hs.7885   | phosphatidylinositol binding clathrin as | 5.0 | 4.8  |
|    | 416490 | AF090116  | Hs.79348  | regulator of G-protein signalling 7      | 5.0 | 20.1 |
|    | 417284 | N62889    | Hs.107242 | Homo sapiens cDNA FLJ12965 fis, clone NT | 5.0 | 3.9  |
| 70 | 448605 | AL109678  | Hs.21597  | Homo sapiens mRNA full length insert cDN | 5.0 | 6.1  |
|    | 442240 | AI791883  | Hs.292719 | ESTs                                     | 4.9 | 6.7  |
|    | 427972 | AA864870  | Hs.181304 | putative gene product                    | 4.9 | 5.2  |
|    | 416040 | AW819158  | Hs.289044 | Homo sapiens cDNA FLJ12048 fis, clone HE | 4.9 | 2.8  |
|    | 444922 | AI921750  | Hs.144871 | Homo sapiens cDNA FLJ13752 fis, clone PL | 4.8 | 3.7  |
|    | 408936 | AL138043  | Hs.293549 | ESTs                                     | 4.8 | 6.6  |
| 75 | 414943 | D80647    | Hs.124193 | ESTs                                     | 4.8 | 3.1  |
|    | 429254 | H10133    | Hs.91846  | hypothetical protein DKFZp761C121        | 4.8 | 2.3  |
|    | 407906 | AA369665  | Hs.41185  | Homo sapiens mRNA; cDNA DKFZp564O1262 (f | 4.8 | 9.1  |
|    | 416577 | BE063207  | Hs.79381  | grancalcin                               | 4.7 | 2.2  |
| 80 | 420480 | AL137351  | Hs.98173  | hypothetical protein                     | 4.7 | 2.8  |
|    | 404793 |           |           |  | 4.6 | 2.2  |
|    | 430895 | U66581    | Hs.248121 | G protein-coupled receptor 22            | 4.6 | 7.4  |
|    | 438571 | AW020775  | Hs.56022  | ESTs                                     | 4.6 | 5.4  |
|    | 444585 | AW170015  | Hs.6594   | ESTs                                     | 4.6 | 6.0  |

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|    |        |           |           |  |     |      |
|----|--------|-----------|-----------|--|-----|------|
| 5  | 414272 | AI651603  | Hs.46988  | ESTs                                     | 4.5 | 2.2  |
|    | 414599 | AI815523  | Hs.76930  | synuclein, alpha (non A4 component of am | 4.5 | 30.9 |
|    | 423449 | AI97900   | Hs.33067  | ESTs                                     | 4.5 | 20.8 |
|    | 433521 | T66087    | Hs.112482 | Homo sapiens unknown mRNA sequence       | 4.4 | 2.0  |
|    | 429876 | AB028977  | Hs.225974 | KIAA1054 protein                         | 4.4 | 19.2 |
| 10 | 429726 | AW628326  | Hs.27151  | ESTs                                     | 4.4 | 10.2 |
|    | 449093 | AB035356  | Hs.22998  | neurexin 1                               | 4.4 | 9.4  |
|    | 415716 | N59294    | Hs.179662 | nucleosome assembly protein 1-like 1     | 4.4 | 15.1 |
|    | 419656 | AB002314  | Hs.92025  | KIAA0316 gene product                    | 4.4 | 8.2  |
|    | 425864 | U56420    | Hs.159903 | olfactory receptor, family 5, subfamily  | 4.4 | 2.4  |
| 15 | 435078 | AW518888  | Hs.40937  | ESTs                                     | 4.4 | 5.7  |
|    | 432712 | AB016247  | Hs.288031 | sterol-C5-desaturase (fungal ERG3, delta | 4.3 | 5.9  |
|    | 426867 | AA460967  | Hs.22668  | ESTs                                     | 4.3 | 6.0  |
|    | 412112 | BE180342  |           | gb:RC3-HT0622-130400-012-a07 HT0622 Homo | 4.3 | 3.2  |
|    | 410171 | H07892    | Hs.12431  | ESTs                                     | 4.3 | 5.3  |
| 20 | 442339 | BE299668  | Hs.227591 | ESTs, Weakly similar to 1901303A Leu zip | 4.2 | 5.0  |
|    | 421249 | AA285362  |           | gb:HTH277 HTCDL1 Homo sapiens cDNA 5/3'  | 4.2 | 3.5  |
|    | 422528 | AB011182  | Hs.118087 | KIAA0610 protein                         | 4.2 | 3.9  |
|    | 434460 | AA478486  | Hs.3852   | KIAA0368 protein                         | 4.1 | 8.3  |
|    | 410362 | H04811    | Hs.93164  | proprotein convertase subtilisin/kexin t | 4.1 | 7.0  |
| 25 | 449754 | H00820    | Hs.30977  | ESTs, Weakly similar to B34087 hypotheti | 4.1 | 3.9  |
|    | 408496 | AI683802  | Hs.136182 | ESTs                                     | 4.1 | 4.7  |
|    | 434101 | AA625205  | Hs.259599 | KIAA1622 protein                         | 4.1 | 6.3  |
|    | 430212 | AA469153  |           | gb:nc67f04.s1 NCI_CGAP_Pr1 Homo sapiens  | 4.0 | 2.5  |
|    | 453165 | S74727    | Hs.32042  | aspartoacylase (aminoacylase 2, Canavan  | 4.0 | 7.4  |
| 30 | 456407 | AW968614  |           | gb:EST380690 MAGE resequences, MAGJ Homo | 4.0 | 5.1  |
|    | 441869 | NM_003947 | Hs.8004   | huntingtin-associated protein interactin | 4.0 | 32.3 |
|    | 429628 | H09604    | Hs.13268  | ESTs                                     | 4.0 | 4.5  |
|    | 410087 | F12079    | Hs.332579 | ESTs                                     | 4.0 | 6.9  |
|    | 419910 | AA662913  | Hs.190173 | ESTs, Weakly similar to A46010 X-linked  | 4.0 | 2.6  |
| 35 | 441005 | Z41305    | Hs.303172 | Homo sapiens mRNA; cDNA DKFZp547G133 (fr | 3.9 | 21.7 |
|    | 412677 | AW029608  | Hs.17384  | ESTs                                     | 3.9 | 2.2  |
|    | 453341 | AI758912  | Hs.295341 | adenylyl cyclase-associated protein 2    | 3.9 | 7.2  |
|    | 416854 | H40164    | Hs.80295  | Purkinje cell protein 4                  | 3.9 | 2.2  |
|    | 414666 | NM_004466 | Hs.76828  | glypican 5                               | 3.8 | 6.2  |
| 40 | 418217 | AI910647  | Hs.13442  | ESTs                                     | 3.8 | 3.2  |
|    | 421855 | F06504    | Hs.27384  | ESTs, Moderately similar to ALU4_HUMAN A | 3.8 | 2.2  |
|    | 414764 | AW013887  | Hs.72047  | ESTs                                     | 3.8 | 10.7 |
|    | 433629 | R13140    | Hs.13359  | ESTs                                     | 3.7 | 2.7  |
|    | 424738 | AI963740  | Hs.46826  | ESTs                                     | 3.7 | 2.1  |
| 45 | 407706 | AA191085  | Hs.26512  | ESTs, Moderately similar to S23650 retro | 3.7 | 5.3  |
|    | 437268 | AI754847  | Hs.227571 | regulator of G-protein signalling 4      | 3.7 | 53.7 |
|    | 423135 | N67655    | Hs.26411  | ESTs                                     | 3.7 | 21.7 |
|    | 446818 | AI342668  | Hs.279765 | ESTs                                     | 3.7 | 2.6  |
|    | 427562 | R56424    | Hs.26534  | ESTs                                     | 3.6 | 3.6  |
| 50 | 439274 | AF086092  | Hs.48372  | ESTs                                     | 3.6 | 34.5 |
|    | 452381 | H23329    | Hs.290880 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 3.6 | 6.0  |
|    | 422697 | AA679784  | Hs.4290   | ESTs                                     | 3.6 | 5.1  |
|    | 429656 | X05608    | Hs.211584 | neurofilament, light polypeptide (68kD)  | 3.6 | 24.6 |
|    | 417154 | AI674701  | Hs.21388  | ESTs                                     | 3.6 | 5.8  |
| 55 | 447176 | Z42549    | Hs.160893 | ESTs                                     | 3.6 | 6.4  |
|    | 405977 |           |           |  | 3.6 | 3.9  |
|    | 423568 | NM_005256 | Hs.129818 | growth arrest-specific 2                 | 3.6 | 2.5  |
|    | 441235 | AI884586  | Hs.135570 | Homo sapiens cDNA: FLJ21268 fis, clone C | 3.6 | 5.4  |
|    | 426775 | AA384564  | Hs.108829 | ESTs                                     | 3.6 | 3.4  |
| 60 | 414831 | M31158    | Hs.77439  | protein kinase, cAMP-dependent, regulato | 3.6 | 2.8  |
|    | 425153 | AW023193  | Hs.27046  | ESTs                                     | 3.6 | 4.9  |
|    | 446495 | D60923    | Hs.153460 | ESTs                                     | 3.5 | 9.8  |
|    | 445898 | AF070623  | Hs.13423  | Homo sapiens clone 24468 mRNA sequence   | 3.5 | 16.6 |
|    | 416421 | AA134006  | Hs.79306  | eukaryotic translation initiation factor | 3.5 | 5.0  |
| 65 | 418207 | C14685    | Hs.34772  | ESTs                                     | 3.5 | 16.0 |
|    | 425383 | D83407    | Hs.156007 | Down syndrome critical region gene 1-lik | 3.5 | 6.2  |
|    | 417027 | AA192306  | Hs.23926  | triadin                                  | 3.5 | 2.5  |
|    | 408367 | AK001178  | Hs.44424  | homolog of rat orphan transporter v7-3   | 3.5 | 5.3  |
|    | 408776 | AA057365  | Hs.63356  | ESTs, Weakly similar to I38022 hypotheti | 3.5 | 5.5  |
| 70 | 453220 | AB033089  | Hs.32452  | Homo sapiens mRNA for KIAA1263 protein,  | 3.5 | 23.6 |
|    | 419347 | C15944    | Hs.90005  | superiorcervical ganglia, neural specifi | 3.5 | 42.3 |
|    | 433803 | AI823593  | Hs.27688  | ESTs                                     | 3.4 | 3.6  |
|    | 450715 | AI266484  | Hs.31570  | ESTs, Weakly similar to KIAA1324 protein | 3.4 | 4.1  |
|    | 415076 | NM_000857 | Hs.77890  | guanylate cyclase 1, soluble, beta 3     | 3.4 | 9.8  |
| 75 | 423826 | U20325    | Hs.1707   | cocaine- and amphetamine-regulated trans | 3.4 | 4.7  |
|    | 427173 | BE255017  | Hs.97540  | ESTs                                     | 3.4 | 2.4  |
|    | 446092 | N33522    | Hs.145894 | ESTs                                     | 3.4 | 3.5  |
|    | 416868 | AI656856  | Hs.292597 | ESTs                                     | 3.4 | 4.5  |
|    | 458234 | BE551408  | Hs.127196 | ESTs                                     | 3.4 | 4.5  |
| 80 | 434053 | AW445136  | Hs.134946 | ESTs                                     | 3.4 | 3.9  |
|    | 428536 | AI143139  | Hs.2288   | visinin-like 1                           | 3.3 | 42.3 |
|    | 410366 | AI267589  | Hs.302689 | hypothetical protein                     | 3.3 | 14.4 |
|    | 425785 | T27017    | Hs.159528 | Homo sapiens clone 24400 mRNA sequence   | 3.3 | 4.6  |
|    | 434998 | AW975157  | Hs.26037  | ESTs                                     | 3.3 | 4.7  |
|    | 456359 | AI967991  | Hs.93574  | homeo box D3                             | 3.3 | 4.4  |
|    | 426527 | NM_001037 | Hs.170238 | sodium channel, voltage-gated, type I, b | 3.3 | 5.2  |
|    | 400302 | N48056    | Hs.1915   | folate hydrolase (prostate-specific memb | 3.3 | 9.0  |

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|    |        |           |           |   |     |      |
|----|--------|-----------|-----------|---|-----|------|
|    | 419875 | AA853410  | Hs.93557  | proenkephalin                             | 3.3 | 3.6  |
|    | 444612 | AW138111  | Hs.22902  | ESTs                                      | 3.3 | 3.0  |
|    | 415242 | R45986    | Hs.295014 | ESTs                                      | 3.2 | 2.2  |
|    | 421640 | AW966652  |           | gb:EST378726 MAGE resequences, MAGI Homo  | 3.2 | 3.8  |
| 5  | 408806 | AW847814  | Hs.289005 | Homo sapiens cDNA: FLJ21532 fis, clone C  | 3.2 | 2.4  |
|    | 446015 | T30968    | Hs.13531  | hypothetical protein FLJ10971             | 3.2 | 3.2  |
|    | 425495 | AA358454  | Hs.78026  | ESTs, Weakly similar to similar to ankyr  | 3.2 | 2.2  |
|    | 403092 |           |           | ESTs                                      | 3.2 | 2.9  |
|    | 452971 | A1873878  | Hs.91789  | ESTs                                      | 3.2 | 4.5  |
| 10 | 454100 | A1693231  | Hs.126043 | chromosome 21 open reading frame 51       | 3.2 | 2.7  |
|    | 448440 | AA173467  | Hs.62402  | p21/Cdc42/Rac1-activated kinase 1 (yeast  | 3.2 | 2.8  |
|    | 421200 | AA284811  | Hs.264433 | ESTs                                      | 3.2 | 2.7  |
|    | 440827 | A1733110  | Hs.128128 | ESTs                                      | 3.2 | 2.1  |
|    | 429809 | AL162010  | Hs.223603 | Homo sapiens mRNA; cDNA DKFZp761D09121 (  | 3.2 | 4.3  |
| 15 | 420156 | AW449258  | Hs.6187   | ESTs                                      | 3.2 | 19.0 |
|    | 457535 | AA609685  | Hs.278672 | membrane component, chromosome 11, surfa  | 3.2 | 2.0  |
|    | 419956 | AL137939  | Hs.40096  | ESTs                                      | 3.1 | 8.7  |
|    | 423930 | AA332697  | Hs.42721  | ESTs                                      | 3.1 | 2.7  |
|    | 417868 | A1078534  | Hs.122592 | ESTs                                      | 3.1 | 12.6 |
| 20 | 423346 | A1267677  | Hs.127416 | synaptotagmin 1                           | 3.1 | 12.0 |
|    | 441921 | A1733376  | Hs.164478 | hypothetical protein FLJ21939 similar to  | 3.1 | 4.3  |
|    | 429470 | A1878901  | Hs.203862 | guanine nucleotide binding protein (G pr  | 3.1 | 5.3  |
|    | 408217 | A1433201  | Hs.279860 | tumor protein, translationally-controlled | 3.1 | 7.1  |
|    | 427322 | AK002017  | Hs.176227 | hypothetical protein FLJ11155             | 3.1 | 6.3  |
| 25 | 449078 | AK001256  | Hs.22975  | KIAA1576 protein                          | 3.1 | 30.1 |
|    | 429608 | U49250    | Hs.210862 | T-box, brain, 1                           | 3.1 | 2.2  |
|    | 442308 | AA989402  | Hs.111    | fibroblast growth factor 9 (glia-activat  | 3.1 | 3.0  |
|    | 411666 | AF106564  | Hs.71346  | neurofilament 3 (150kD medium)            | 3.1 | 10.9 |
|    | 427865 | AA416931  | Hs.126065 | ESTs                                      | 3.1 | 7.5  |
| 30 | 430708 | U78308    | Hs.278485 | olfactory receptor, family 1, subfamily   | 3.1 | 3.4  |
|    | 451829 | AW964081  | Hs.247377 | ESTs                                      | 3.0 | 6.2  |
|    | 405911 |           |           | ESTs                                      | 3.0 | 2.4  |
|    | 418808 | A1821836  | Hs.10359  | ESTs                                      | 3.0 | 6.2  |
| 35 | 452893 | H18017    | Hs.22869  | ESTs, Moderately similar to KIAA1395 pro  | 3.0 | 5.1  |
|    | 423952 | AW877787  | Hs.136102 | KIAA0853 protein                          | 3.0 | 2.1  |
|    | 412000 | AW576555  | Hs.15780  | ATP-binding cassette, sub-family A (ABC1  | 3.0 | 2.1  |
|    | 405793 |           |           | ESTs                                      | 3.0 | 2.7  |
|    | 410711 | AB002316  | Hs.65746  | KIAA0318 protein                          | 3.0 | 14.3 |
|    | 427071 | AA397958  | Hs.192719 | ESTs                                      | 3.0 | 2.1  |
| 40 | 453534 | NM_014796 | Hs.33187  | KIAA0748 gene product                     | 3.0 | 14.5 |
|    | 413903 | AA496493  | Hs.23136  | ESTs                                      | 3.0 | 2.2  |
|    | 426866 | U02330    | Hs.172816 | neuregulin 1                              | 3.0 | 11.3 |
|    | 434945 | AB033065  | Hs.4280   | KIAA1239 protein                          | 3.0 | 3.5  |
|    | 412639 | AW961284  | Hs.296235 | ESTs                                      | 2.9 | 4.9  |
| 45 | 453590 | AF150278  | Hs.33578  | KIAA0820 protein                          | 2.9 | 33.1 |
|    | 414502 | AL133721  | Hs.224680 | ESTs                                      | 2.9 | 2.3  |
|    | 434367 | AB020700  | Hs.3830   | KIAA0893 protein                          | 2.9 | 23.1 |
|    | 425121 | AI797511  | Hs.154679 | synaptotagmin I                           | 2.9 | 8.1  |
| 50 | 412494 | AL133900  | Hs.792    | ADP-ribosylation factor domain protein 1  | 2.9 | 20.8 |
|    | 401213 |           |           | ESTs                                      | 2.9 | 3.2  |
|    | 401028 | AW673312  | Hs.50848  | hypothetical protein FLJ20331             | 2.9 | 3.4  |
|    | 415191 | AA190381  | Hs.120810 | ESTs                                      | 2.9 | 3.0  |
|    | 449275 | AW450848  | Hs.205457 | periaxin                                  | 2.9 | 5.6  |
| 55 | 419863 | AW952691  | Hs.93485  | Homo sapiens mRNA; cDNA DKFZp761D191 (fr  | 2.9 | 35.0 |
|    | 411421 | BE272110  | Hs.21177  | ESTs                                      | 2.9 | 2.0  |
|    | 430865 | AI073424  | Hs.5232   | HSPC125 protein                           | 2.9 | 11.4 |
|    | 437486 | AW952089  | Hs.5536   | RAB6A, member RAS oncogene family         | 2.9 | 2.2  |
|    | 442357 | AI458586  | Hs.135706 | ESTs                                      | 2.9 | 6.0  |
|    | 408274 | R17315    |           | gb:yg12g11.r1 Soares infant brain 1N1B H  | 2.9 | 2.2  |
| 60 | 444185 | AW298350  | Hs.66020  | ESTs                                      | 2.8 | 5.0  |
|    | 420173 | AA256151  | Hs.22999  | ESTs                                      | 2.8 | 5.1  |
|    | 428358 | AA993222  | Hs.101915 | Stargardt disease 3 (autosomal dominant)  | 2.8 | 7.0  |
|    | 447252 | R90916    | Hs.12449  | Homo sapiens transmembrane protein HTMP1  | 2.8 | 4.4  |
|    | 440260 | AI972867  | Hs.7130   | copine IV                                 | 2.8 | 10.6 |
| 65 | 417084 | H08370    | Hs.33067  | ESTs                                      | 2.8 | 8.4  |
|    | 438257 | AW474419  | Hs.224794 | ESTs                                      | 2.8 | 2.8  |
|    | 441934 | T23939    | Hs.7344   | ESTs                                      | 2.8 | 6.2  |
|    | 447885 | F11528    | Hs.303172 | Homo sapiens mRNA; cDNA DKFZp547G133 (fr  | 2.8 | 3.5  |
|    | 423552 | AF107028  | Hs.129783 | sodium channel, voltage-gated, type II,   | 2.8 | 3.4  |
| 70 | 450940 | AI744943  | Hs.143209 | ESTs, Weakly similar to I38022 hypotheri  | 2.8 | 14.4 |
|    | 410011 | AB020641  | Hs.57856  | PFTAIRE protein kinase 1                  | 2.8 | 21.7 |
|    | 445887 | AI263105  | Hs.145597 | ESTs                                      | 2.8 | 5.1  |
|    | 425494 | N55540    | Hs.78026  | ESTs, Weakly similar to similar to ankyr  | 2.8 | 2.4  |
|    | 438202 | AW169287  | Hs.22588  | ESTs                                      | 2.8 | 11.9 |
| 75 | 436199 | R38946    | Hs.127951 | hypothetical protein FLJ14503             | 2.8 | 6.0  |
|    | 434826 | AF155661  | Hs.22265  | pyruvate dehydrogenase phosphatase        | 2.8 | 2.4  |
|    | 415462 | R52692    | Hs.12698  | ESTs                                      | 2.8 | 3.4  |
|    | 418070 | NM_000844 | Hs.83407  | glutamate receptor, metabotropic 7        | 2.8 | 4.5  |
|    | 432149 | AW614326  | Hs.157022 | ESTs, Weakly similar to T34549 probable   | 2.8 | 9.5  |
| 80 | 430371 | D87466    | Hs.240112 | KIAA0276 protein                          | 2.8 | 7.0  |
|    | 437357 | AL359559  | Hs.331666 | Homo sapiens mRNA; cDNA DKFZp762O2215 (f  | 2.7 | 2.5  |
|    | 415838 | R44336    | Hs.7093   | ESTs                                      | 2.7 | 3.6  |
|    | 438675 | AA813725  | Hs.213568 | ESTs                                      | 2.7 | 2.5  |



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|    |        |           |           |  |     |      |
|----|--------|-----------|-----------|--|-----|------|
|    | 419558 | AW953679  |           | gb:EST365749 MAGE resequences, MAGC Homo   | 2.7 | 3.1  |
|    | 446318 | AI949389  | Hs.18067  | ESTs                                       | 2.7 | 4.1  |
|    | 445183 | AB007877  | Hs.12385  | KIAA0417 gene product                      | 2.7 | 5.3  |
|    | 457012 | R41480    | Hs.127630 | ESTs                                       | 2.7 | 19.0 |
| 5  | 431988 | AC002302  | Hs.77202  | protein kinase C, beta 1                   | 2.7 | 7.2  |
|    | 430223 | NM_002514 | Hs.235935 | nephroblastoma overexpressed gene          | 2.7 | 2.8  |
|    | 447932 | AA837474  | Hs.20021  | vesicle-associated membrane protein 1 (s   | 2.7 | 3.8  |
|    | 450214 | BE439763  | Hs.227571 | regulator of G-protein signalling 4        | 2.7 | 6.9  |
|    | 434731 | AA648049  | Hs.121518 | ESTs                                       | 2.7 | 5.0  |
| 10 | 428839 | AI767756  | Hs.82302  | Homo sapiens cDNA FLJ14814 fis, clone NT   | 2.7 | 5.2  |
|    | 407709 | AA456135  | Hs.23023  | ESTs                                       | 2.7 | 2.5  |
|    | 422420 | U03398    | Hs.1524   | tumor necrosis factor (ligand) superfamily | 2.7 | 3.3  |
|    | 443305 | AI050693  | Hs.133318 | ESTs                                       | 2.7 | 5.9  |
|    | 435648 | H24347    | Hs.27524  | ESTs                                       | 2.7 | 15.0 |
| 15 | 418407 | AL044818  | Hs.84928  | nuclear transcription factor Y, beta       | 2.7 | 2.7  |
|    | 436771 | AW975687  | Hs.292979 | ESTs                                       | 2.7 | 6.0  |
|    | 428689 | NM_014351 | Hs.189810 | sulfotransferase family 4A, member 1       | 2.7 | 4.8  |
|    | 440503 | NM_006539 | Hs.7235   | calcium channel, voltage-dependent, gamma  | 2.7 | 4.4  |
|    | 441006 | AW605267  | Hs.7627   | CGI-50 protein                             | 2.7 | 3.1  |
| 20 | 410330 | AW023630  | Hs.46786  | ESTs                                       | 2.6 | 29.5 |
|    | 434398 | AA121098  | Hs.3838   | serum-inducible kinase                     | 2.6 | 2.6  |
|    | 438831 | BE263273  | Hs.6439   | synapsin II                                | 2.6 | 7.8  |
|    | 419066 | Z98492    | Hs.6975   | PR01073 protein                            | 2.6 | 3.4  |
|    | 412643 | AW971239  | Hs.293982 | ESTs                                       | 2.6 | 2.2  |
| 25 | 430456 | AA314998  | Hs.241503 | hypothetical protein                       | 2.6 | 17.9 |
|    | 416498 | U33632    | Hs.79351  | potassium channel, subfamily K, member 1   | 2.6 | 2.9  |
|    | 401421 |           |           |  | 2.6 | 2.0  |
|    | 419530 | X98330    | Hs.90821  | ryanodine receptor 2 (cardiac)             | 2.6 | 4.2  |
|    | 441817 | AW969706  | Hs.293332 | ESTs                                       | 2.6 | 3.8  |
| 30 | 439203 | AA448930  | Hs.8453   | KIAA1587 protein                           | 2.6 | 4.2  |
|    | 426054 | U12431    | Hs.166109 | ELAV (embryonic lethal, abnormal vision,   | 2.6 | 5.1  |
|    | 444583 | AW994403  | Hs.100861 | hypothetical protein FLJ14600              | 2.6 | 3.7  |
|    | 417919 | AI928203  | Hs.86379  | ESTs                                       | 2.6 | 3.0  |
|    | 434293 | NM_004445 | Hs.3796   | EphB6                                      | 2.6 | 3.2  |
| 35 | 431716 | D89053    | Hs.268012 | fatty-acid-Coenzyme A ligase, long-chain   | 2.6 | 6.4  |
|    | 443037 | AW500305  | Hs.299166 | syntaxin 7                                 | 2.6 | 2.2  |
|    | 440736 | D56919    | Hs.265848 | myomegalin                                 | 2.6 | 7.1  |
|    | 404648 |           |           |  | 2.6 | 3.0  |
|    | 429995 | AA463571  |           | gb:zx72e09.r1 Soares_total_fetus_Nb2HF8_   | 2.6 | 3.5  |
| 40 | 436508 | AW604381  | Hs.121121 | ESTs, Weakly similar to S00755 pleckstri   | 2.6 | 3.9  |
|    | 441190 | H09073    | Hs.25046  | ESTs                                       | 2.6 | 3.1  |
|    | 432278 | AL137506  | Hs.274256 | hypothetical protein FLJ23563              | 2.6 | 2.9  |
|    | 442731 | AI868167  | Hs.131044 | ESTs                                       | 2.6 | 4.1  |
|    | 416836 | D54745    | Hs.80247  | cholecystokinin                            | 2.6 | 14.9 |
| 45 | 449071 | NM_005872 | Hs.22960  | breast carcinoma amplified sequence 2      | 2.5 | 2.4  |
|    | 436321 | AA709133  | Hs.180144 | ESTs                                       | 2.5 | 2.8  |
|    | 439693 | AI741816  | Hs.125897 | ESTs                                       | 2.5 | 3.6  |
|    | 443212 | AW269515  | Hs.102500 | hypothetical protein FLJ20481              | 2.5 | 2.8  |
|    | 423981 | AL122104  | Hs.136664 | Homo sapiens mRNA: cDNA DKFZp434A1627 (f   | 2.5 | 3.8  |
| 50 | 407868 | NM_000950 | Hs.40637  | proline-rich Gla (G-carboxyglutamic acid   | 2.5 | 3.1  |
|    | 443992 | AW022228  | Hs.322922 | ESTs                                       | 2.5 | 27.9 |
|    | 444124 | R43097    | Hs.6818   | ESTs                                       | 2.5 | 5.3  |
|    | 411379 | AI816344  | Hs.12554  | ESTs, Weakly similar to NPL4_HUMAN NUCLE   | 2.5 | 38.0 |
| 55 | 440474 | AI207936  | Hs.7195   | gamma-aminobutyric acid (GABA) A recepto   | 2.5 | 3.8  |
|    | 446277 | AI284218  | Hs.159204 | ESTs                                       | 2.5 | 2.2  |
|    | 410111 | AI620206  | Hs.189647 | ESTs                                       | 2.5 | 3.5  |
|    | 445162 | AB011131  | Hs.12376  | piccolo (presynaptic cytomatrix protein)   | 2.5 | 4.8  |
|    | 410718 | AI920783  | Hs.191435 | ESTs                                       | 2.5 | 4.5  |
|    | 417201 | T60432    | Hs.269084 | ESTs, Moderately similar to AF097994 1 L   | 2.5 | 2.9  |
| 60 | 420274 | AW968000  | Hs.143389 | ESTs, Weakly similar to T14318 ubiquitin   | 2.5 | 2.8  |
|    | 433496 | AF064254  | Hs.49765  | VLCS-H1 protein                            | 2.5 | 4.7  |
|    | 437331 | AL353933  | Hs.21710  | hypothetical protein DKFZp761G0313         | 2.5 | 3.3  |
|    | 437368 | AI471969  | Hs.182606 | ESTs                                       | 2.5 | 3.0  |
|    | 441985 | BE047625  | Hs.169815 | ESTs                                       | 2.5 | 3.6  |
| 65 | 410025 | BE220489  | Hs.113592 | ESTs, Moderately similar to I54374 gene    | 2.5 | 9.2  |
|    | 414680 | AA743331  | Hs.272572 | hemoglobin, alpha 2                        | 2.5 | 3.6  |
|    | 429956 | AI374651  | Hs.22542  | ESTs                                       | 2.5 | 23.9 |
|    | 429028 | AA443439  | Hs.48797  | ESTs                                       | 2.5 | 2.8  |
|    | 438109 | AI076621  | Hs.71367  | ESTs, Moderately similar to ALU7_HUMAN A   | 2.5 | 3.1  |
| 70 | 439780 | AL109688  |           | gb:Homo sapiens mRNA full length insert    | 2.5 | 2.3  |
|    | 440888 | N45600    | Hs.326880 | ESTs                                       | 2.5 | 3.9  |
|    | 445246 | AI217713  | Hs.147586 | ESTs                                       | 2.5 | 2.6  |
|    | 440152 | AB002376  | Hs.7006   | KIAA0378 protein                           | 2.4 | 23.6 |
|    | 432740 | AF061034  | Hs.278898 | tumor necrosis factor alpha-inducible ce   | 2.4 | 2.1  |
| 75 | 415122 | D60708    | Hs.22245  | ESTs                                       | 2.4 | 3.9  |
|    | 432298 | AL118812  | Hs.274293 | Homo sapiens mRNA: cDNA DKFZp761G1111 (f   | 2.4 | 9.8  |
|    | 437948 | AA772920  | Hs.303527 | ESTs                                       | 2.4 | 9.8  |
|    | 421360 | AA297012  | Hs.103839 | erythrocyte membrane protein band 4.1-li   | 2.4 | 2.8  |
|    | 427115 | AW972853  | Hs.112237 | ESTs                                       | 2.4 | 2.2  |
| 80 | 452074 | BE299035  | Hs.27747  | G protein-coupled receptor 37 (endotheli   | 2.4 | 10.0 |
|    | 436639 | D14838    | Hs.111    | fibroblast growth factor 9 (glia-activat   | 2.4 | 3.5  |
|    | 434520 | AA205273  | Hs.177011 | hypothetical protein                       | 2.4 | 3.1  |
|    | 411529 | AA430348  | Hs.317596 | Homo sapiens cDNA FLJ12927 fis, clone NT   | 2.4 | 3.0  |

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|    |        |           |           |  |     |      |
|----|--------|-----------|-----------|--|-----|------|
|    | 442272 | AA588302  | Hs.129172 | ESTs                                     | 2.4 | 2.1  |
|    | 422927 | AW247388  | Hs.301423 | calcium binding protein 1 (calbrain)     | 2.4 | 2.7  |
|    | 444647 | H14718    | Hs.11506  | Human clone 23589 mRNA sequence          | 2.4 | 2.8  |
|    | 415827 | H17462    | Hs.23079  | ESTs                                     | 2.4 | 15.0 |
| 5  | 451397 | AA017432  | Hs.84529  | ESTs, Weakly similar to Z202_HUMAN ZINC  | 2.4 | 3.9  |
|    | 445200 | AA084460  | Hs.12409  | somatostatin                             | 2.4 | 3.7  |
|    | 451062 | AL110125  | Hs.25910  | Homo sapiens mRNA; cDNA DKFZp564C1416 (f | 2.4 | 2.4  |
|    | 420328 | Y19062    | Hs.96870  | staufen (Drosophila, RNA-binding protein | 2.4 | 4.3  |
| 10 | 432122 | AA526514  |           | gb:ni60f02.s1 NCI_CGAP_Ov2 Homo sapiens  | 2.4 | 4.3  |
|    | 444125 | AI124882  | Hs.118121 | ESTs                                     | 2.4 | 3.5  |
|    | 430538 | AB032435  | Hs.242821 | differentiation-associated Na-dependent  | 2.4 | 10.8 |
|    | 457519 | X69438    | Hs.3052   | early growth response 4                  | 2.4 | 2.4  |
|    | 409371 | RS1736    | Hs.12381  | ESTs                                     | 2.4 | 2.1  |
| 15 | 456303 | AA224872  | Hs.115088 | ESTs                                     | 2.4 | 3.2  |
|    | 440105 | AA694010  | Hs.6932   | Homo sapiens clone 23809 mRNA sequence   | 2.4 | 23.4 |
|    | 400979 |           |           |  | 2.4 | 4.1  |
|    | 435296 | R49685    | Hs.24980  | ESTs                                     | 2.4 | 6.5  |
|    | 408950 | AA707814  | Hs.14945  | long fatty acyl-CoA synthetase 2 gene    | 2.4 | 18.5 |
| 20 | 452032 | BE244005  | Hs.27610  | retinoic acid- and interferon-inducible  | 2.4 | 2.2  |
|    | 432098 | AF252297  | Hs.91546  | cytochrome P450 retinoid metabolizing pr | 2.4 | 2.7  |
|    | 408974 | AW015458  | Hs.297017 | ESTs                                     | 2.4 | 2.5  |
|    | 412177 | Z23091    | Hs.73734  | glycoprotein V (platelet)                | 2.4 | 2.8  |
|    | 413153 | N94205    |           | gb:za27a08.r1 Soares fetal liver spleen  | 2.4 | 2.5  |
| 25 | 417583 | AA668782  | Hs.191284 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 2.4 | 2.6  |
|    | 452034 | F12234    | Hs.75893  | ankyrin 3, node of Ranvier (ankyrin G)   | 2.3 | 3.0  |
|    | 424940 | AA985308  | Hs.194327 | ESTs                                     | 2.3 | 6.3  |
|    | 431706 | AI816086  | Hs.296341 | adenylyl cyclase-associated protein 2    | 2.3 | 4.1  |
|    | 419125 | AA642452  | Hs.130881 | B-cell CLL/lymphoma 11A (zinc finger pro | 2.3 | 2.9  |
| 30 | 423641 | AL137256  | Hs.130489 | ATPase, aminophospholipid transporter-li | 2.3 | 8.7  |
|    | 436407 | T88803    | Hs.271507 | ESTs, Weakly similar to TIM_HUMAN PROBAB | 2.3 | 3.2  |
|    | 448681 | AL109781  | Hs.21754  | Homo sapiens mRNA full length insert cDN | 2.3 | 5.2  |
|    | 415669 | NM_005025 | Hs.78589  | serine (or cysteine) proteinase inhibito | 2.3 | 54.7 |
|    | 410765 | AI694972  | Hs.66180  | nucleosome assembly protein 1-like 2     | 2.3 | 9.1  |
| 35 | 422386 | AF105374  | Hs.115830 | heparan sulfate (glucosamine) 3-O-sulfot | 2.3 | 5.0  |
|    | 414828 | AA156651  |           | gb:z05h05.r1 Soares_pregnant_uterus_NbH  | 2.3 | 2.4  |
|    | 445556 | AI910241  | Hs.12887  | actin-related protein 3-beta             | 2.3 | 8.5  |
|    | 426968 | U07616    | Hs.173034 | amphiphysin (Stiff-Mann syndrome with br | 2.3 | 26.3 |
|    | 444562 | AA186715  | Hs.336429 | RIKEN cDNA 9130422N19 gene               | 2.3 | 2.5  |
| 40 | 423420 | AI571364  | Hs.128382 | Homo sapiens mRNA; cDNA DKFZp76111224 (f | 2.3 | 7.6  |
|    | 439450 | R51613    | Hs.125304 | ESTs                                     | 2.3 | 26.3 |
|    | 427127 | AW802282  | Hs.22265  | pyruvate dehydrogenase phosphatase       | 2.3 | 2.2  |
|    | 447179 | AW015633  | Hs.157299 | ESTs                                     | 2.3 | 3.8  |
|    | 414711 | AI310440  | Hs.288735 | Homo sapiens cDNA FLJ13522 fis, clone PL | 2.3 | 2.3  |
| 45 | 433449 | AW772282  |           | gb:hn71b05.x1 NCI_CGAP_Kid11 Homo sapien | 2.3 | 3.8  |
|    | 414320 | U13616    | Hs.75893  | ankyrin 3, node of Ranvier (ankyrin G)   | 2.3 | 2.5  |
|    | 416778 | M16505    | Hs.79876  | steroid sulfatase (microsomal), arylsulf | 2.3 | 7.8  |
|    | 425130 | AA448208  | Hs.99163  | ESTs                                     | 2.3 | 4.1  |
|    | 456664 | AW963354  | Hs.334409 | metallothionein 1G                       | 2.3 | 2.5  |
| 50 | 438283 | AI458931  | Hs.37282  | ESTs                                     | 2.3 | 4.2  |
|    | 417455 | AW007066  | Hs.18949  | ESTs, Weakly similar to CA2B_HUMAN COLLA | 2.3 | 3.0  |
|    | 412100 | AW892731  |           | gb:CMO-NN0005-100300-279-c02 NN0005 Homo | 2.3 | 3.7  |
|    | 448981 | AI968719  | Hs.195387 | ESTs                                     | 2.3 | 3.2  |
|    | 416101 | R24854    | Hs.268806 | ESTs                                     | 2.3 | 6.5  |
| 55 | 439731 | AI953135  | Hs.45140  | hypothetical protein FLJ14084            | 2.3 | 17.8 |
|    | 415734 | NM_014747 | Hs.78748  | KIAA0237 gene product                    | 2.3 | 40.1 |
|    | 424596 | AB020639  | Hs.151017 | estrogen-related receptor gamma          | 2.3 | 2.9  |
|    | 420230 | AL034344  | Hs.284186 | forkhead box C1                          | 2.3 | 2.4  |
|    | 451559 | AL119980  | Hs.20935  | hypothetical protein DKFZp761D221        | 2.3 | 5.7  |
| 60 | 404835 |           |           |  | 2.3 | 2.1  |
|    | 456765 | AI497900  | Hs.33067  | ESTs                                     | 2.3 | 4.1  |
|    | 455517 | AW984068  |           | gb:RC0-HN0006-160300-011-e06 HN0006 Homo | 2.3 | 2.4  |
|    | 408206 | AF041853  | Hs.43670  | kinesin family member 3A                 | 2.2 | 18.5 |
|    | 411770 | NM_014278 | Hs.71992  | heat shock protein (hsp110 family)       | 2.2 | 3.9  |
| 65 | 430105 | X70297    | Hs.2540   | cholinergic receptor, nicotinic, alpha p | 2.2 | 2.6  |
|    | 458694 | F12832    | Hs.13298  | ESTs                                     | 2.2 | 4.9  |
|    | 415091 | AL044872  | Hs.77910  | 3-hydroxy-3-methylglutaryl-Coenzyme A sy | 2.2 | 4.4  |
|    | 439642 | W81441    | Hs.153967 | ESTs                                     | 2.2 | 2.4  |
|    | 450138 | AW152104  | Hs.200879 | ESTs                                     | 2.2 | 4.9  |
| 70 | 454222 | BE144344  | Hs.7589   | ESTs, Weakly similar to A46010 X-linked  | 2.2 | 3.7  |
|    | 405326 |           |           |  | 2.2 | 2.7  |
|    | 431342 | AW971018  | Hs.21659  | ESTs                                     | 2.2 | 5.2  |
|    | 453101 | AW952776  | Hs.94943  | ESTs                                     | 2.2 | 3.3  |
|    | 408897 | N50204    | Hs.283709 | lipopolysaccharide specific response-7 p | 2.2 | 2.8  |
| 75 | 451398 | AI793124  | Hs.144479 | ESTs                                     | 2.2 | 4.6  |
|    | 438208 | AL041224  | Hs.65379  | ESTs                                     | 2.2 | 10.4 |
|    | 408449 | NM_004408 | Hs.166161 | dynamain 1                               | 2.2 | 6.1  |
|    | 414130 | AI670831  | Hs.71592  | Homo sapiens cDNA: FLJ21893 fis, clone H | 2.2 | 3.1  |
|    | 445016 | U79716    | Hs.12246  | reelin                                   | 2.2 | 3.9  |
|    | 424375 | AF070547  | Hs.146312 | Homo sapiens clone 24820 mRNA sequence   | 2.2 | 2.3  |
| 80 | 424645 | NM_014682 | Hs.151449 | KIAA0535 gene product                    | 2.2 | 11.7 |
|    | 409729 | D51315    | Hs.106289 | ESTs                                     | 2.2 | 4.9  |
|    | 432809 | AA565509  | Hs.131703 | ESTs                                     | 2.2 | 19.9 |
|    | 422890 | Z43784    | Hs.75893  | ankyrin 3, node of Ranvier (ankyrin G)   | 2.2 | 10.4 |

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|    |        |           |           |  |     |      |
|----|--------|-----------|-----------|--|-----|------|
|    | 428532 | AF157326  | Hs.184786 | TBP-interacting protein                  | 2.2 | 6.5  |
|    | 413074 | AI871368  | Hs.8417   | hypothetical protein DKFZp761M0423       | 2.2 | 3.4  |
|    | 414442 | AA156238  | Hs.32501  | ESTs                                     | 2.2 | 3.2  |
|    | 452768 | AW069459  | Hs.61539  | ESTs                                     | 2.2 | 2.0  |
| 5  | 450440 | AB024334  | Hs.25001  | tyrosine 3-monooxygenase/tryptophan 5-mo | 2.2 | 3.2  |
|    | 426281 | AK000987  | Hs.169111 | oxidation resistance 1                   | 2.2 | 2.3  |
|    | 428411 | AW291464  | Hs.10338  | ESTs                                     | 2.2 | 2.3  |
|    | 413787 | AI352558  | Hs.75544  | tyrosine 3-monooxygenase/tryptophan 5-mo | 2.2 | 3.1  |
| 10 | 451734 | NM_006176 | Hs.26944  | neurogranin (protein kinase C substrate, | 2.2 | 8.5  |
|    | 439108 | AW163034  | Hs.5467   | synaptogyrin 3                           | 2.2 | 7.9  |
|    | 405385 |           |           |  | 2.2 | 2.4  |
|    | 447285 | AI371849  | Hs.200696 | ATPase, Class VI, type 11C               | 2.2 | 2.2  |
|    | 452667 | T87219    | Hs.13219  | ESTs                                     | 2.2 | 3.1  |
| 15 | 422234 | AF119818  | Hs.113287 | discs, large (Drosophila) homolog-associ | 2.1 | 8.3  |
|    | 410339 | AI916499  | Hs.298258 | ESTs                                     | 2.1 | 3.2  |
|    | 413231 | D87461    | Hs.75244  | BCL2-like 2                              | 2.1 | 4.5  |
|    | 447104 | R19085    | Hs.210706 | Homo sapiens cDNA FLJ13182 fis, clone NT | 2.1 | 2.2  |
|    | 451952 | AL120173  | Hs.301663 | ESTs                                     | 2.1 | 36.5 |
| 20 | 415841 | Z45637    | Hs.7093   | ESTs                                     | 2.1 | 2.4  |
|    | 441086 | AI928489  | Hs.213490 | ESTs, Weakly similar to N33_HUMAN N33 PR | 2.1 | 2.2  |
|    | 450407 | NM_000810 | Hs.24969  | gamma-aminobutyric acid (GABA) A recepto | 2.1 | 6.6  |
|    | 427627 | R87582    | Hs.179915 | guanine nucleotide binding protein (G pr | 2.1 | 5.3  |
|    | 449712 | R56545    | Hs.6100   | ESTs                                     | 2.1 | 4.5  |
| 25 | 409660 | AW452065  | Hs.258905 | ESTs                                     | 2.1 | 2.1  |
|    | 430434 | AL049548  | Hs.241420 | Homo sapiens mRNA for KIAA1756 protein,  | 2.1 | 5.4  |
|    | 434138 | AA625804  |           | gb:zu86h01.s1 Soares_testis_NHT Homo sap | 2.1 | 3.0  |
|    | 448610 | NM_006157 | Hs.21602  | nel (chicken)-like 1                     | 2.1 | 4.8  |
|    | 418948 | AI217097  |           | gb:qd43h07.x1 Soares_fetal_heart_NbHH19W | 2.1 | 2.9  |
| 30 | 414876 | AW950925  | Hs.924    | crystallin, mu                           | 2.1 | 3.4  |
|    | 440426 | AI159800  | Hs.7181   | Homo sapiens cDNA FLJ13663 fis, clone PL | 2.1 | 3.7  |
|    | 451249 | AA016227  | Hs.27280  | ESTs                                     | 2.1 | 4.1  |
|    | 451475 | T19093    | Hs.26450  | KIAA0725 protein                         | 2.1 | 2.1  |
|    | 448743 | AB032962  | Hs.21896  | KIAA1136 protein                         | 2.1 | 29.7 |
| 35 | 430814 | U89336    | Hs.247993 | NG5 protein                              | 2.1 | 2.7  |
|    | 426990 | AL044315  | Hs.173094 | Homo sapiens mRNA for KIAA1750 protein,  | 2.1 | 2.3  |
|    | 426642 | AW068223  | Hs.171581 | ubiquitin C-terminal hydrolase UCH37     | 2.1 | 4.5  |
|    | 427335 | AA448542  | Hs.251677 | G antigen 7B                             | 2.1 | 2.2  |
|    | 459089 | F13036    | Hs.27373  | Homo sapiens mRNA: cDNA DKFZp564O1763 (f | 2.1 | 2.3  |
| 40 | 435832 | AA425688  | Hs.41641  | Bruno (Drosophila) -like 4, RNA binding  | 2.1 | 5.9  |
|    | 446383 | T05816    | Hs.92511  | ESTs                                     | 2.1 | 2.9  |
|    | 412768 | AW996044  | Hs.26239  | Human DNA sequence from clone RP11-438B2 | 2.1 | 2.1  |
|    | 453976 | BE463830  | Hs.163714 | ESTs                                     | 2.1 | 4.2  |
|    | 415111 | R39039    | Hs.328455 | EST                                      | 2.1 | 3.3  |
| 45 | 452238 | F01811    | Hs.187931 | ESTs                                     | 2.1 | 4.9  |
|    | 445279 | R41900    | Hs.22245  | ESTs                                     | 2.1 | 9.8  |
|    | 448799 | AI937094  | Hs.179080 | ESTs                                     | 2.1 | 3.1  |
|    | 418338 | NM_002522 | Hs.84154  | neuronal pentraxin I                     | 2.1 | 8.3  |
|    | 445725 | AK000956  | Hs.13209  | hypothetical protein FLJ10094            | 2.1 | 5.4  |
| 50 | 443537 | D13305    | Hs.203    | cholecystokinin B receptor               | 2.1 | 4.1  |
|    | 454066 | X00356    | Hs.37058  | calcitonin/calcitonin-related polypeptid | 2.1 | 6.4  |
|    | 429954 | AI918130  | Hs.21374  | ESTs                                     | 2.1 | 7.2  |
|    | 415292 | H29016    | Hs.200576 | ESTs                                     | 2.1 | 3.9  |
|    | 423563 | R34734    | Hs.75209  | protein kinase (cAMP-dependent, catalyti | 2.1 | 3.1  |
| 55 | 424906 | AI566086  | Hs.153716 | Homo sapiens mRNA for Hmob33 protein, 3' | 2.1 | 4.7  |
|    | 459309 | AA040620  | Hs.5672   | hypothetical protein AF140225            | 2.1 | 2.2  |
|    | 439340 | AB032436  | Hs.6535   | brain-specific Na-dependent inorganic ph | 2.1 | 4.7  |
|    | 402598 | BE314624  | Hs.3128   | polymerase (RNA) II (DNA directed) polyp | 2.1 | 5.4  |
|    | 435406 | F26698    | Hs.4884   | calcium/calmodulin-dependent protein kin | 2.1 | 6.6  |
| 60 | 448792 | R42550    | Hs.12826  | ESTs                                     | 2.1 | 4.1  |
|    | 449500 | AW956345  | Hs.12926  | ESTs                                     | 2.1 | 2.4  |
|    | 441134 | W29092    | Hs.7678   | cellular retinoic acid-binding protein 1 | 2.1 | 5.8  |
|    | 433361 | AW469373  | Hs.300141 | ribosomal protein L39                    | 2.1 | 2.7  |
|    | 452946 | X35425    | Hs.31092  | EphA5                                    | 2.1 | 5.0  |
| 65 | 426167 | AF039023  | Hs.167496 | RAN binding protein 6                    | 2.0 | 2.2  |
|    | 453666 | AW015681  | Hs.135229 | ESTs, Weakly similar to A2BP_HUMAN ATAXI | 2.0 | 3.1  |
|    | 424632 | AB014523  | Hs.151406 | KIAA0623 gene product                    | 2.0 | 3.5  |
|    | 448589 | AF017090  | Hs.21554  | KIAA1107 protein                         | 2.0 | 4.1  |
|    | 430416 | AC005531  | Hs.57806  | Homo sapiens PAC clone RP4-701O16 from 7 | 2.0 | 2.3  |
| 70 | 445627 | AW818475  | Hs.7363   | ESTs                                     | 2.0 | 2.1  |
|    | 417092 | H97508    | Hs.181165 | eukaryotic translation elongation factor | 2.0 | 2.5  |
|    | 453653 | AW505554  | Hs.144559 | ESTs                                     | 2.0 | 4.7  |
|    | 435850 | AF250847  | Hs.283514 | mitochondrial ceramidase                 | 2.0 | 3.7  |
|    | 435086 | AW975243  | Hs.122596 | ESTs                                     | 2.0 | 2.1  |
| 75 | 423191 | D61506    | Hs.8417   | hypothetical protein DKFZp761M0423       | 2.0 | 2.1  |
|    | 411562 | AL050201  | Hs.70769  | hypothetical protein DKFZp586E1923       | 2.0 | 2.8  |
|    | 431645 | AF078849  | Hs.266483 | dynein light chain-A                     | 2.0 | 2.5  |
|    | 429834 | AI929645  | Hs.225936 | synapsin I                               | 2.0 | 3.6  |
|    | 439607 | BE540565  | Hs.159460 | ESTs                                     | 2.0 | 17.5 |
| 80 | 408033 | AW138045  | Hs.242256 | ESTs                                     | 2.0 | 4.0  |
|    | 430317 | AB020645  | Hs.239189 | glutaminase                              | 2.0 | 2.7  |
|    | 419631 | AW188117  | Hs.303154 | popeye protein 3                         | 2.0 | 2.6  |
|    | 432660 | AI288430  | Hs.64004  | ESTs                                     | 2.0 | 2.3  |
|    | 454048 | HO5626    | Hs.6921   | ESTs                                     | 2.0 | 15.9 |

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|   |        |          |           |  |     |      |
|---|--------|----------|-----------|--|-----|------|
| 5 | 426917 | AA913814 | Hs.172854 | DKFZP586B0923 protein                    | 2.0 | 3.1  |
|   | 423246 | AL119114 | Hs.77196  | spectrin, alpha, non-erythrocytic 1 (alp | 2.0 | 2.9  |
|   | 415989 | AI267700 | Hs.317584 | ESTs                                     | 2.0 | 4.8  |
|   | 420276 | AA290938 | Hs.190561 | ESTs, Highly similar to SORL_HUMAN SORTI | 2.0 | 5.1  |
|   | 424983 | AI742434 | Hs.169911 | ESTs                                     | 2.0 | 15.9 |
|   | 446296 | AA985662 | Hs.63131  | Homo sapiens cDNA FLJ13155 fis, clone NT | 2.0 | 2.7  |
|   | 450006 | AI241555 | Hs.60171  | ESTs                                     | 2.0 | 3.5  |

|    |             |                                       |  |
|----|-------------|---------------------------------------|--|
| 10 | TABLE 11B:  |                                       |  |
|    | Pkey:       | Unique Eos probeset identifier number |  |
|    | CAT number: | Gene cluster number                   |  |
|    | Accession:  | Genbank accession numbers             |  |

|    |        |            |   |
|----|--------|------------|---|
| 15 | Pkey   | CAT Number | Accession   |
|    | 408274 | 104999_1   | R17315 Z43964 AA053547  |
|    | 412100 | 1277224_1  | AW892731 H08502 Z45826  |
|    | 412112 | 1277883_1  | BE180342 BE180347 AW901900 BE180222 BE180218 BE180226 BE180413 BE180416 AW901899 BE180228 AW901897 BE180224 AW901898 BE180223 BE180219 BE180346 BE180343 BE180418 BE180225 BE180221 BE180341 AW901894 BE180217 BE180227 AW901891 BE180345 AW893614 AW893615 H85799 H83501 BE180220 N94205 BE067565 BE067556 F13044 T77009 BE145525 BE145493 AA156651 AA156622 R14472 AI217097 AW886090 W38035 W38792 AA232835 AW936043 AW953679 AW953680 AA244436 H82527 AA361046 AA244483 H82526 AA285362 AW752386 AW847156 AA285373 AW879575 AW879558 AW966652 AW966653 AA294989 AA385977 AA463571 AI277645 AL118763 AA469153 AI718503 AA469225 AA526514 AW973343 AA554293 AW772282 AA592974 AA625804 AW418787 AW074833 AI675642 AI393368 AL390174 AW898817 AL109688 R23665 R26578 AI904296 BE007223 R30687 AW984068 AW984072 AW984077 AW968614 AA243209 AA281411 |
| 20 | 413153 | 1350849_1  |   |
|    | 413510 | 1374377_1  |   |
|    | 414828 | 149563_1   |   |
|    | 418948 | 180808_1   |   |
| 25 | 419558 | 185904_1   |   |
|    | 421249 | 200649_1   |   |
|    | 421640 | 204833_1   |   |
|    | 429995 | 311738_1   |   |
| 30 | 430212 | 314437_1   |   |
|    | 432122 | 341756_1   |   |
|    | 433449 | 366532_1   |   |
|    | 434138 | 380572_1   |   |
| 35 | 437483 | 43756_1    |   |
|    | 439780 | 47673_1    |   |
|    | 452502 | 919733_1   |   |
|    | 455517 | 1321782_1  |   |
|    | 456407 | 184986_1   |   |

|    |              |   |  |
|----|--------------|---|--|
| 40 | TABLE 11C:   |   |  |
|    | Pkey:        | Unique number corresponding to an Eos probeset  |  |
|    | Ref:         | Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <u>Nature</u> 402:489-495. |  |
|    | Strand:      | Indicates DNA strand from which exons were predicted.   |  |
|    | Nt_position: | Indicates nucleotide positions of predicted exons.  |  |

|    |        |         |        |   |
|----|--------|---------|--------|---|
| 45 | Pkey   | Ref     | Strand | Nt_position   |
|    | 400979 | 8072554 | Plus   | 160842-161028   |
|    | 401213 | 9858408 | Plus   | 98243-98380,98489-98619   |
|    | 401421 | 7452889 | Minus  | 142291-142461   |
| 50 | 403092 | 8954241 | Plus   | 174720-175016,175104-175406,175508-175813                               |
|    | 404648 | 9796894 | Minus  | 115334-116020   |
|    | 404793 | 7232206 | Minus  | 61087-61590   |
|    | 404835 | 6970743 | Plus   | 85462-85684,88139-88287,90338-91018,94827-94990                         |
| 55 | 405326 | 4375975 | Plus   | 10633-10709,30805-30893,38078-38253,55112-55327,57718-57818,66696-66841 |
|    | 405385 | 6552772 | Plus   | 48332-48454   |
|    | 405793 | 1405887 | Minus  | 89197-89453   |
|    | 405911 | 6758795 | Plus   | 101008-101643   |
|    | 405977 | 8247789 | Minus  | 135548-136177   |

60 TABLE 12A: ABOUT 678 GENES UP-REGULATED IN LOWER GRADE GLIOBLASTOMA COMPARED TO NORMAL CENTRAL NERVOUS SYSTEM

Table 12A lists about 678 genes up-regulated in lower grade glioblastoma (LGG) compared to normal central nervous system (CNS). These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" LGG to "average" CNS tissues was greater than or equal to 2.5. The "average" LGG level was set to the 85<sup>th</sup> percentile amongst various LGG tumors. The "average" normal CNS tissue level was set to the 85<sup>th</sup> percentile amongst various CNS tissues. In order to remove gene-specific background levels of non-specific hybridization, the 10<sup>th</sup> percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

|    |                |   |  |  |
|----|----------------|---|--|--|
| 65 | Pkey:          | Unique Eos probeset identifier number               |  |  |
|    | ExAccn:        | Exemplar Accession number, Genbank accession number |  |  |
|    | UnigeneID:     | Unigene number                                      |  |  |
|    | Unigene Title: | Unigene gene title                                  |  |  |
| 70 | R1:            | Ratio of LOWER GRADE GLIOBLASTOMA to normal CNS     |  |  |

|    |        |          |           |  |      |
|----|--------|----------|-----------|--|------|
| 75 | Pkey   | ExAccn   | UnigeneID | Unigene Title                            | R1   |
|    | 412420 | AL035668 | Hs.73853  | bone morphogenetic protein 2             | 20.3 |
|    | 424800 | AL035588 | Hs.153203 | MyoD family inhibitor                    | 19.5 |
|    | 453392 | U23752   | Hs.32964  | SRY (sex determining region Y)-box 11    | 18.5 |
| 80 | 402604 |          |           | Target Exon                              | 16.9 |
|    | 444190 | AI878918 | Hs.10526  | cysteine and glycine-rich protein 2      | 15.0 |
|    | 409638 | AW450420 | Hs.21335  | ESTs                                     | 14.0 |
|    | 443731 | AI083928 | Hs.145418 | ESTs                                     | 14.0 |
|    | 456759 | BE259150 | Hs.127792 | delta (Drosophila)-like 3                | 13.6 |
|    | 447342 | AI199268 | Hs.19322  | Homo sapiens, Similar to RIKEN cDNA 2010 | 12.2 |
|    | 433001 | AF217513 | Hs.279905 | clone HQ0310 PRO0310p1                   | 10.3 |
|    | 427019 | AA001732 | Hs.173233 | hypothetical protein FLJ10970            | 9.5  |

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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
|    | 425187 | AW014486  | Hs.22509  | ESTs                                     | 9.0 |
|    | 440210 | AW674562  | Hs.125296 | ESTs                                     | 8.8 |
|    | 448769 | N66037    | Hs.38173  | ESTs                                     | 8.4 |
| 5  | 437034 | AA742643  |           | gb:ny91c01.s1 NCL CGAP_GCB1 Homo sapiens | 8.2 |
|    | 449539 | W80363    | Hs.58446  | ESTs                                     | 8.1 |
|    | 417061 | AI675944  | Hs.188691 | Homo sapiens cDNA FLJ12033 fis, clone HE | 8.0 |
|    | 435020 | AW505076  | Hs.301855 | DiGeorge syndrome critical region gene 8 | 7.8 |
|    | 414217 | AI309298  | Hs.279898 | Homo sapiens cDNA: FLJ23165 fis, clone L | 7.7 |
| 10 | 449300 | AI656959  | Hs.346514 | ESTs                                     | 7.6 |
|    | 449969 | AW295142  | Hs.180187 | Homo sapiens cDNA FLJ14337 fis, clone PL | 7.5 |
|    | 452372 | AI885742  | Hs.228474 | ESTs                                     | 7.2 |
|    | 410102 | AW248508  | Hs.279727 | ESTs; homologue of PEM-3 [Ciona savignyi | 7.2 |
|    | 417308 | H60720    | Hs.81892  | KIAA0101 gene product                    | 7.2 |
| 15 | 447004 | AW296968  | Hs.157539 | ESTs                                     | 7.1 |
|    | 418113 | AI272141  | Hs.83484  | SRY (sex determining region Y)-box 4     | 7.1 |
|    | 424635 | AA420687  | Hs.115455 | Homo sapiens cDNA FLJ14259 fis, clone PL | 7.1 |
|    | 406478 |           |           | Target Exon                              | 7.1 |
|    | 428728 | NM_016625 | Hs.191381 | hypothetical protein                     | 6.9 |
| 20 | 414761 | AU077228  | Hs.77256  | enhancer of zeste (Drosophila) homolog 2 | 6.9 |
|    | 428037 | N47474    | Hs.89230  | potassium intermediate/small conductance | 6.7 |
|    | 423343 | AA324643  | Hs.246106 | ESTs                                     | 6.7 |
|    | 418097 | R45137    | Hs.21868  | ESTs                                     | 6.7 |
|    | 431553 | X78075    | Hs.2799   | cartilage linking protein 1              | 6.6 |
| 25 | 412326 | R07566    | Hs.73817  | small inducible cytokine A3 (homologous  | 6.6 |
|    | 425397 | J04088    | Hs.156345 | topoisomerase (DNA) II alpha (170kD)     | 6.4 |
|    | 419169 | AW851980  | Hs.262346 | ESTs, Weakly similar to S72482 hypothe   | 6.4 |
|    | 431117 | AF003522  | Hs.250500 | delta (Drosophila)-like 1                | 6.4 |
|    | 445908 | R13580    | Hs.13436  | Homo sapiens clone 24425 mRNA sequence   | 6.3 |
| 30 | 402855 |           |           | NM_001839*:Homo sapiens calponin 3, acid | 6.2 |
|    | 424009 | F11690    |           | gb:HSC30D041 normalized infant brain cDN | 6.2 |
|    | 400419 | AF084545  |           | Target                                   | 6.2 |
|    | 446584 | U53445    | Hs.15432  | downregulated in ovarian cancer 1        | 6.0 |
|    | 414020 | NM_002984 | Hs.75703  | small inducible cytokine A4 (homologous  | 6.0 |
| 35 | 426140 | AF131798  | Hs.343768 | Homo sapiens clone 25119 mRNA sequence   | 5.9 |
|    | 427144 | X95097    | Hs.2126   | vasoactive intestinal peptide receptor 2 | 5.9 |
|    | 416658 | U03272    | Hs.79432  | fibillin 2 (congenital contractural ara  | 5.8 |
|    | 405238 |           |           | Target Exon                              | 5.7 |
|    | 421977 | W94197    | Hs.110165 | ribosomal protein L26 homolog            | 5.7 |
| 40 | 405348 |           |           | C7001664:gi12698061 dbj BAB21849.1  (AB  | 5.6 |
|    | 428795 | R45503    | Hs.97469  | ESTs, Highly similar to A39769 N-acetyl  | 5.4 |
|    | 422672 | X12784    | Hs.119129 | collagen, type IV, alpha 1               | 5.3 |
|    | 403349 | NM_001406 |           | ephrin-B3                                | 5.3 |
|    | 453941 | U39817    | Hs.36820  | Bloom syndrome                           | 5.2 |
| 45 | 429139 | F09092    | Hs.66087  | ESTs                                     | 5.2 |
|    | 454860 | AW835767  |           | gb:QV4-LT0016-240200-110-b08 LT0016 Homo | 5.2 |
|    | 452279 | AA286844  | Hs.61260  | hypothetical protein FLJ13164            | 5.1 |
|    | 418030 | BE207573  | Hs.83321  | neuromedin B                             | 5.1 |
|    | 429469 | M64590    | Hs.27     | glycine dehydrogenase (decarboxylating;  | 5.1 |
| 50 | 450639 | AI703186  | Hs.277174 | ESTs                                     | 5.1 |
|    | 412811 | H06382    |           | ESTs                                     | 5.1 |
|    | 442832 | AW206560  | Hs.253569 | ESTs                                     | 5.1 |
|    | 436608 | AA528980  |           | down syndrome critical region protein DS | 5.1 |
|    | 408161 | AW952912  | Hs.300383 | hypothetical protein MGC3032             | 5.1 |
| 55 | 443744 | AI084326  | Hs.271548 | ESTs, Weakly similar to I78885 serine/th | 5.1 |
|    | 447497 | AW167254  | Hs.205722 | ESTs                                     | 5.0 |
|    | 450811 | AI739486  | Hs.245497 | ESTs                                     | 5.0 |
|    | 433244 | AB040943  | Hs.271285 | KIAA1510 protein                         | 4.9 |
|    | 438458 | AW975186  |           | gb:EST387294 MAGE resequences, MAGN Homo | 4.9 |
| 60 | 438456 | AA913381  | Hs.20594  | ESTs                                     | 4.9 |
|    | 411048 | AK001742  | Hs.67991  | hypothetical protein DKFZp434G0522       | 4.9 |
|    | 456304 | AI820973  |           | gb:nc21c02.y5 NCL CGAP_Pr1 Homo sapiens  | 4.9 |
|    | 442547 | AA306997  | Hs.217484 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 4.9 |
|    | 419991 | AJ000098  | Hs.94210  | eyes absent (Drosophila) homolog 1       | 4.8 |
| 65 | 402274 |           |           | C19000498*:gi14567179 gb AAD23607.1 AC00 | 4.8 |
|    | 420092 | AA814043  | Hs.88045  | ESTs                                     | 4.8 |
|    | 436282 | R91913    | Hs.272104 | ESTs, Moderately similar to ALU1_HUMAN A | 4.8 |
|    | 430809 | AI791150  | Hs.262009 | ESTs, Moderately similar to I38022 hypot | 4.8 |
|    | 455104 | BE064863  |           | gb:RC1-BT0313-110300-01S-f06 BT0313 Homo | 4.8 |
| 70 | 403961 |           |           | Target Exon                              | 4.8 |
|    | 424954 | NM_000546 | Hs.1846   | tumor protein p53 (Li-Fraumeni syndrome) | 4.8 |
|    | 414825 | X06370    | Hs.77432  | epidermal growth factor receptor (avian  | 4.8 |
|    | 447891 | R41754    | Hs.6496   | ESTs                                     | 4.7 |
|    | 423529 | T87318    | Hs.120411 | ESTs                                     | 4.7 |
| 75 | 422737 | M26939    | Hs.119571 | collagen, type III, alpha 1 (Ehlers-Dan) | 4.7 |
|    | 428722 | U76456    | Hs.190787 | tissue inhibitor of metalloproteinase 4  | 4.6 |
|    | 437698 | R61837    | Hs.7990   | ESTs, Moderately similar to I84505 calci | 4.6 |
|    | 403481 |           |           | Target Exon                              | 4.6 |
|    | 426075 | AW513691  | Hs.270149 | ESTs, Weakly similar to 2109260A B cell  | 4.6 |
| 80 | 422170 | AI791949  | Hs.112432 | anti-Mullerian hormone                   | 4.6 |
|    | 416379 | N38857    | Hs.203933 | ESTs                                     | 4.6 |
|    | 406481 |           |           | Target Exon                              | 4.5 |
|    | 456052 | BE311901  | Hs.28935  | gb:601142614F1 NIH_MGC_14 Homo sapiens c | 4.5 |
|    | 423178 | AI033140  | Hs.124983 | Homo sapiens mRNA; cDNA DKFZp564C142 (fr | 4.5 |

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|    |        |           |           |   |     |
|----|--------|-----------|-----------|---|-----|
| 5  | 411642 | NM_014932 | Hs.71132  | neurologin 1                              | 4.5 |
|    | 428282 | N34905    | Hs.44653  | Homo sapiens cDNA: FLJ22669 fis, clone H  | 4.5 |
|    | 432625 | AI243596  | Hs.94830  | ESTs, Moderately similar to T03094 A-kin  | 4.5 |
|    | 452994 | AW962597  | Hs.31305  | KIAA1547 protein                          | 4.5 |
|    | 449961 | AW265634  | Hs.133100 | ESTs                                      | 4.4 |
| 10 | 401454 |           |           | NM_014226*:Homo sapiens renal tumor anti  | 4.4 |
|    | 406395 |           |           | Target Exon                               | 4.4 |
|    | 432281 | AK001239  | Hs.274263 | hypothetical protein FLJ10377             | 4.4 |
|    | 453792 | AL134539  | Hs.254129 | KIAA1678                                  | 4.4 |
|    | 415131 | D61119    |           | gb:HUM158C11B Clontech human fetal brain  | 4.4 |
| 15 | 437695 | AA769202  | Hs.192142 | ESTs                                      | 4.4 |
|    | 422081 | AW136820  | Hs.196011 | ESTs                                      | 4.4 |
|    | 437748 | AF234882  | Hs.5814   | suppression of tumorigenicity 7           | 4.3 |
|    | 433323 | AA805132  | Hs.159142 | ESTs                                      | 4.3 |
|    | 420352 | BE258835  |           | gb:601117374F1 NIH_MGC_16 Homo sapiens c  | 4.3 |
| 20 | 444218 | AF070641  | Hs.10684  | Homo sapiens clone 24421 mRNA sequence    | 4.3 |
|    | 441035 | AI694309  | Hs.126458 | ESTs                                      | 4.3 |
|    | 443836 | BE221613  | Hs.140553 | ESTs                                      | 4.3 |
|    | 425292 | NM_005824 | Hs.155545 | 37 kDa leucine-rich repeat (LRR) protein  | 4.3 |
|    | 450166 | AA429504  |           | ESTs                                      | 4.3 |
| 25 | 429149 | AW193360  | Hs.197962 | ESTs, Weakly similar to I38022 hypotheli  | 4.2 |
|    | 422798 | R92347    | Hs.34574  | ESTs, Weakly similar to ALU1_HUMAN ALU S  | 4.2 |
|    | 451254 | AI571016  | Hs.172967 | ESTs                                      | 4.2 |
|    | 409189 | AA125984  |           | gb:zn27h06.r1 Stratagene neuroepithelium  | 4.2 |
|    | 445118 | AI208762  | Hs.345572 | ESTs                                      | 4.2 |
| 30 | 444326 | AI939357  | Hs.270710 | ESTs                                      | 4.2 |
|    | 456060 | C14904    | Hs.45184  | Homo sapiens cDNA FLJ12284 fis, clone MA  | 4.2 |
|    | 404120 |           |           | C5000537*:gi 3298595 gb AAC41376.1  (AF0  | 4.2 |
|    | 436899 | AA764852  | Hs.291567 | ESTs                                      | 4.1 |
|    | 407624 | AW157431  | Hs.248941 | ESTs                                      | 4.1 |
| 35 | 453361 | AA035197  | Hs.107375 | ESTs                                      | 4.1 |
|    | 447439 | AA313565  | Hs.145020 | ESTs, Weakly similar to KIAA1205 protein  | 4.1 |
|    | 438372 | AI140189  | Hs.123191 | ESTs                                      | 4.1 |
|    | 438624 | AA889055  | Hs.123468 | ESTs                                      | 4.1 |
|    | 422493 | AW474183  | Hs.250173 | hypothetical protein FLJ13158             | 4.1 |
| 40 | 406872 | AI760903  |           | gb:wi09h08.x1 NCI_CGAP_CLL1 Homo sapiens  | 4.1 |
|    | 425295 | AA431366  | Hs.37251  | ESTs                                      | 4.1 |
|    | 425849 | AJ000512  | Hs.296323 | serum/glucocorticoid regulated kinase     | 4.1 |
|    | 434206 | AW136973  | Hs.180479 | ESTs, Weakly similar to S69890 mitogen i  | 4.0 |
|    | 420602 | AF060877  | Hs.99236  | regulator of G-protein signalling 20      | 4.0 |
| 45 | 400645 |           |           | Target Exon                               | 4.0 |
|    | 456306 | AA225313  | Hs.222886 | ESTs, Weakly similar to TRHY_HUMAN TRICH  | 4.0 |
|    | 419326 | W94915    | Hs.42419  | ESTs                                      | 4.0 |
|    | 414948 | C15240    | Hs.182155 | ESTs                                      | 4.0 |
|    | 423198 | M81933    | Hs.1634   | cell division cycle 25A                   | 4.0 |
| 50 | 411537 | BE073250  |           | gb:MR0-BT0551-060300-102-e05 BT0551 Homo  | 4.0 |
|    | 421637 | AF035290  | Hs.106300 | Homo sapiens clone 23556 mRNA sequence    | 3.9 |
|    | 439231 | AW581935  | Hs.141480 | Homo sapiens mRNA; cDNA DKFpZp434N079 (fr | 3.9 |
|    | 429433 | AA452899  | Hs.213586 | ESTs, Weakly similar to KIAA1353 protein  | 3.9 |
|    | 424186 | AI536021  | Hs.288706 | Homo sapiens cDNA FLJ10281 fis, clone HE  | 3.9 |
| 55 | 449932 | AI675444  | Hs.263024 | ESTs                                      | 3.9 |
|    | 434072 | H70854    | Hs.283059 | Homo sapiens PRO1082 mRNA, complete cds   | 3.9 |
|    | 434784 | AA649051  | Hs.164007 | ESTs                                      | 3.9 |
|    | 425146 | AW954627  |           | gb:EST366697 MAGE resequencas, MAGC Homo  | 3.9 |
|    | 428538 | AA446440  | Hs.98643  | ESTs                                      | 3.9 |
| 60 | 443318 | AI051603  | Hs.133141 | ESTs                                      | 3.9 |
|    | 416857 | AA188775  | Hs.292453 | ESTs                                      | 3.9 |
|    | 411688 | AW953440  |           | gb:EST365510 MAGE resequencas, MAGB Homo  | 3.9 |
|    | 447343 | AA256641  | Hs.236894 | ESTs, Highly similar to S02392 alpha-2-m  | 3.9 |
|    | 425905 | AB032959  | Hs.318584 | novel C3HC4 type Zinc finger (ring finger | 3.8 |
| 65 | 403696 |           |           | C4001100*:gi 5852342 gb AAD54015.1  (AF0  | 3.8 |
|    | 415884 | H22966    | Hs.13471  | ESTs                                      | 3.8 |
|    | 432646 | AW753310  |           | gb:RC3-CT0254-031099-012-c05 CT0254 Homo  | 3.8 |
|    | 447057 | AI423407  | Hs.157697 | ESTs                                      | 3.8 |
|    | 400814 |           |           | Target Exon                               | 3.8 |
| 70 | 441329 | AI203575  | Hs.46821  | hypothetical protein FLJ20086             | 3.8 |
|    | 416664 | H72780    | Hs.20289  | ESTs                                      | 3.8 |
|    | 426044 | AA502490  | Hs.170290 | ESTs                                      | 3.8 |
|    | 455646 | BE064420  |           | gb:RC4-BT0311-241199-012-c08 BT0311 Homo  | 3.8 |
|    | 419043 | T19167    | Hs.89566  | ets variant gene 1                        | 3.8 |
| 75 | 445075 | AI651827  | Hs.344767 | ESTs                                      | 3.8 |
|    | 457211 | AW972565  | Hs.32399  | ESTs, Weakly similar to S51797 vasodilat  | 3.8 |
|    | 420004 | AW975532  | Hs.164039 | ESTs, Moderately similar to I38022 hypot  | 3.8 |
|    | 428060 | AA420616  | Hs.249483 | ESTs                                      | 3.7 |
|    | 416427 | BE244050  | Hs.79307  | Rac/Cdc42 guanine exchange factor (GEF)   | 3.7 |
| 80 | 453038 | AW292415  | Hs.20509  | HBV pX associated protein-8               | 3.7 |
|    | 404584 |           |           | Target Exon                               | 3.7 |
|    | 447143 | AW292408  | Hs.152290 | ESTs, Highly similar to JC2463 vasoactiv  | 3.7 |
|    | 453438 | AI469935  | Hs.22792  | ESTs                                      | 3.7 |
|    | 429643 | AA455889  | Hs.167279 | FYVE-finger-containing Rab5 effector pro  | 3.7 |
|    | 458072 | AI890347  | Hs.271923 | Homo sapiens cDNA: FLJ22785 fis, clone K  | 3.7 |
|    | 459660 | M79082    |           | ESTs                                      | 3.7 |
|    | 432188 | AI362952  | Hs.2928   | solute carrier family 7 (cationic amino   | 3.7 |

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|----|--------|-----------|-----------|--|-----|
|    | 430744 | AA485229  | Hs.105649 | ESTs                                     | 3.7 |
|    | 454392 | BE260893  | Hs.236131 | homeodomain-interacting protein kinase 2 | 3.7 |
|    | 454457 | AW753456  |           | gb:QV2-CT0261-261099-011-d11 CT0261 Homo | 3.7 |
| 5  | 435095 | AA021160  | Hs.4750   | hypothetical protein DKFZp564K0822       | 3.7 |
|    | 438206 | AA780385  | Hs.187885 | ESTs                                     | 3.7 |
|    | 418967 | NM_001725 | Hs.89535  | bactericidal/permeability-increasing pro | 3.7 |
|    | 427809 | M26380    | Hs.180878 | lipoprotein lipase                       | 3.7 |
|    | 427722 | AK000123  | Hs.180479 | hypothetical protein FLJ20116            | 3.7 |
| 10 | 413986 | Z43567    |           | gb:HSC1FC021 normalized infant brain cDN | 3.7 |
|    | 438898 | AI819863  | Hs.106243 | ESTs                                     | 3.7 |
|    | 418483 | W26076    | Hs.221847 | ESTs                                     | 3.7 |
|    | 415849 | R20529    | Hs.6806   | ESTs                                     | 3.6 |
|    | 438380 | T06430    | Hs.6194   | chondroitin sulfate proteoglycan BEHAB/b | 3.6 |
|    | 440296 | D30829    | Hs.180610 | splicing factor proline/glutamine rich ( | 3.6 |
| 15 | 438025 | AW501360  | Hs.258910 | ESTs                                     | 3.6 |
|    | 458970 | AW246119  | Hs.25300  | phosphatidylinositol 4-kinase type II    | 3.6 |
|    | 448002 | Y15227    | Hs.20149  | deleted in lymphocytic leukemia, 1       | 3.6 |
|    | 432058 | AW665996  | Hs.130729 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 3.6 |
|    | 409557 | BE182896  | Hs.211193 | ESTs                                     | 3.6 |
| 20 | 418049 | AA211467  | Hs.190488 | Homo sapiens, Similar to nuclear localiz | 3.6 |
|    | 425331 | AW962128  |           | gb:EST374201 MAGE resequences, MAGG Homo | 3.6 |
|    | 424051 | AL110203  | Hs.138411 | Homo sapiens mRNA; cDNA DKFZp586J1922 (f | 3.6 |
|    | 404185 |           |           | Target Exon                              | 3.6 |
| 25 | 427517 | AA644142  | Hs.7107   | ESTs, Weakly similar to ALU7_HUMAN ALU S | 3.6 |
|    | 421094 | AW978202  | Hs.289064 | hypothetical protein FLJ22251            | 3.6 |
|    | 440388 | AI693520  | Hs.223000 | ESTs                                     | 3.6 |
|    | 415934 | NM_000928 | Hs.992    | phospholipase A2, group IB (pancreas)    | 3.6 |
|    | 408292 | AW178363  |           | gb:RC3-HT0105-010999-002-H06 HT0105 Homo | 3.6 |
| 30 | 442432 | BE093589  | Hs.38178  | hypothetical protein FLJ23468            | 3.6 |
|    | 451826 | AA020741  | Hs.171611 | ESTs                                     | 3.6 |
|    | 427375 | AL035460  | Hs.177536 | metallocarboxypeptidase CPX-1            | 3.6 |
|    | 419485 | AA489023  | Hs.99807  | ESTs, Weakly similar to unnamed protein  | 3.6 |
|    | 416370 | N90470    | Hs.203697 | ESTs, Weakly similar to I38022 hypotheti | 3.6 |
|    | 418400 | BE243026  | Hs.301989 | KIAA0246 protein                         | 3.6 |
| 35 | 436674 | AA725002  | Hs.272018 | low molecular mass ubiquinone-binding pr | 3.5 |
|    | 407013 | U35637    |           | gb:Human nebulin mRNA, partial cds       | 3.5 |
|    | 403108 |           |           | ENSP00000241415*:Hypothetical 67.7 kDa p | 3.5 |
|    | 422564 | AI148006  | Hs.222120 | ESTs                                     | 3.5 |
| 40 | 450297 | AW901347  | Hs.38592  | hypothetical protein FLJ23342            | 3.5 |
|    | 436338 | W92147    | Hs.118394 | ESTs                                     | 3.5 |
|    | 447458 | AI741082  | Hs.158961 | ESTs                                     | 3.5 |
|    | 457364 | AW971037  |           | gb:EST383123 MAGE resequences, MAGK Homo | 3.5 |
|    | 458814 | AI498957  | Hs.170861 | ESTs, Weakly similar to Z195_HUMAN ZINC  | 3.5 |
| 45 | 441701 | AW339828  | Hs.127497 | ESTs                                     | 3.5 |
|    | 405558 |           |           | Target Exon                              | 3.5 |
|    | 452682 | AA456193  | Hs.9071   | progesterone membrane binding protein    | 3.5 |
|    | 434589 | AF147363  |           | gb:Homo sapiens full length insert cDNA  | 3.5 |
|    | 443282 | T47764    | Hs.132917 | ESTs                                     | 3.5 |
| 50 | 405183 |           |           | NM_016358*:Homo sapiens iroquois homeobo | 3.5 |
|    | 410064 | X53416    | Hs.195464 | filamin A, alpha (actin-binding protein- | 3.5 |
|    | 425234 | AW152225  | Hs.165909 | ESTs, Weakly similar to I38022 hypotheti | 3.5 |
|    | 404272 |           |           | Target Exon                              | 3.5 |
|    | 428808 | AA436007  | Hs.188780 | ESTs                                     | 3.5 |
| 55 | 447444 | AK000318  | Hs.18616  | hypothetical protein FLJ20311            | 3.5 |
|    | 450475 | AW805634  | Hs.205015 | ESTs                                     | 3.4 |
|    | 454451 | AW846706  |           | gb:QV3-CT0192-211099-008-g02 CT0192 Homo | 3.4 |
|    | 400379 | NM_018432 |           | Homo sapiens ovarian cancer related prot | 3.4 |
|    | 440948 | AW188311  | Hs.128619 | ESTs                                     | 3.4 |
| 60 | 449611 | AI970394  | Hs.197075 | ESTs                                     | 3.4 |
|    | 445666 | R59960    | Hs.282386 | ESTs                                     | 3.4 |
|    | 445828 | F05802    | Hs.81907  | ESTs                                     | 3.4 |
|    | 437528 | N59646    | Hs.169745 | crumbs (Drosophila) homolog 1            | 3.4 |
|    | 442927 | AI024347  | Hs.131519 | ESTs                                     | 3.4 |
| 65 | 451130 | AI762250  | Hs.345554 | ESTs                                     | 3.4 |
|    | 454765 | AW819629  |           | gb:RC5-ST0293-140200-014-H05 ST0293 Homo | 3.4 |
|    | 459200 | Y09306    | Hs.30148  | homeodomain-interacting protein kinase 3 | 3.4 |
|    | 433791 | AA719352  | Hs.112718 | ESTs                                     | 3.4 |
|    | 444911 | U06117    | Hs.250    | xanthene dehydrogenase                   | 3.4 |
| 70 | 439753 | BE262233  | Hs.7423   | hypothetical protein from EUROIMAGE 2168 | 3.4 |
|    | 440933 | AI208217  | Hs.142879 | ESTs                                     | 3.4 |
|    | 447726 | AL137638  | Hs.19368  | matrilin 2                               | 3.4 |
|    | 403849 |           |           | Target Exon                              | 3.4 |
|    | 422418 | AK001383  | Hs.116385 | hypothetical protein FLJ10521            | 3.3 |
| 75 | 439533 | W76021    |           | gb:zd64c04.r1 Soares_fetal_heart_NbHH19W | 3.3 |
|    | 416422 | H60457    |           | ESTs, Moderately similar to ZN91_HUMAN Z | 3.3 |
|    | 441668 | AI611973  | Hs.136313 | ESTs                                     | 3.3 |
|    | 432890 | NM_014442 | Hs.279751 | sialic acid binding Ig-like lectin 8     | 3.3 |
|    | 412135 | AW895309  |           | gb:QV4-NN0038-300300-155-e07 NN0038 Homo | 3.3 |
|    | 417130 | AW276858  | Hs.81256  | S100 calcium-binding protein A4 (calcium | 3.3 |
| 80 | 447854 | AW138454  | Hs.11594  | ESTs                                     | 3.3 |
|    | 448048 | BE281291  | Hs.170408 | ESTs, Moderately similar to A47582 B-cel | 3.3 |
|    | 404632 |           |           | NM_022490:Homo sapiens hypothetical prot | 3.3 |
|    | 411565 | AW851728  |           | gb:MR2-CT0222-011199-007-d06 CT0222 Homo | 3.3 |

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|----|--------|-----------|-----------|---|-----|
|    | 436267 | AW450938  | Hs.180115 | ESTs                                      | 3.3 |
|    | 426625 | T78300    | Hs.300642 | serologically defined colon cancer antig  | 3.3 |
|    | 401272 |           |           | C9000559*:gij12314195 embj CAB99338.1  (A | 3.3 |
| 5  | 433128 | AB021923  | Hs.23367  | EST-YD1 protein                           | 3.3 |
|    | 401702 |           |           | NM_001171*:Homo sapiens ATP-binding cass  | 3.3 |
|    | 454363 | AW816274  | Hs.250154 | hypothetical protein FLJ12973             | 3.3 |
|    | 440332 | AI218517  | Hs.188051 | ESTs                                      | 3.3 |
|    | 454177 | AW807321  |           | gb:MR4-ST0062-240300-003-g05 ST0062 Homo  | 3.3 |
| 10 | 423784 | AK000039  | Hs.132826 | Homo sapiens cDNA FLJ14913 fis, clone PL  | 3.3 |
|    | 440588 | AW404591  | Hs.147440 | ESTs, Weakly similar to Z192_HUMAN ZINC   | 3.3 |
|    | 410267 | AW978005  | Hs.12600  | N-ethylmaleimide-sensitive factor attach  | 3.3 |
|    | 455778 | BE088746  |           | gb:CM2-BT0693-210300-123-d09 BT0693 Homo  | 3.3 |
|    | 430183 | BE010038  |           | gb:PM3-BN0176-100400-001-g04 BN0176 Homo  | 3.2 |
| 15 | 451597 | AW295250  | Hs.207536 | ESTs                                      | 3.2 |
|    | 451446 | AI826288  | Hs.171637 | hypothetical protein MGC2628              | 3.2 |
|    | 421353 | AW292857  | Hs.255130 | ESTs                                      | 3.2 |
|    | 442710 | AI015631  | Hs.23210  | ESTs                                      | 3.2 |
|    | 420560 | AW207748  | Hs.59115  | ESTs                                      | 3.2 |
| 20 | 417404 | NM_007350 | Hs.82101  | pleckstrin homology-like domain, family   | 3.2 |
|    | 437834 | AA769294  | Hs.283854 | gb:nz36g03.s1 NCL_CGAP_GCB1 Homo sapiens  | 3.2 |
|    | 430694 | AA810624  | Hs.30936  | ESTs, Weakly similar to H2BH_HUMAN HISTO  | 3.2 |
|    | 412021 | AW885592  |           | gb:RC4-OT0071-090300-011-g11 OT0071 Homo  | 3.2 |
|    | 443431 | AI056847  | Hs.20654  | ESTs                                      | 3.2 |
| 25 | 445774 | AI254165  | Hs.339968 | ESTs                                      | 3.2 |
|    | 413335 | AI613318  | Hs.48442  | ESTs                                      | 3.2 |
|    | 450692 | H50603    | Hs.94037  | hypothetical protein FLJ23053             | 3.2 |
|    | 411671 | BE049094  |           | ESTs                                      | 3.2 |
|    | 404592 |           |           | NM_022739*:Homo sapiens E3 ubiquitin lig  | 3.2 |
| 30 | 402747 |           |           | Target Exon                               | 3.2 |
|    | 428600 | AW863261  | Hs.242413 | hypothetical protein DKFZp434K1421        | 3.2 |
|    | 420300 | AA258245  | Hs.127573 | Homo sapiens FKSG41 (FKSG41) mRNA, compl  | 3.2 |
|    | 445347 | AF035318  | Hs.12533  | Homo sapiens clone 23705 mRNA sequence    | 3.2 |
|    | 458438 | AI141520  | Hs.151464 | ESTs, Weakly similar to ALUC_HUMAN !!!!   | 3.2 |
| 35 | 442314 | AI311854  | Hs.129220 | ESTs                                      | 3.2 |
|    | 436291 | BE568452  | Hs.344037 | protein regulator of cytokinesis 1        | 3.2 |
|    | 413249 | AF167160  | Hs.75251  | DEAD/H (Asp-Glu-Ala-Asp/His) box binding  | 3.2 |
|    | 448789 | BE539108  | Hs.22051  | hypothetical protein MGC15548             | 3.2 |
|    | 403291 |           |           | Target Exon                               | 3.2 |
| 40 | 436210 | AI825420  | Hs.197824 | ESTs                                      | 3.2 |
|    | 418079 | R40058    | Hs.6911   | ESTs                                      | 3.2 |
|    | 413951 | AW051200  | Hs.75640  | natriuretic peptide precursor A           | 3.2 |
|    | 435828 | AA700705  | Hs.13852  | ESTs                                      | 3.2 |
|    | 437722 | AW292947  | Hs.122872 | ESTs, Weakly similar to JU0033 hypotheti  | 3.2 |
| 45 | 451418 | BE387790  | Hs.26369  | hypothetical protein FLJ20287             | 3.2 |
|    | 405046 |           |           | C3000978:gij9280045 dbj BAB01579.1  (AB0  | 3.1 |
|    | 444315 | R07860    | Hs.20039  | ESTs                                      | 3.1 |
|    | 453096 | AW294631  | Hs.11325  | ESTs                                      | 3.1 |
|    | 433835 | AI806185  |           | gb:wf26a10.x1 Soares_NFL_T_GBC_S1 Homo s  | 3.1 |
| 50 | 430608 | R45584    | Hs.23025  | ESTs, Weakly similar to ALU5_HUMAN ALU S  | 3.1 |
|    | 453324 | W26592    | Hs.232089 | ESTs                                      | 3.1 |
|    | 414884 | R54418    | Hs.183745 | hypothetical protein FLJ13456             | 3.1 |
|    | 446862 | AV660697  | Hs.282700 | ESTs                                      | 3.1 |
|    | 427241 | AA399988  | Hs.112087 | Human DNA sequence from clone RP11-530N1  | 3.1 |
| 55 | 416486 | H81336    | Hs.37560  | ESTs                                      | 3.1 |
|    | 429940 | W25215    |           | gb:zb87a09.r1 Soares_senescent_fibroblas  | 3.1 |
|    | 430535 | AW968485  |           | gb:EST380561 MAGE resequences, MAGJ Homo  | 3.1 |
|    | 439544 | W26354    | Hs.28891  | hypothetical protein FLJ11360; artemis p  | 3.1 |
|    | 437083 | AW082597  | Hs.244862 | ESTs                                      | 3.1 |
| 60 | 435677 | AA694142  | Hs.293726 | ESTs, Weakly similar to TSGA RAT TESTIS   | 3.1 |
|    | 458810 | BE407125  | Hs.231510 | ESTs                                      | 3.1 |
|    | 443484 | AI091458  | Hs.134559 | ESTs                                      | 3.1 |
|    | 427581 | NM_014788 | Hs.179703 | KIAA0129 gene product                     | 3.1 |
|    | 444016 | AA448154  |           | gb:zw82h09.r1 Soares_testis_NHT Homo sap  | 3.1 |
| 65 | 423337 | NM_004655 | Hs.127337 | axin 2 (conductin, axil)                  | 3.1 |
|    | 403288 |           |           | C1001737*:gij7511201 pir IT27904 hypothe  | 3.1 |
|    | 450125 | AA005418  | Hs.158186 | ESTs                                      | 3.1 |
|    | 438138 | R98299    | Hs.177502 | ESTs                                      | 3.1 |
|    | 436222 | AI208737  | Hs.122810 | Homo sapiens cDNA FLJ11489 fis, clone HE  | 3.1 |
| 70 | 443433 | R44743    | Hs.301667 | ESTs                                      | 3.1 |
|    | 443725 | AW245680  | Hs.9701   | growth arrest and DNA-damage-inducible,   | 3.1 |
|    | 432044 | AW972727  |           | gb:EST384819 MAGE resequences, MAGL Homo  | 3.1 |
|    | 405760 |           |           | Target Exon                               | 3.1 |
|    | 423789 | AK002084  | Hs.132851 | hypothetical protein FLJ11222             | 3.1 |
| 75 | 411605 | AW006831  | Hs.177530 | ESTs                                      | 3.1 |
|    | 417893 | AA290605  | Hs.190002 | ESTs                                      | 3.1 |
|    | 449246 | AW411209  | Hs.23363  | hypothetical protein FLJ10983             | 3.1 |
|    | 429528 | AI985303  | Hs.99361  | ESTs                                      | 3.1 |
|    | 456645 | AF227156  | Hs.110103 | RNA polymerase I transcription factor RR  | 3.1 |
| 80 | 412490 | AW803564  | Hs.288850 | Homo sapiens cDNA: FLJ22528 fis, clone H  | 3.1 |
|    | 421679 | AI475110  | Hs.203933 | ESTs                                      | 3.1 |
|    | 434503 | T96231    | Hs.17762  | ESTs                                      | 3.1 |
|    | 450756 | AI733488  | Hs.144062 | ESTs                                      | 3.1 |
|    | 415293 | R49462    | Hs.106541 | ESTs                                      | 3.0 |



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|    |        |           |   |     |
|----|--------|-----------|---|-----|
|    | 403212 |           | NM_019595: Homo sapiens intersectin 2 (IT | 3.0 |
|    | 422757 | AI909935  | Hs.65551                                  | 3.0 |
|    | 427624 | AA406245  | Hs.24895                                  | 3.0 |
|    | 449256 | AA059050  | Hs.59847                                  | 3.0 |
| 5  | 411543 | AW851248  | gb:IL3-CT0220-160200-066-F01 CT0220 Homo  | 3.0 |
|    | 409112 | BE243971  | Hs.50649                                  | 3.0 |
|    | 414403 | AW969551  | Hs.76064                                  | 3.0 |
|    | 427418 | AA402587  | Hs.325520                                 | 3.0 |
|    | 455481 | AW948317  | gb:RC0-MT0015-280300-021-a09 MT0015 Homo  | 3.0 |
| 10 | 444396 | T65213    | Hs.4257                                   | 3.0 |
|    | 407235 | D20569    | Hs.169407                                 | 3.0 |
|    | 431431 | AL096711  | Hs.252953                                 | 3.0 |
|    | 451391 | AA017410  | Hs.40568                                  | 3.0 |
|    | 430251 | AA609246  | Hs.181451                                 | 3.0 |
| 15 | 420658 | AW965215  | Hs.130707                                 | 3.0 |
|    | 442786 | H50733    | Hs.256261                                 | 3.0 |
|    | 440897 | AW104275  | Hs.146348                                 | 3.0 |
|    | 444609 | AW571659  | Hs.278081                                 | 3.0 |
|    | 433062 | AK001757  | Hs.281348                                 | 3.0 |
| 20 | 408523 | AW833259  | Hs.314287                                 | 3.0 |
|    | 443477 | R32325    | Hs.221794                                 | 3.0 |
|    | 423869 | BE409301  | Hs.134012                                 | 3.0 |
|    | 405488 |           | C1q-related factor                        | 3.0 |
|    | 414988 | C17535    | ENSP00000220888*:ZINC FINGER TRANSCRIPT1  | 3.0 |
| 25 | 440471 | AA886146  | Hs.307944                                 | 3.0 |
|    | 416355 | H49875    | Hs.268906                                 | 3.0 |
|    | 408926 | AF217525  | Hs.49002                                  | 3.0 |
|    | 424028 | AF055084  | Hs.153692                                 | 2.9 |
|    | 438201 | AA780243  | Hs.54647                                  | 2.9 |
| 30 | 413851 | AW897510  | Hs.137387                                 | 2.9 |
|    | 402229 | BE262804  | Hs.282385                                 | 2.9 |
|    | 444145 | BE153823  | Hs.132776                                 | 2.9 |
|    | 423770 | AW976766  | Hs.29076                                  | 2.9 |
|    | 439627 | BE621702  | Hs.238246                                 | 2.9 |
| 35 | 414232 | W86946    | Hs.238246                                 | 2.9 |
|    | 400533 |           | ENSP00000209376*:PRED65 protein (Fragmen  | 2.9 |
|    | 440483 | AI200836  | Hs.150386                                 | 2.9 |
|    | 443502 | AI074528  | Hs.133949                                 | 2.9 |
|    | 449667 | AB023227  | Hs.23860                                  | 2.9 |
| 40 | 446809 | AW590171  | Hs.101413                                 | 2.9 |
|    | 408788 | AL134947  | Hs.213956                                 | 2.9 |
|    | 413627 | BE182082  | Hs.246973                                 | 2.9 |
|    | 449655 | AI021987  | Hs.59970                                  | 2.9 |
|    | 407378 | AA299264  | Hs.57776                                  | 2.9 |
| 45 | 400090 |           | Eos Control                               | 2.9 |
|    | 454968 | AW849046  | gb:IL3-CT0214-150300-085-H06 CT0214 Homo  | 2.9 |
|    | 423352 | AA324808  | Hs.193576                                 | 2.9 |
|    | 426197 | AA004410  | Hs.100009                                 | 2.9 |
| 50 | 452102 | U04343    | Hs.27954                                  | 2.9 |
|    | 415346 | Z43108    | gb:HSC13E071 normalized infant brain cDN  | 2.9 |
|    | 436726 | AA324975  | Hs.198689                                 | 2.9 |
|    | 442513 | AF150207  | Hs.207949                                 | 2.9 |
|    | 425012 | T77666    | Hs.92414                                  | 2.9 |
| 55 | 402322 |           | Homo sapiens cDNA: FLJ22030 fis, clone H  | 2.9 |
|    | 427235 | AI126288  | Hs.192232                                 | 2.9 |
|    | 456412 | AW749617  | Hs.280776                                 | 2.9 |
|    | 431196 | AW974436  | Hs.154929                                 | 2.9 |
|    | 439379 | AA835002  | Hs.125611                                 | 2.9 |
| 60 | 423757 | AL049337  | Hs.132571                                 | 2.9 |
|    | 446134 | AW161234  | Hs.13993                                  | 2.9 |
|    | 435645 | AI052789  | Hs.133263                                 | 2.9 |
|    | 449385 | AI650471  | Hs.347290                                 | 2.9 |
|    | 444161 | N52543    | Hs.142940                                 | 2.9 |
| 65 | 406635 | U07162    | gb:Human clone LNA11 autoantibody Ig hea  | 2.9 |
|    | 419239 | AA468183  | Hs.184598                                 | 2.9 |
|    | 458760 | AI498631  | Hs.111334                                 | 2.9 |
|    | 427245 | AA421022  | Hs.97739                                  | 2.9 |
|    | 400658 |           | ENSP00000237081*:KIAA1217 PROTEIN (FRAGM  | 2.9 |
| 70 | 430701 | AI760833  | Hs.293971                                 | 2.9 |
|    | 435294 | T84084    | Hs.196008                                 | 2.9 |
|    | 429927 | NM_001115 | Hs.2522                                   | 2.9 |
|    | 446160 | AW392197  | Hs.218003                                 | 2.9 |
|    | 420674 | NM_000055 | Hs.1327                                   | 2.9 |
| 75 | 424330 | AW073953  | Hs.333396                                 | 2.9 |
|    | 418915 | AI474778  | Hs.118977                                 | 2.9 |
|    | 425922 | AL157466  | Hs.162751                                 | 2.9 |
|    | 447512 | AW958148  | Hs.129454                                 | 2.9 |
|    | 449990 | AI279010  | Hs.48821                                  | 2.8 |
| 80 | 423779 | AW071837  | Hs.57971                                  | 2.8 |
|    | 427395 | AW298741  | Hs.97861                                  | 2.8 |
|    | 416188 | BE157260  | Hs.79070                                  | 2.8 |
|    | 426746 | J03626    | Hs.2057                                   | 2.8 |
|    | 400362 | AF068294  | Hs.272414                                 | 2.8 |

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|----|--------|-----------|-----------|--|-----|
|    | 457579 | AB030816  | Hs.36761  | HRAS-like suppressor                     | 2.8 |
|    | 451059 | AW297465  | Hs.267150 | KIAA1409 protein                         | 2.8 |
|    | 403903 |           |           | C5001632".gi 10645308 gb AAG21430.1 AC00 | 2.8 |
| 5  | 444491 | AI151091  | Hs.270714 | ESTs                                     | 2.8 |
|    | 455899 | BE155112  |           | gb:PM1-HT0350-151299-003-a03 HT0350 Homo | 2.8 |
|    | 457292 | AI921270  | Hs.281462 | hypothetical protein FLJ14251            | 2.8 |
|    | 428305 | AA446628  | Hs.2799   | cartilage linking protein 1              | 2.8 |
|    | 435375 | AI733610  | Hs.187832 | ESTs                                     | 2.8 |
| 10 | 409078 | AW327515  | Hs.346209 | ESTs                                     | 2.8 |
|    | 436109 | AA922153  | Hs.132760 | hypothetical protein MGC15729            | 2.8 |
|    | 444656 | AI277924  | Hs.145199 | ESTs                                     | 2.8 |
|    | 426384 | AI472078  | Hs.303662 | hypothetical protein FLJ13189 (FLJ13189) | 2.8 |
|    | 424200 | AA337221  |           | gb:EST41944 Endometrial tumor Homo sapie | 2.8 |
| 15 | 438243 | AI581311  |           | ESTs                                     | 2.8 |
|    | 434012 | AA621425  | Hs.186256 | ESTs                                     | 2.8 |
|    | 402711 |           |           | Target Exon                              | 2.8 |
|    | 442955 | AI683534  | Hs.131583 | ESTs                                     | 2.8 |
|    | 418319 | AW611703  | Hs.190173 | ESTs, Weakly similar to A46010 X-linked  | 2.8 |
| 20 | 438934 | BE220137  | Hs.124323 | ESTs                                     | 2.8 |
|    | 438689 | AW129261  | Hs.181672 | ESTs                                     | 2.8 |
|    | 420083 | AA478847  | Hs.42484  | hypothetical protein FLJ10618            | 2.8 |
|    | 400315 | U46120    | Hs.193392 | Human expressed unknown mRNA             | 2.8 |
|    | 433563 | AI732637  | Hs.277901 | ESTs                                     | 2.8 |
| 25 | 458093 | AI207788  | Hs.343628 | sialyltransferase 4B (beta-galactosidase | 2.8 |
|    | 409157 | AA064631  |           | gb:zf72c03.s1 Soares_pineal_gland_N3HPG  | 2.8 |
|    | 450597 | AI701635  | Hs.207077 | ESTs                                     | 2.8 |
|    | 425300 | AW601773  | Hs.270259 | ESTs                                     | 2.8 |
|    | 458617 | Z25900    | Hs.18724  | Homo sapiens mRNA; cDNA DKFZp564F093 (fr | 2.8 |
| 30 | 418312 | AW972468  | Hs.170307 | Rai guanine nucleotide exchange factor R | 2.8 |
|    | 430335 | D80007    | Hs.239499 | KIAA0185 protein                         | 2.8 |
|    | 454581 | AW809189  |           | gb:MR4-ST0118-261099-012-e10 ST0118 Homo | 2.8 |
|    | 419735 | AW750056  | Hs.169577 | Homo sapiens cDNA FLJ14743 fis, clone NT | 2.8 |
|    | 436265 | AA731331  | Hs.190668 | ESTs                                     | 2.8 |
| 35 | 439481 | AF086294  | Hs.125844 | ESTs                                     | 2.8 |
|    | 441964 | AA972619  | Hs.20506  | ESTs, Weakly similar to I38022 hypothei  | 2.8 |
|    | 422648 | D86983    | Hs.118893 | Melanoma associated gene                 | 2.8 |
|    | 430503 | AA533574  | Hs.152274 | ESTs                                     | 2.8 |
|    | 403942 |           |           | Target Exon                              | 2.8 |
| 40 | 420565 | AI806770  | Hs.30258  | ESTs                                     | 2.8 |
|    | 439069 | H63144    | Hs.184178 | ESTs, Weakly similar to ALUB_HUMAN !!!   | 2.8 |
|    | 436480 | AJ271643  | Hs.87469  | putative acid-sensing ion channel        | 2.8 |
|    | 408137 | AI694131  | Hs.29002  | KIAA1706 protein                         | 2.8 |
|    | 451692 | AL137422  | Hs.26849  | Homo sapiens mRNA; cDNA DKFZp761A1623 (f | 2.8 |
| 45 | 419713 | AW968058  | Hs.92381  | nudix (nucleoside diphosphate linked moi | 2.8 |
|    | 452526 | W38537    | Hs.280740 | hypothetical protein MGC3040             | 2.8 |
|    | 414300 | AI304870  | Hs.188680 | ESTs                                     | 2.8 |
|    | 419741 | NM_007019 | Hs.93002  | ubiquitin carrier protein E2-C           | 2.8 |
|    | 437933 | AI276132  | Hs.146155 | ESTs                                     | 2.7 |
| 50 | 405941 |           |           | Target Exon                              | 2.7 |
|    | 443210 | AI692649  | Hs.9451   | hypothetical protein MGC13168            | 2.7 |
|    | 450651 | W79000    | Hs.44545  | ESTs, Weakly similar to B34087 hypothei  | 2.7 |
|    | 426765 | AA743603  | Hs.172108 | nucleoporin 88kD                         | 2.7 |
|    | 418886 | AA993982  | Hs.130858 | ESTs                                     | 2.7 |
| 55 | 429483 | AA974832  | Hs.128708 | ESTs                                     | 2.7 |
|    | 430426 | AA478807  | Hs.125173 | ESTs                                     | 2.7 |
|    | 439019 | AF085902  | Hs.271737 | ESTs                                     | 2.7 |
|    | 400924 |           |           | Target Exon                              | 2.7 |
|    | 458070 | AW503578  | Hs.209406 | ESTs, Weakly similar to I38600 zinc fing | 2.7 |
| 60 | 427299 | AA830210  | Hs.214263 | ESTs, Moderately similar to ALU1_HUMAN A | 2.7 |
|    | 442621 | AI004333  | Hs.130553 | ESTs, Weakly similar to ALUA_HUMAN !!!   | 2.7 |
|    | 437643 | AL080280  |           | gb:Homo sapiens mRNA full length insert  | 2.7 |
|    | 426925 | NM_001196 | Hs.315689 | Homo sapiens cDNA: FLJ22373 fis, clone H | 2.7 |
|    | 443392 | AI055821  | Hs.293420 | ESTs                                     | 2.7 |
| 65 | 429972 | AI700846  | Hs.234518 | ribosomal protein L23                    | 2.7 |
|    | 438875 | AA827640  | Hs.189059 | ESTs                                     | 2.7 |
|    | 422551 | AW967284  |           | gb:EST379359 MAGE resequences, MAGJ Homo | 2.7 |
|    | 446139 | H77395    | Hs.39749  | ESTs                                     | 2.7 |
|    | 429115 | AA446728  | Hs.289020 | Homo sapiens cDNA FLJ14098 fis, clone MA | 2.7 |
| 70 | 428612 | AA770001  | Hs.188778 | ESTs                                     | 2.7 |
|    | 439947 | AB006627  | Hs.6788   | astrolactin                              | 2.7 |
|    | 439699 | AF086534  | Hs.187561 | ESTs, Moderately similar to ALU1_HUMAN A | 2.7 |
|    | 438335 | AI498421  | Hs.243168 | ESTs                                     | 2.7 |
|    | 456680 | AL137758  | Hs.116072 | Homo sapiens mRNA; cDNA DKFZp434H245 (fr | 2.7 |
| 75 | 412074 | S74683    | Hs.73139  | ADP-ribosyltransferase 1                 | 2.7 |
|    | 412225 | AW902042  |           | gb:QV0-NN1022-170400-193-c02 NN1022 Homo | 2.7 |
|    | 438801 | AA825971  | Hs.124284 | ESTs                                     | 2.7 |
|    | 442892 | AI038379  | Hs.131865 | ESTs                                     | 2.7 |
|    | 432964 | AF118395  | Hs.279865 | trans-prenyltransferase                  | 2.7 |
| 80 | 403790 |           |           | NM_001334".Homo sapiens cathepsin O (CTS | 2.7 |
|    | 400335 | Y13187    | Hs.248068 | Homo sapiens dmd gene, intron 11         | 2.7 |
|    | 415467 | R60891    | Hs.260274 | ESTs                                     | 2.7 |
|    | 428715 | AW293716  | Hs.53126  | ESTs                                     | 2.7 |
|    | 457750 | AI651474  | Hs.163944 | ESTs                                     | 2.7 |

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|    |        |          |           |   |     |
|----|--------|----------|-----------|---|-----|
|    | 424480 | AA341442 | Hs.205299 | ESTs                                      | 2.7 |
|    | 444822 | BE164351 | Hs.292767 | hypothetical protein FLJ23109             | 2.7 |
|    | 432651 | AW973744 | Hs.293100 | ESTs                                      | 2.7 |
|    | 439823 | AW665287 | Hs.124514 | ESTs                                      | 2.7 |
| 5  | 457021 | AW968934 | Hs.173108 | Homo sapiens cDNA: FLJ21897 fis, clone H  | 2.7 |
|    | 440026 | AA861299 | Hs.160371 | ESTs                                      | 2.7 |
|    | 446960 | AW294936 | Hs.156762 | ESTs                                      | 2.7 |
|    | 435046 | AA662772 | Hs.174330 | ESTs, Weakly similar to ALU1_HUMAN ALU S  | 2.7 |
| 10 | 431999 | AL133573 | Hs.272312 | Homo sapiens mRNA; cDNA DKFZp434J2235 (I  | 2.7 |
|    | 458527 | AI950256 | Hs.224875 | ESTs                                      | 2.7 |
|    | 445899 | AI263736 | Hs.145626 | ESTs                                      | 2.7 |
|    | 404254 |          |           | ENSP00000082468*:DJ45P21.3 (butyrophilin  | 2.7 |
|    | 402344 |          |           | Target Exon                               | 2.7 |
|    | 426503 | AA380153 |           | gb:EST93093 Skin tumor I Homo sapiens cD  | 2.7 |
| 15 | 446420 | AW015693 | Hs.135614 | ESTs                                      | 2.7 |
|    | 426914 | AA393328 | Hs.194303 | ESTs                                      | 2.7 |
|    | 407903 | AI287341 | Hs.154029 | bHLH factor Hes4                          | 2.7 |
|    | 433009 | AA761668 |           | gb:nz24c08.s1 NCI_CGAP_GCB1 Homo sapiens  | 2.7 |
|    | 403431 |          |           | Target Exon                               | 2.7 |
| 20 | 403290 |          |           | C10001011*:gil4758212[ref]NP_004411.1  d  | 2.7 |
|    | 435143 | R12375   | Hs.194600 | ESTs                                      | 2.7 |
|    | 416569 | H64891   |           | gb:yr68h03.r1 Soares fetal liver spleen   | 2.7 |
|    | 428690 | AI948490 | Hs.98765  | ESTs                                      | 2.7 |
|    | 425128 | BE561929 | Hs.154718 | tumor protein D52-like 2                  | 2.7 |
| 25 | 443361 | AI792628 | Hs.133273 | ESTs                                      | 2.7 |
|    | 404053 |          |           | Target Exon                               | 2.7 |
|    | 435113 | AA665469 | Hs.117136 | ESTs                                      | 2.6 |
|    | 405717 |          |           | CX000838:gil10092633[ref]NP_055314.1  pu  | 2.6 |
| 30 | 413098 | BE065279 |           | gb:RC1-BT0314-030500-016-b09 BT0314 Homo  | 2.6 |
|    | 444884 | AI201094 | Hs.148540 | ESTs                                      | 2.6 |
|    | 419015 | T79262   | Hs.14463  | ESTs                                      | 2.6 |
|    | 423234 | AA323534 | Hs.296162 | AD037 protein                             | 2.6 |
|    | 406871 | AA993857 | Hs.180842 | ribosomal protein L13                     | 2.6 |
|    | 428670 | AA431682 | Hs.134832 | ESTs                                      | 2.6 |
| 35 | 408371 | AF161545 | Hs.44439  | hypothetical protein                      | 2.6 |
|    | 413929 | BE501689 | Hs.75617  | collagen, type IV, alpha 2                | 2.6 |
|    | 408369 | R38438   | Hs.182575 | solute carrier family 15 (H??? transport  | 2.6 |
|    | 419817 | AA743434 | Hs.193778 | ESTs                                      | 2.6 |
|    | 415788 | AW628686 | Hs.78851  | KIAA0217 protein                          | 2.6 |
| 40 | 427388 | BE379610 | Hs.177592 | ribosomal protein, large, P1              | 2.6 |
|    | 451018 | AW965599 | Hs.247324 | mitochondrial ribosomal protein S14       | 2.6 |
|    | 405863 |          |           | Target Exon                               | 2.6 |
|    | 454037 | AW998716 |           | gb:PM4-BN0067-250300-002-f11 BN0067 Homo  | 2.6 |
|    | 430147 | R60704   | Hs.234434 | hairly/enhancer-of-split related with YRP | 2.6 |
| 45 | 425480 | AB023198 | Hs.158135 | KIAA0981 protein                          | 2.6 |
|    | 407182 | AA312551 | Hs.230157 | ESTs                                      | 2.6 |
|    | 439538 | AA837323 | Hs.56407  | ESTs                                      | 2.6 |
|    | 449249 | T52285   | Hs.193115 | Homo sapiens mRNA for KIAA1764 protein,   | 2.6 |
|    | 429569 | AA454993 | Hs.138343 | ESTs, Weakly similar to I78885 serine/th  | 2.6 |
| 50 | 402936 |          |           | ENSP00000217246*:DJ803K15.1 (novel prote  | 2.6 |
|    | 420670 | AW973577 |           | ESTs                                      | 2.6 |
|    | 455409 | AW936832 |           | gb:PM2-DT0023-050400-003-h03 DT0023 Homo  | 2.6 |
|    | 413151 | H47969   | Hs.141971 | ESTs, Weakly similar to ALU1_HUMAN ALU S  | 2.6 |
|    | 422484 | AA568770 | Hs.123158 | Homo sapiens cDNA FLJ12830 fis, clone NT  | 2.6 |
| 55 | 400780 |          |           | NM_007325*:Homo sapiens glutamate recept  | 2.6 |
|    | 429258 | AA448765 |           | gb:zx10e09.r1 Soares_total_fetus_Nb2HF8_  | 2.6 |
|    | 448970 | AW138582 |           | gb:UL-H-B11-acw-a-06-0-UL.s1 NCI_CGAP_Su  | 2.6 |
|    | 402615 |          |           | C1003844*:gil6912550[ref]NP_036483.1  ol  | 2.6 |
|    | 417099 | BE537357 | Hs.306995 | hypothetical protein MGC5457              | 2.6 |
| 60 | 428397 | AA428040 |           | gb:zw50e02.r1 Soares_total_fetus_Nb2HF8_  | 2.6 |
|    | 449164 | AI632772 | Hs.264165 | ESTs                                      | 2.6 |
|    | 412584 | X54870   | Hs.74085  | DNA segment on chromosome 12 (unique) 24  | 2.6 |
|    | 443635 | AI080230 | Hs.134214 | ESTs                                      | 2.6 |
|    | 402981 |          |           | Target Exon                               | 2.6 |
| 65 | 433258 | AI806626 | Hs.207300 | ESTs, Weakly similar to ALUB_HUMAN !!!    | 2.6 |
|    | 428917 | AA437337 | Hs.16689  | ESTs                                      | 2.6 |
|    | 418557 | BE140602 | Hs.246645 | ESTs                                      | 2.6 |
|    | 445211 | BE045601 | Hs.118248 | ESTs, Weakly similar to YC18_HUMAN HYPOT  | 2.6 |
|    | 404423 |          |           | C8000067*:gil10432400[emb]CAC10290.1  (A  | 2.6 |
| 70 | 435953 | AI767087 | Hs.114142 | ESTs                                      | 2.6 |
|    | 435937 | AA830893 | Hs.119769 | ESTs                                      | 2.6 |
|    | 439220 | AW295340 | Hs.130417 | ESTs, Weakly similar to Z195_HUMAN ZINC   | 2.6 |
|    | 419597 | W73692   |           | gb:zd50c01.s1 Soares_fetal_heart_NbHH19W  | 2.6 |
|    | 436852 | AI814817 | Hs.269099 | ESTs                                      | 2.6 |
| 75 | 430569 | AF241254 | Hs.178098 | angiotensin I converting enzyme (peptidy  | 2.6 |
|    | 443845 | AI590084 | Hs.148485 | ESTs, Weakly similar to A47161 Mac-2-bin  | 2.6 |
|    | 414223 | AA954566 | Hs.238246 | hypothetical protein FLJ22479             | 2.6 |
|    | 443770 | AW815924 |           | gb:MR3-ST0218-191199-012-a10 ST0218 Homo  | 2.6 |
|    | 450443 | AA009847 | Hs.120744 | ESTs                                      | 2.6 |
| 80 | 435523 | T62849   | Hs.11090  | membrane-spanning 4-domains, subfamily A  | 2.6 |
|    | 400492 |          |           | C10001573*:gil7302749[gb]AAF57827.1  (AE  | 2.6 |
|    | 450202 | AW969756 | Hs.34145  | ESTs, Weakly similar to B49647 GTP-bind   | 2.6 |
|    | 416845 | H95279   | Hs.293788 | gb:yu20h02.s1 Soares fetal liver spleen   | 2.6 |

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|----|--------|-----------|-----------|--|-----|
|    | 446423 | AW139655  | Hs.150120 | ESTs                                     | 2.6 |
|    | 447587 | AW292139  | Hs.115789 | ESTs                                     | 2.6 |
|    | 437014 | AA808757  | Hs.222531 | ESTs, Weakly similar to S59501 interfero | 2.6 |
| 5  | 426411 | AK000708  | Hs.169764 | hypothetical protein FLJ20701            | 2.6 |
|    | 432668 | AA558601  | Hs.43296  | ESTs                                     | 2.6 |
|    | 436682 | AI590055  | Hs.124110 | ESTs                                     | 2.6 |
|    | 426894 | AI204209  | Hs.143911 | ESTs                                     | 2.6 |
|    | 402605 |           |           | Target Exon                              | 2.6 |
| 10 | 457554 | AA570111  | Hs.155873 | ESTs, Weakly similar to ALUE_HUMAN !!!!  | 2.6 |
|    | 438166 | N30158    | Hs.122645 | ESTs                                     | 2.6 |
|    | 443021 | AA368546  | Hs.8904   | Ig superfamily protein                   | 2.6 |
|    | 427005 | AA394228  | Hs.97494  | ESTs                                     | 2.6 |
|    | 437085 | AA743935  | Hs.202329 | ESTs                                     | 2.6 |
| 15 | 408603 | R25283    | Hs.325416 | Homo sapiens mRNA; cDNA DKFZp564H1916 (f | 2.6 |
|    | 431019 | NM_005249 | Hs.2714   | forkhead box G1B                         | 2.5 |
|    | 437287 | AA748180  | Hs.159346 | hypothetical protein FLJ21369            | 2.5 |
|    | 458552 | AW136139  | Hs.245856 | ESTs                                     | 2.5 |
|    | 436350 | AA713661  | Hs.121091 | ESTs                                     | 2.5 |
| 20 | 421988 | AW450481  | Hs.161333 | ESTs                                     | 2.5 |
|    | 416704 | H77795    | Hs.39785  | ESTs                                     | 2.5 |
|    | 447630 | R98920    | Hs.164314 | ESTs                                     | 2.5 |
|    | 413278 | BE563085  | Hs.833    | interferon-stimulated protein, 15 kDa    | 2.5 |
|    | 406789 | AI041403  |           | ribosomal protein L29                    | 2.5 |
| 25 | 433683 | AI817723  | Hs.22678  | hypothetical protein FLJ21832            | 2.5 |
|    | 433523 | H29882    |           | ESTs                                     | 2.5 |
|    | 452296 | T65535    | Hs.111539 | ESTs                                     | 2.5 |
|    | 428878 | AA436884  | Hs.48926  | ESTs                                     | 2.5 |
|    | 442476 | AF069475  |           | gb:AF069475 Homo sapiens astrocytoma lib | 2.5 |
| 30 | 452785 | AL359942  | Hs.296434 | erythroid differentiation and denudeati  | 2.5 |
|    | 444422 | AI768623  | Hs.108264 | ESTs                                     | 2.5 |
|    | 420579 | AA278449  | Hs.137429 | ESTs                                     | 2.5 |
|    | 416505 | H66470    | Hs.16004  | ESTs                                     | 2.5 |
|    | 402595 |           |           | C1001578:gij6759903[gb]AAF28099.1  (AF1  | 2.5 |
| 35 | 447930 | R44574    | Hs.107510 | ESTs                                     | 2.5 |
|    | 459527 | AW977556  | Hs.291735 | ESTs, Weakly similar to I78885 serine/th | 2.5 |
|    | 458421 | AI279978  | Hs.22547  | ESTs                                     | 2.5 |
|    | 427527 | AI809057  | Hs.293441 | immunoglobulin heavy constant mu         | 2.5 |
|    | 436035 | AA703679  | Hs.106999 | ESTs, Weakly similar to SYT5_HUMAN SYNAP | 2.5 |
| 40 | 453362 | H14988    | Hs.107375 | ESTs                                     | 2.5 |
|    | 423600 | AI633559  | Hs.310359 | ESTs                                     | 2.5 |
|    | 433325 | AW206986  | Hs.143905 | ESTs                                     | 2.5 |
|    | 415983 | AI436798  | Hs.117078 | Homo sapiens cDNA: FLJ23028 fis, clone L | 2.5 |
|    | 431198 | AL047634  | Hs.231913 | ESTs                                     | 2.5 |
| 45 | 430530 | AA480870  | Hs.47660  | ESTs                                     | 2.5 |
|    | 455276 | BE176479  |           | gb:RC3-HT0585-160300-022-b09 HT0585 Homo | 2.5 |
|    | 416665 | H72974    |           | gb:yu28a10.s1 Soares fetal liver spleen  | 2.5 |
|    | 422352 | AA766296  | Hs.99200  | ESTs                                     | 2.5 |
|    | 427613 | AW273851  | Hs.98025  | ESTs                                     | 2.5 |
| 50 | 453685 | AL110309  |           | gb:DKFZp564L0278_r1 564 (synonym: hibr2) | 2.5 |
|    | 450508 | R37408    | Hs.101654 | ESTs                                     | 2.5 |
|    | 436361 | AA825814  | Hs.149065 | ESTs                                     | 2.5 |
|    | 427709 | AI631811  | Hs.180403 | STRIN protein                            | 2.5 |
|    | 432036 | AF224266  | Hs.272373 | interleukin 20                           | 2.5 |
| 55 | 422752 | BE247253  | Hs.21263  | suppressor of potassium transport defect | 2.5 |
|    | 413786 | AW613780  | Hs.13500  | ESTs                                     | 2.5 |
|    | 439706 | AW872527  | Hs.59761  | ESTs, Weakly similar to DAPI_HUMAN DEATH | 2.5 |
|    | 451533 | NM_004657 | Hs.26530  | serum deprivation response (phosphatidyl | 2.5 |
|    | 414959 | D59968    | Hs.45184  | Homo sapiens cDNA FLJ12284 fis, clone MA | 2.5 |
| 60 | 449919 | AI674685  | Hs.200141 | ESTs                                     | 2.5 |
|    | 458891 | AI659166  | Hs.207144 | ESTs                                     | 2.5 |
|    | 427140 | AA398487  | Hs.97642  | ESTs                                     | 2.5 |
|    | 405239 | U89281    |           | oxidative 3 alpha hydroxysteroid dehydro | 2.5 |
|    | 428450 | NM_014791 | Hs.184339 | KIAA0175 gene product                    | 2.5 |
| 65 | 443753 | AW367578  | Hs.134749 | ESTs                                     | 2.5 |
|    | 432888 | T86823    |           | gb:yd81a08.s1 Soares fetal liver spleen  | 2.5 |
|    | 445065 | AI806657  | Hs.302024 | glycoprotein beta-Gal 3'-sulfotransferas | 2.5 |
|    | 431202 | AA495824  | Hs.188822 | ESTs, Weakly similar to A46010 X-linked  | 2.5 |
|    | 445658 | AI469062  | Hs.172660 | ESTs                                     | 2.5 |
| 70 | 435330 | R16769    | Hs.173174 | Homo sapiens cDNA FLJ14429 fis, clone HE | 2.5 |
|    | 435703 | AW630133  | Hs.83313  | GK003 protein                            | 2.5 |
|    | 456232 | AL040357  |           | gb:DKFZp434O0713_r1 434 (synonym: htes3) | 2.5 |
|    | 421955 | AK000160  | Hs.121576 | Homo sapiens cDNA FLJ20153 fis, clone CO | 2.5 |
|    | 420796 | L34355    | Hs.99931  | sarcoglycan, alpha (50kD dystrophin-asso | 2.5 |
| 75 | 425428 | AL110261  | Hs.157211 | DKFZP586B0621 protein                    | 2.5 |
|    | 437627 | AW469925  | Hs.257837 | ESTs                                     | 2.5 |
|    | 408574 | AA328046  | Hs.46405  | polymerase (RNA) II (DNA directed) polyp | 2.5 |
|    | 418733 | AA227714  | Hs.179703 | KIAA0129 gene product                    | 2.5 |
|    | 440473 | BE562314  | Hs.98711  | Homo sapiens, clone IMAGE:3677165, mRNA, | 2.5 |
| 80 | 422106 | DB4239    | Hs.111732 | Fc fragment of IgG binding protein       | 2.5 |
|    | 411480 | AW848022  |           | gb:IL3-CT0214-231299-053-A09 CT0214 Homo | 2.5 |
|    | 436391 | AJ227892  | Hs.146274 | ESTs                                     | 2.5 |
|    | 424947 | R77952    |           | ESTs, Weakly similar to alternatively sp | 2.5 |
|    | 450831 | R37974    | Hs.25255  | ESTs                                     | 2.5 |

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|        |          |           |  |     |
|--------|----------|-----------|--|-----|
| 447527 | AI702896 | Hs.42091  | ESTs                                     | 2.5 |
| 424686 | AA345504 |           | gb:EST51529 Gall bladder II Homo sapiens | 2.5 |
| 453385 | AW296101 | Hs.252806 | ESTs                                     | 2.5 |

5

TABLE 12B:

|             |                                       |
|-------------|---------------------------------------|
| Pkey:       | Unique Eos probeset identifier number |
| CAT number: | Gene cluster number                   |
| Accession:  | Genbank accession numbers             |

10

| Pkey   | CAT Number | Accession   |
|--------|------------|---|
| 408292 | 1050507_1  | AW178363 AW846011 AW845964 AW845988 AW845977 AW846002   |
| 409157 | 110363_1   | AA064631 AA722000 AA064793  |
| 409189 | 110687_1   | AA125984 AA127189 AA065075 AA070377 AA100017 AA079891 AA113255 AA075168 AA082764 AA083380 N84829 AA084752 AA076512 AA085119 |

15

|        |           |  |
|--------|-----------|--|
| 411480 | 1247089_1 | AA085208 AA085045  |
| 411537 | 1248899_1 | AW848022 AW848704 AW848168 AW848959 AW848476 AW848699 AW848700 AW848761          |
| 411543 | 1249127_1 | BE073250 BE073378 BE073379 AW850533 AW850529                                     |
| 411565 | 1249756_1 | AW851248 AW851425 AW850805 AW851021 AW850905                                     |
| 411671 | 125369_1  | AW851728 AW851607 AW851621 AW851702 AW851647 AW851727 AW851658 AW851617 AW851628 |
| 411688 | 1254076_1 | BE049094 AA700765 H86770 AA094646 R02483 C03868 N56170                           |

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|        |           |  |
|--------|-----------|--|
| 411688 | 1254076_1 | AW953440 T08189 AW857085   |
| 412021 | 1272156_1 | AW885592 AW885594 AW885579 AW885651  |
| 412135 | 1279148_1 | AW895309 AW895290 AW895307 AW895397 AW895378 AW895402 AW895403 AW895311 AW895298 AW895390 AW895488 AW895468 AW895481 |

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|        |           |  |
|--------|-----------|--|
| 412225 | 1284108_1 | AW902042 N77591  |
| 412811 | 132943_1  | H06382 AW957730 AA352014 R13591 AA121201 D60420 BE263253 BE047862 Z41952 A1424991 A1693507 A1863108 AA599060 A1091148 AA598689 |

30

|        |           |   |
|--------|-----------|---|
| 413098 | 1349115_1 | R39887 AA813482 AW016452 H06383 R41807 A1364268 AA620528 A1241940 AW089149 AW090733 AW088875 Z38240 AA121202 R17734 |
| 413986 | 140720_1  | BE065279 BE065306 BE065164 BE065389   |
| 414988 | 1511316_1 | Z43567 H24159 AA134240  |
| 415131 | 1523680_1 | C17535 D59244 D58878 D79090   |
| 415346 | 1534581_1 | D61119 D81508 D81734  |
| 416422 | 1593811_1 | Z43108 F06295 R13085  |
| 416569 | 1601567_1 | H60457 H68709 H73528 H54335 R87154  |
| 416665 | 1607797_1 | H64891 R93444 R93458 R05590   |

35

|        |           |   |
|--------|-----------|---|
| 419597 | 1863413_1 | H72974 W28967   |
| 420352 | 192979_1  | W73692 W73836 W95650  |
| 420670 | 195442_1  | BE258835 AW968316 AA258918 AW843305 R14744 A1580388 BE071923 R36280 |
| 422551 | 217767_1  | AW973577 AA553621 AA279187  |

40

|        |          |                                 |
|--------|----------|---------------------------------|
| 424009 | 234177_1 | AW967284 AA312192 AA312203      |
| 424200 | 236595_1 | F11690 AW965370 AA333586 D30830 |
| 424686 | 242486_1 | AA337221 AA336756 AW966196      |
| 424947 | 245247_1 | AA345504 AA345251 AW963243      |

45

|        |          |   |
|--------|----------|---|
| 425146 | 247244_1 | R77952 AA348809 AW959960 AW959962 A1565552 AW070702 AA973910 R85973 |
| 425331 | 250199_1 | AW954627 AW954629 AA351258 R25935                                   |
| 426503 | 268283_1 | AW962128 AA355353 AA427363  |
| 428397 | 290994_1 | AA380153 AA380233 AW963529  |

50

|        |          |  |
|--------|----------|--|
| 429258 | 301917_1 | AA428040 AW889864 AA836434   |
| 429940 | 310884_1 | AA448765 C04967 C03045 AA658293  |
| 430183 | 31412_2  | W25215 AA461079 AA461391   |
| 430535 | 319643_1 | BE010038 AA676833 A1311783 T86895 W68032 BE064393 BE064394 BE157228 BE183282 A1936370 AA552514 T67280 AA039909 |

55

|        |          |  |
|--------|----------|--|
| 432044 | 340773_1 | AW968485 AW968670 AA480922 BE350425          |
| 432646 | 351909_1 | AW972727 AA524829 AW972733                   |
| 432888 | 355780_1 | AW753310 AW974000 AA557840 AA558570 AW751539 |
| 433009 | 357371_1 | T86823 A1821425 A1732232 AA569589 AA570737   |

60

|        |          |  |
|--------|----------|--|
| 433523 | 368873_1 | AA761668 AA573621 R92814 R09670  |
| 433835 | 374758_1 | H29882 AW665533 AW149901 A1572917 AA598500 A1686466 A1336390 AW864390 AW864320 |
| 434589 | 38929_1  | A1806185 AA610063 A1693089 A1693075  |
| 436608 | 42361_3  | AF147363 T47219 T47218   |
| 437034 | 431713_1 | AA628980 A126603 BE504035  |

65

|        |          |                                 |
|--------|----------|---------------------------------|
| 437643 | 43998_1  | AA742643 AA808575 AW976668      |
| 438243 | 453072_1 | AL080280 T73124 H02689 AL080281 |
| 438458 | 457837_1 | A1581311 AA781682 AA781678      |
| 439533 | 47349_1  | AW975186 AA807807 D29548        |

70

|        |          |                            |
|--------|----------|----------------------------|
| 442476 | 543547_1 | W76021 AF088052 W72465     |
| 443770 | 579849_1 | AF069475 AF069477 AF069476 |
| 444016 | 58899_1  | AW815924 AW815926 A1085174 |
| 448970 | 791254_1 | AA448154 AV647571          |

75

|        |           |  |
|--------|-----------|--|
| 450166 | 82677_1   | AW138582 A1638298 A1631640 A1963868 A1611082 |
| 453685 | 977734_1  | AA429504 R41904 AA279467 H09648 AA007236     |
| 454037 | 996287_1  | AL110309 AW088119 H22881                     |
| 454177 | 1049351_1 | AW998716 AW022148 N68020                     |

80

|        |           |  |
|--------|-----------|--|
| 454451 | 1206502_1 | AW807321 AW807262 AW177104 AW807319 AW807115 AW807344 AW807324 AW178116 BE141575 AW845849 AW807105 AW845868 BE140942 |
| 454457 | 1207274_1 | AW807178 AW807167 AW807398 AW807320 AW807306 AW845866  |
| 454581 | 1225710_1 | AW846706 AW846703 AW752167 AW846700 AW846699 AW752176 AW846694   |

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|    |        |           |   |
|----|--------|-----------|---|
|    | 455409 | 1288355_1 | AW936832 AW936609 AW936657 AW936611 AW936739 AW936734 AW936779 AW936688 AW936659 AW936738 AW936827 AW936737 AW936736 AW936740 AW936833 AW936777 AW936830 AW936834 AW936829 AW936772 AW936638 AW936658 AW936636 AW936774 AW936778 AW936766 AW936776 AW936831 AW9 |
|    | 455481 | 1293182_1 | AW948317 AW948322 AW948329 AW948316 AW948298 AW948330 AW948325 AW948324   |
| 5  | 455646 | 1348557_1 | BE064420 BE064435 BE064429 BE064414 BE064400 BE064517   |
|    | 455778 | 1364506_1 | BE088746 BE088802 BE088755 BE088876 BE088947 BE088881 BE088952  |
|    | 455899 | 1381547_1 | BE155112 BE155154 BE155087 BE155247 BE155499 BE155367 BE155452  |
|    | 456232 | 168294_1  | AL040357 AA883621 AA203230  |
|    | 456304 | 176820_1  | AI820973 AI734077 AI820984 AA225796 AA225060 AA225101   |
| 10 | 457364 | 328154_1  | AW971037 AA508019 AA492345  |

TABLE 12C:

Pkey: Unique Eos probeset identifier number  
Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) Nature 402:489-495.  
Strand: Indicates DNA strand from which exons were predicted.  
NT\_position: Indicates nucleotide positions of predicted exons.

|    |        |         |        |   |
|----|--------|---------|--------|---|
|    | Pkey   | Ref     | Strand | NT_position   |
| 20 | 400492 | 9213749 | Minus  | 123881-124090   |
|    | 400533 | 6981826 | Minus  | 277132-277595   |
|    | 400645 | 8117693 | Minus  | 58471-58716   |
|    | 400658 | 8118459 | Minus  | 73525-73644   |
|    | 400780 | 8131663 | Minus  | 118372-118619   |
| 25 | 400814 | 8569925 | Minus  | 72840-72924,74761-74849                                 |
|    | 400924 | 7107613 | Minus  | 30309-30498   |
|    | 401272 | 9797373 | Minus  | 98374-98509   |
|    | 401454 | 9186923 | Minus  | 114659-114832   |
|    | 401702 | 1871197 | Minus  | 68182-68325   |
| 30 | 402229 | 9965022 | Minus  | 15739-15951,16166-16779                                 |
|    | 402274 | 2935596 | Plus   | 5604-6527   |
|    | 402322 | 7630359 | Minus  | 75078-75203   |
|    | 402344 | 8099256 | Minus  | 76812-79040   |
|    | 402595 | 7705171 | Plus   | 37870-37923,39664-39717,71711-71764                     |
| 35 | 402604 | 9909420 | Plus   | 20393-20767   |
|    | 402605 | 9909420 | Minus  | 47680-47973   |
|    | 402615 | 9926801 | Plus   | 131390-132157   |
|    | 402711 | 8901247 | Minus  | 114306-115418   |
|    | 402747 | 9212492 | Minus  | 7105-7357   |
| 40 | 402855 | 9662953 | Minus  | 59763-59909   |
|    | 402936 | 8894303 | Plus   | 51655-51771   |
|    | 402981 | 9944246 | Minus  | 45716-45889   |
|    | 403108 | 8980955 | Plus   | 93253-93667   |
|    | 403212 | 7630897 | Minus  | 156037-156210   |
| 45 | 403288 | 8081479 | Plus   | 133763-133899,135813-135958                             |
|    | 403290 | 8083176 | Plus   | 19288-20076   |
|    | 403291 | 7230870 | Plus   | 95177-95435   |
|    | 403349 | 8569773 | Minus  | 167815-168374   |
|    | 403431 | 7139839 | Plus   | 56509-56860   |
| 50 | 403481 | 9965004 | Plus   | 93496-93633   |
|    | 403696 | 3135242 | Minus  | 143467-143634   |
|    | 403790 | 8084957 | Minus  | 87826-87947,89835-90002                                 |
|    | 403849 | 7708855 | Plus   | 95043-96519   |
|    | 403903 | 7710671 | Minus  | 101165-102597   |
| 55 | 403942 | 7711825 | Minus  | 99606-99757   |
|    | 403961 | 7596976 | Minus  | 110393-110603   |
|    | 404053 | 3548785 | Plus   | 61797-64205   |
|    | 404120 | 7342152 | Plus   | 135775-136000   |
| 60 | 404185 | 4572584 | Minus  | 129171-129327   |
|    | 404254 | 9367203 | Plus   | 129350-129873   |
|    | 404272 | 9885189 | Plus   | 83207-83355,84358-84496,90519-90720,91371-91447         |
|    | 404423 | 7407959 | Plus   | 34438-34618   |
|    | 404584 | 9857511 | Plus   | 138651-139153   |
|    | 404592 | 9943965 | Minus  | 39067-39225   |
| 65 | 404632 | 9796668 | Plus   | 45096-45229   |
|    | 405046 | 7596829 | Minus  | 4373-4528   |
|    | 405183 | 7209940 | Plus   | 12335-12653   |
|    | 405238 | 7249119 | Minus  | 51728-51836   |
|    | 405239 | 7249119 | Plus   | 144345-144464,144690-144836,151750-151883,152407-152484 |
| 70 | 405348 | 2914717 | Minus  | 43310-43462   |
|    | 405488 | 7131455 | Minus  | 75771-75883,105295-105398,134754-134875                 |
|    | 405558 | 1621110 | Plus   | 4502-4644,5983-6083                                     |
|    | 405717 | 9588573 | Plus   | 11275-11973   |
|    | 405760 | 6066938 | Minus  | 37424-38045   |
| 75 | 405863 | 7657810 | Plus   | 49410-49620   |
|    | 405941 | 6758796 | Plus   | 2798-3444   |
|    | 406395 | 9256242 | Minus  | 20805-20960   |
|    | 406478 | 9857502 | Plus   | 68314-68523,68853-68950                                 |
| 80 | 406481 | 9864741 | Minus  | 91439-91579   |

TABLE 13A: 964 GENES UP-REGULATED IN LOWER GRADE GLIOBLASTOMA COMPARED TO NORMAL ADULT TISSUES

Table 13A lists about 678 genes up-regulated in lower grade glioblastoma (LGG) compared to normal adult tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" LGG to "average" normal tissues was greater than or equal to 3.0. The "average" LGG level was set to the 85<sup>th</sup>

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percentile amongst various LGG tumors. The "average" normal tissue level was set to the 85<sup>th</sup> percentile amongst various non-malignant adult tissues. In order to remove gene-specific background levels of non-specific hybridization, the 10<sup>th</sup> percentile value amongst the various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

|    |                |   |           |  |
|----|----------------|---|-----------|--|
| 5  | Pkey:          | Unique Eos probeset identifier number                     |           |  |
|    | ExAccn:        | Exemplar Accession number, Genbank accession number       |           |  |
|    | UnigeneID:     | Unigene number  |           |  |
|    | Unigene Title: | Unigene gene title  |           |  |
|    | R1:            | Ratio of LOWER GRADE GLIOBLASTOMA to NORMAL ADULT TISSUES |           |  |
| 10 | Pkey           | ExAccn  | UnigeneID | Unigene Title                            |
|    | 427343         | AI880044  | Hs.176977 | protein kinase C binding protein 2       |
|    | 409389         | AB007979  | Hs.301281 | Homo sapiens mRNA, chromosome 1 specific |
|    | 418375         | NM_003081   | Hs.84389  | synaptosomal-associated protein, 25kD    |
|    | 431917         | D16181  | Hs.2868   | peripheral myelin protein 2              |
| 15 | 428321         | AI699994  | Hs.2868   | peripheral myelin protein 2              |
|    | 426325         | D28114  | Hs.169309 | myelin-associated oligodendrocyte basic  |
|    | 435147         | AL133731  | Hs.4774   | Homo sapiens mRNA; cDNA DKFZp761C1712 (f |
|    | 456759         | BE259150  | Hs.127792 | delta (Drosophila)-like 3                |
|    | 415817         | U88967  | Hs.78867  | protein tyrosine phosphatase, receptor-t |
| 20 | 429007         | D80642  |           | gb:HUM092E09B Human fetal brain (TFujiwa |
|    | 417183         | R52089  | Hs.172717 | ESTs                                     |
|    | 430838         | N46664  | Hs.169395 | hypothetical protein FLJ12015            |
|    | 413472         | BE242870  | Hs.75379  | solute carrier family 1 (glial high affi |
|    | 425088         | AA663372  | Hs.169395 | hypothetical protein FLJ12015            |
| 25 | 429276         | AF056085  | Hs.198612 | G protein-coupled receptor 51            |
|    | 424140         | Z48051  | Hs.141308 | myelin oligodendrocyte glycoprotein      |
|    | 450133         | AW969769  | Hs.105201 | ESTs                                     |
|    | 423849         | AL157425  | Hs.133315 | Homo sapiens mRNA; cDNA DKFZp761J1324 (f |
|    | 413333         | M74028  | Hs.75297  | fibroblast growth factor 1 (acidic)      |
| 30 | 449494         | AW237014  | Hs.315369 | Homo sapiens cDNA: FLJ23075 fis, clone L |
|    | 402604         |   |           | Target Exon                              |
|    | 412733         | AA984472  | Hs.74554  | KIAA0080 protein                         |
|    | 416829         | AB013805  | Hs.80220  | catenin (cadherin-associated protein), d |
|    | 439239         | AI031540  | Hs.235331 | ESTs                                     |
| 35 | 444378         | R41339  | Hs.47860  | neurotrophic tyrosine kinase, receptor,  |
|    | 439415         | F05538  | Hs.4273   | ESTs                                     |
|    | 425048         | H05468  | Hs.164502 | ESTs                                     |
|    | 429903         | AL134197  | Hs.93597  | cyclin-dependent kinase 5, regulatory su |
|    | 425057         | AA826434  | Hs.1619   | achaete-scute complex (Drosophila) homol |
| 40 | 425799         | T08133  | Hs.182906 | Homo sapiens mRNA for KIAA1872 protein,  |
|    | 447359         | NM_012093   | Hs.18268  | adenylate kinase 5                       |
|    | 425842         | AI587490  | Hs.159623 | NK-2 (Drosophila) homolog B              |
|    | 423853         | AB011537  | Hs.133466 | slit (Drosophila) homolog 1              |
|    | 435708         | AI362949  | Hs.75169  | ESTs                                     |
| 45 | 437268         | AI754847  | Hs.227571 | regulator of G-protein signalling 4      |
|    | 409395         | U46745  | Hs.336678 | dystrobrevin, alpha                      |
|    | 441285         | NM_002374   | Hs.167    | microtubule-associated protein 2         |
|    | 422656         | AI870435  | Hs.1569   | LIM homeobox protein 2                   |
|    | 425523         | AB007948  | Hs.158244 | KIAA0479 protein                         |
| 50 | 437204         | AL110216  | Hs.22826  | ESTs, Weakly similar to I55214 salivary  |
|    | 416370         | N90470  | Hs.203697 | ESTs, Weakly similar to I38022 hypotheti |
|    | 441497         | R51064  | Hs.23172  | ESTs                                     |
|    | 453392         | U23752  | Hs.32964  | SRY (sex determining region Y)-box 11    |
|    | 408604         | D51408  | Hs.21925  | ESTs                                     |
| 55 | 413597         | AW302885  | Hs.117183 | ESTs                                     |
|    | 422980         | N46569  | Hs.76722  | CCAAT/enhancer binding protein (C/EBP),  |
|    | 428392         | H10233  | Hs.2265   | secretory granule, neuroendocrine protei |
|    | 429466         | M85835  | Hs.12827  | ESTs                                     |
|    | 448302         | AI480208  | Hs.182906 | Homo sapiens mRNA for KIAA1872 protein,  |
| 60 | 439199         | R40373  | Hs.26299  | ESTs                                     |
|    | 448743         | AB032962  | Hs.21896  | KIAA1136 protein                         |
|    | 418338         | NM_002522   | Hs.84154  | neuronal pentraxin I                     |
|    | 444513         | AL120214  | Hs.7117   | glutamate receptor, ionotropic, AMPA 1   |
|    | 444783         | AK001468  | Hs.62180  | anillin (Drosophila Scraps homolog), act |
| 65 | 447004         | AW296968  | Hs.157539 | ESTs                                     |
|    | 425984         | AW836277  | Hs.165636 | hypothetical protein DKFZp761C07121      |
|    | 448672         | AI955511  | Hs.225106 | ESTs                                     |
|    | 452372         | AI885742  | Hs.228474 | ESTs                                     |
|    | 424120         | T80579  | Hs.290270 | ESTs                                     |
| 70 | 424581         | M62062  | Hs.150917 | catenin (cadherin-associated protein), a |
|    | 424790         | AL119344  | Hs.13326  | ESTs, Weakly similar to 2004399A chromos |
|    | 426269         | H15302  | Hs.168950 | Homo sapiens mRNA; cDNA DKFZp566A1046 (f |
|    | 446592         | Z44514  |           | Homo sapiens mRNA for KIAA1753 protein,  |
|    | 453642         | AI370936  | Hs.34074  | dipeptidylpeptidase VI                   |
| 75 | 429037         | X81895  | Hs.194765 | H.sapiens GENX-5624 mRNA, 3' UTR         |
|    | 441440         | AI807981  | Hs.30495  | ESTs                                     |
|    | 429927         | NM_001115   | Hs.2522   | adenylate cyclase 8 (brain)              |
|    | 415849         | R20529  | Hs.6806   | ESTs                                     |
|    | 418110         | R43523  | Hs.217754 | hypothetical protein FLJ22202            |
| 80 | 434277         | X77748  | Hs.3786   | glutamate receptor, metabotropic 3       |
|    | 409638         | AW450420  | Hs.21335  | ESTs                                     |
|    | 441350         | AB020690  | Hs.7782   | paraneoplastic antigen MA2               |
|    | 415734         | NM_014747   | Hs.78748  | KIAA0237 gene product                    |

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|    |        |           |           |   |      |
|----|--------|-----------|-----------|---|------|
|    | 424945 | AI221919  |           | hypothetical protein FLJ10582             | 13.6 |
|    | 426344 | H41821    | Hs.322469 | transcriptional activator of the c-fos p  | 13.4 |
|    | 446372 | AB020644  | Hs.14945  | long fatty acyl-CoA synthetase 2 gene     | 13.3 |
|    | 429946 | R49390    | Hs.254129 | KIAA1678                                  | 13.3 |
| 5  | 444119 | R41231    | Hs.184261 | ESTs, Weakly similar to T26686 hypotheti  | 13.3 |
|    | 438380 | T06430    | Hs.6194   | chondroitin sulfate proteoglycan BEHAB/b  | 13.2 |
|    | 415910 | U20350    | Hs.78913  | chemokine (C-X3-C) receptor 1             | 13.2 |
|    | 412266 | N59006    | Hs.26133  | ESTs                                      | 13.2 |
|    | 436878 | BE465204  | Hs.47448  | ESTs                                      | 13.1 |
| 10 | 428536 | AI143139  | Hs.2288   | visinin-like 1                            | 13.1 |
|    | 425649 | U30930    | Hs.158540 | UDP glycosyltransferase 8 (UDP-galactose  | 13.1 |
|    | 428982 | NM_005097 | Hs.194704 | leucine-rich, glioma inactivated 1        | 13.0 |
|    | 437948 | AA772920  | Hs.303527 | ESTs                                      | 13.0 |
|    | 444124 | R43097    | Hs.6818   | ESTs                                      | 12.9 |
| 15 | 428342 | AI739168  |           | Homo sapiens cDNA FLJ13458 fis, clone PL  | 12.7 |
|    | 419249 | X14767    | Hs.89768  | gamma-aminobutyric acid (GABA) A recepto  | 12.7 |
|    | 412959 | D87458    | Hs.75090  | KIAA0282 protein                          | 12.6 |
|    | 419863 | AW952691  | Hs.93485  | Homo sapiens mRNA; cDNA DKFZp761D191 (fr  | 12.6 |
|    | 431467 | N71831    | Hs.256398 | Homo sapiens mRNA; cDNA DKFZp434E0528 (f  | 12.6 |
| 20 | 431019 | NM_005249 | Hs.2714   | forkhead box G1B                          | 12.4 |
|    | 420547 | AF155140  | Hs.98738  | gonadotropin-regulated testicular RNA he  | 12.4 |
|    | 430091 | AB032958  | Hs.233023 | KIAA1132 protein                          | 12.4 |
|    | 448595 | AB014544  | Hs.21572  | KIAA0644 gene product                     | 12.2 |
|    | 447342 | AI199268  | Hs.19322  | Homo sapiens, Similar to RIKEN cDNA 2010  | 12.2 |
| 25 | 409049 | AI423132  | Hs.146343 | ESTs                                      | 12.0 |
|    | 421264 | AL039123  | Hs.103042 | microtubule-associated protein 1B         | 11.9 |
|    | 451952 | AL120173  | Hs.301663 | ESTs                                      | 11.9 |
|    | 411305 | BE241596  | Hs.69547  | myelin basic protein                      | 11.8 |
|    | 433551 | AI985544  | Hs.12450  | protocadherin 9                           | 11.6 |
| 30 | 431988 | AC002302  | Hs.77202  | protein kinase C, beta 1                  | 11.6 |
|    | 415170 | R44386    | Hs.164578 | ESTs                                      | 11.5 |
|    | 408562 | AI436323  | Hs.31141  | Homo sapiens mRNA for KIAA1568 protein,   | 11.4 |
|    | 435501 | AW051819  | Hs.129908 | KIAA0591 protein                          | 11.4 |
| 35 | 429656 | X05608    | Hs.211584 | neurofilament, light polypeptide (68kD)   | 11.1 |
|    | 423419 | R55336    | Hs.23539  | ESTs                                      | 11.1 |
|    | 424432 | AB037821  | Hs.146858 | protocadherin 10                          | 10.9 |
|    | 433896 | AW294729  | Hs.274461 | ESTs                                      | 10.9 |
|    | 415293 | R49462    | Hs.106541 | ESTs                                      | 10.9 |
| 40 | 447101 | N72185    | Hs.44189  | ESTs                                      | 10.9 |
|    | 440105 | AA694010  | Hs.6932   | Homo sapiens clone Z3809 mRNA sequence    | 10.9 |
|    | 438054 | AA776626  | Hs.169309 | ESTs                                      | 10.8 |
|    | 433597 | AA708205  | Hs.100343 | ESTs                                      | 10.7 |
|    | 421659 | NM_014459 | Hs.106511 | protocadherin 17                          | 10.6 |
| 45 | 445102 | AW204610  | Hs.22270  | ESTs                                      | 10.6 |
|    | 425154 | NM_001851 | Hs.154850 | collagen, type IX, alpha 1                | 10.6 |
|    | 451625 | R56793    | Hs.106576 | alanine-glyoxylate aminotransferase 2-li  | 10.6 |
|    | 435191 | R15912    | Hs.4817   | Homo sapiens clone 24461 mRNA sequence    | 10.6 |
|    | 450154 | R15891    | Hs.281587 | Human (clone CTG-A4) mRNA sequence        | 10.5 |
| 50 | 407886 | AW969688  | Hs.100826 | ESTs                                      | 10.4 |
|    | 420345 | AW295230  | Hs.25231  | ESTs                                      | 10.4 |
|    | 428728 | NM_016625 | Hs.191381 | hypothetical protein                      | 10.3 |
|    | 424997 | AL138167  | Hs.96920  | ESTs                                      | 10.3 |
|    | 440184 | AB002297  | Hs.7022   | dedicator of cyto-kinesis 3               | 10.2 |
| 55 | 419078 | M93119    | Hs.89584  | insulinoma-associated 1                   | 10.2 |
|    | 445495 | BE622641  | Hs.38489  | ESTs, Weakly similar to I38022 hypotheti  | 10.1 |
|    | 416857 | AA188775  | Hs.292453 | ESTs                                      | 10.0 |
|    | 445041 | T64183    | Hs.282982 | solute carrier                            | 10.0 |
|    | 419271 | N34901    | Hs.238532 | ESTs                                      | 9.8  |
| 60 | 446711 | AF169692  | Hs.12450  | protocadherin 9                           | 9.8  |
|    | 426847 | S78723    | Hs.298623 | 5-hydroxytryptamine (serotonin) receptor  | 9.7  |
|    | 427304 | AA761526  | Hs.163853 | ESTs                                      | 9.7  |
|    | 418097 | R45137    | Hs.21858  | ESTs                                      | 9.7  |
|    | 449300 | AI656959  | Hs.346514 | ESTs                                      | 9.7  |
| 65 | 419985 | H66373    | Hs.5856   | ESTs, Highly similar to bA393J16.3 [H.s.a | 9.7  |
|    | 443785 | AW449952  | Hs.190125 | basic-helix-loop-helix-PAS protein        | 9.5  |
|    | 415486 | H12214    | Hs.13284  | ESTs, Weakly similar to 2109260A B cell   | 9.5  |
|    | 453220 | AB033089  | Hs.32452  | Homo sapiens mRNA for KIAA1263 protein,   | 9.5  |
|    | 438209 | AL120659  | Hs.6111   | aryl-hydrocarbon receptor nuclear transl  | 9.4  |
| 70 | 424028 | AF055084  | Hs.153692 | Homo sapiens cDNA FLJ14354 fis, clone Y7  | 9.4  |
|    | 419683 | AA248897  | Hs.48784  | ESTs                                      | 9.4  |
|    | 414175 | AI308876  | Hs.103849 | hypothetical protein DKFZp761D112         | 9.2  |
|    | 400292 | AA250737  | Hs.72472  | BMP-R1B                                   | 9.2  |
|    | 408947 | AL080093  | Hs.49117  | Homo sapiens mRNA; cDNA DKFZp564N1662 (f  | 9.2  |
|    | 454048 | H05626    | Hs.6921   | ESTs                                      | 9.2  |
| 75 | 454027 | R40192    | Hs.21527  | Human DNA sequence from clone GS1-115M3   | 9.1  |
|    | 441016 | AW138653  | Hs.25845  | ESTs                                      | 9.0  |
|    | 425187 | AW014486  | Hs.22509  | ESTs                                      | 9.0  |
|    | 445568 | H00918    | Hs.268744 | KIAA1796 protein                          | 8.9  |
| 80 | 453941 | U39817    | Hs.36820  | Bloom syndrome                            | 8.9  |
|    | 422411 | AW749443  | Hs.22511  | ESTs                                      | 8.8  |
|    | 447350 | AI375572  | Hs.172634 | ESTs                                      | 8.8  |
|    | 424481 | R19453    | Hs.1787   | proteolipid protein 1 (Pelizaeus-Merzbac  | 8.7  |
|    | 448902 | Z45998    | Hs.22543  | Homo sapiens mRNA; cDNA DKFZp76111912 (f  | 8.7  |



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|----|--------|-----------|-----------|---|-----|
|    | 448986 | H42169    | Hs.347310 | hypothetical protein FLJ14627             | 8.6 |
|    | 423135 | N67655    | Hs.26411  | ESTs                                      | 8.5 |
|    | 418030 | BE207573  | Hs.83321  | neuromedin B                              | 8.4 |
|    | 448769 | N66037    | Hs.38173  | ESTs                                      | 8.4 |
| 5  | 407748 | AL079409  | Hs.38176  | KIAA0606 protein; SCN Circadian Oscillat  | 8.3 |
|    | 400293 | N51002    | Hs.306480 | Homo sapiens mRNA; cDNA DKFZp761E2112 (f  | 8.3 |
|    | 415279 | F04237    | Hs.1447   | glial fibrillary acidic protein           | 8.2 |
|    | 451516 | AI800515  | Hs.12024  | ESTs                                      | 8.2 |
| 10 | 419629 | AB020695  | Hs.91662  | KIAA0888 protein                          | 8.2 |
|    | 437034 | AA742643  |           | gb:ny91c01.s1 NCI_CGAP_GCB1 Homo sapiens  | 8.2 |
|    | 456965 | AW131888  | Hs.172792 | ESTs, Weakly similar to hypothetical pro  | 8.1 |
|    | 417417 | F05745    | Hs.89512  | ATPase, Ca transporting, plasma membrane  | 8.1 |
|    | 452279 | AA286844  | Hs.61260  | hypothetical protein FLJ13164             | 8.1 |
| 15 | 422864 | AA318323  | Hs.12827  | gb:EST20390 Retina II Homo sapiens cDNA   | 8.1 |
|    | 452526 | W38537    | Hs.280740 | hypothetical protein MGC3040              | 8.0 |
|    | 435793 | AB037734  | Hs.4993   | KIAA1313 protein                          | 7.9 |
|    | 415669 | NM_005025 | Hs.78589  | serine (or cysteine) proteinase inhibito  | 7.9 |
|    | 407168 | R45175    | Hs.117183 | ESTs                                      | 7.9 |
| 20 | 447414 | D82343    | Hs.74376  | neuroblastoma (nerve tissue) protein      | 7.8 |
|    | 442710 | AI015631  | Hs.23210  | ESTs                                      | 7.8 |
|    | 416836 | D54745    | Hs.80247  | cholecystokinin                           | 7.8 |
|    | 419721 | NM_001650 | Hs.288650 | aquaporin 4                               | 7.7 |
|    | 438080 | AA777381  | Hs.291530 | ESTs, Weakly similar to ALUC_HUMAN !!!    | 7.7 |
| 25 | 436109 | AA922153  | Hs.132760 | hypothetical protein MGC15729             | 7.7 |
|    | 428845 | AL157579  | Hs.153610 | KIAA0751 gene product                     | 7.7 |
|    | 448321 | NM_005883 | Hs.20912  | adenomatous polyposis coli like           | 7.7 |
|    | 410305 | AF030409  | Hs.62185  | solute carrier family 9 (sodium/hydrogen  | 7.6 |
|    | 443392 | AI055821  | Hs.293420 | ESTs                                      | 7.6 |
| 30 | 429038 | AL023513  | Hs.194766 | seizure related gene 6 (mouse)-like       | 7.5 |
|    | 418738 | AW388633  | Hs.6682   | solute carrier family 7, (cationic amino  | 7.5 |
|    | 423361 | AW170055  | Hs.47628  | ESTs                                      | 7.5 |
|    | 447198 | D61523    | Hs.283435 | ESTs                                      | 7.5 |
|    | 448555 | AI536697  | Hs.159863 | ESTs                                      | 7.5 |
| 35 | 458332 | AI000341  | Hs.220491 | ESTs                                      | 7.4 |
|    | 407034 | U84540    |           | gb:Human dystrobrevin isoform DTN-3 (DTN  | 7.4 |
|    | 425354 | U62027    | Hs.155935 | complement component 3a receptor 1        | 7.4 |
|    | 426814 | AF036943  | Hs.172619 | myelin transcription factor 1-like        | 7.4 |
|    | 448507 | AL133109  | Hs.21333  | Homo sapiens mRNA; cDNA DKFZp566N1047 (f  | 7.4 |
| 40 | 439845 | AL355743  | Hs.56663  | Homo sapiens EST from clone 41214, full   | 7.4 |
|    | 449078 | AK001256  | Hs.22975  | KIAA1576 protein                          | 7.3 |
|    | 410102 | AW248508  | Hs.279727 | ESTs; homologue of PEM-3 [Ciona savignyi  | 7.2 |
|    | 425741 | AF052152  | Hs.159412 | Homo sapiens clone 24628 mRNA sequence    | 7.2 |
|    | 440210 | AW674562  | Hs.125296 | ESTs                                      | 7.2 |
| 45 | 415651 | AI207162  | Hs.3815   | stathmin-like-protein RB3                 | 7.2 |
|    | 428409 | AW117207  | Hs.98523  | ESTs                                      | 7.1 |
|    | 413409 | AI638418  | Hs.1440   | DEAD/H (Asp-Glu-Ala-Asp/His) box polypep  | 7.1 |
|    | 443992 | AW022228  | Hs.322922 | ESTs                                      | 7.1 |
|    | 455601 | AI368680  | Hs.816    | SRY (sex determining region Y)-box 2      | 7.1 |
| 50 | 427540 | R12014    | Hs.20976  | ESTs                                      | 7.0 |
|    | 439979 | AW600291  | Hs.6823   | hypothetical protein FLJ10430             | 7.0 |
|    | 424893 | AW295112  | Hs.153648 | Homo sapiens cDNA FLJ13303 fis, clone OV  | 7.0 |
|    | 452355 | N54926    | Hs.29202  | G protein-coupled receptor 34             | 7.0 |
|    | 414696 | AF002020  | Hs.76918  | Niemann-Pick disease, type C1             | 7.0 |
| 55 | 440152 | AB002376  | Hs.7006   | KIAA0378 protein                          | 7.0 |
|    | 454293 | H49739    | Hs.134013 | ESTs, Moderately similar to HK61_HUMAN H  | 7.0 |
|    | 425782 | U66468    | Hs.159525 | cell growth regulatory with EF-hand doma  | 7.0 |
|    | 416805 | F13271    | Hs.79981  | Human clone 23560 mRNA sequence           | 7.0 |
|    | 419991 | AJ000098  | Hs.94210  | eyes absent (Drosophila) homolog 1        | 7.0 |
| 60 | 424343 | AW956360  | Hs.4748   | adenylate cyclase activating polypeptide  | 6.9 |
|    | 408369 | R38438    | Hs.182575 | solute carrier family 15 (H??? transport  | 6.9 |
|    | 449605 | AW138581  | Hs.198416 | ESTs                                      | 6.9 |
|    | 444396 | T65213    | Hs.4257   | ESTs                                      | 6.9 |
|    | 444165 | AL137443  | Hs.10441  | hypothetical protein FLJ11236             | 6.9 |
| 65 | 414245 | BE148072  | Hs.75850  | WAS protein family, member 1              | 6.9 |
|    | 412155 | R38167    | Hs.12449  | Homo sapiens transmembrane protein HTMP1  | 6.9 |
|    | 424624 | AB032947  | Hs.151301 | Ca2+-dependent activator protein for secr | 6.9 |
|    | 448681 | AL109781  | Hs.21754  | Homo sapiens mRNA full length insert cDN  | 6.9 |
|    | 411379 | AI816344  | Hs.12554  | ESTs, Weakly similar to NPL4_HUMAN NUCLE  | 6.9 |
| 70 | 446782 | AI653048  | Hs.144006 | ESTs                                      | 6.8 |
|    | 426919 | AL041228  |           | ELAV (embryonic lethal, abnormal vision,  | 6.8 |
|    | 423346 | AI267677  | Hs.127416 | synaptojanin 1                            | 6.8 |
|    | 436643 | AA757626  | Hs.10941  | ESTs, Weakly similar to IPP1_HUMAN PROTE  | 6.8 |
|    | 414922 | D00723    | Hs.77631  | glycine cleavage system protein H (amino  | 6.8 |
| 75 | 410037 | AB020725  | Hs.58009  | KIAA0918 protein                          | 6.8 |
|    | 442613 | AI004002  | Hs.130522 | Kv channel-interacting protein 1          | 6.8 |
|    | 413589 | AW452631  | Hs.313803 | ESTs, Highly similar to AF157833 1 noncl  | 6.8 |
|    | 422175 | N79885    | Hs.6382   | ESTs, Highly similar to T00391 hypotheti  | 6.8 |
|    | 421141 | AW117261  | Hs.125914 | ESTs                                      | 6.7 |
| 80 | 452786 | R61362    | Hs.106642 | ESTs, Weakly similar to T09052 hypotheti  | 6.7 |
|    | 441916 | AA993571  | Hs.129075 | ESTs                                      | 6.7 |
|    | 448533 | AL119710  | Hs.21365  | nucleosome assembly protein 1-like 3      | 6.7 |
|    | 428037 | N47474    | Hs.89230  | potassium intermediate/small conductance  | 6.7 |
|    | 423343 | AA324643  | Hs.246106 | ESTs                                      | 6.7 |

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|    | 456723 | Z43902    | Hs.4748   | adenylate cyclase activating polypeptide | 6.7 |
|    | 414214 | D49958    | Hs.75819  | glycoprotein M6A                         | 6.7 |
|    | 434811 | AW971205  | Hs.114280 | ESTs                                     | 6.7 |
| 5  | 424922 | BE386547  | Hs.217112 | hypothetical protein MGC10825            | 6.7 |
|    | 449328 | AI962493  | Hs.345303 | ESTs                                     | 6.6 |
|    | 431553 | X78075    | Hs.2799   | cartilage linking protein 1              | 6.6 |
|    | 420156 | AW449258  | Hs.6187   | ESTs                                     | 6.6 |
|    | 431117 | AF003522  | Hs.250500 | della (Drosophila)-like 1                | 6.6 |
| 10 | 422960 | AW890487  | Hs.63984  | cadherin 13, H-cadherin (heart)          | 6.6 |
|    | 429239 | AA448419  | Hs.45209  | ESTs                                     | 6.5 |
|    | 453924 | R49295    | Hs.24886  | ESTs                                     | 6.5 |
|    | 433929 | AI375499  | Hs.27379  | ESTs                                     | 6.5 |
|    | 426529 | AF090100  | Hs.170241 | Homo sapiens clone IMAGE 23915           | 6.5 |
| 15 | 414683 | S78296    | Hs.76888  | hypothetical protein MGC12702            | 6.4 |
|    | 409746 | NM_004794 | Hs.56294  | RAB33A, member RAS oncogene family       | 6.4 |
|    | 419169 | AW851980  | Hs.262346 | ESTs, Weakly similar to S72482 hypotheti | 6.4 |
|    | 453590 | AF150278  | Hs.33578  | KIAA0820 protein                         | 6.4 |
|    | 422263 | AA307639  | Hs.129908 | KIAA0591 protein                         | 6.4 |
| 20 | 421688 | AK000307  | Hs.106825 | hypothetical protein FLJ20300            | 6.4 |
|    | 447197 | R36075    |           | gb:yh88b01.s1 Soares placenta Nb2HP Homo | 6.3 |
|    | 425588 | F07396    | Hs.46627  | ESTs                                     | 6.3 |
|    | 410366 | AI267589  | Hs.302689 | hypothetical protein                     | 6.3 |
|    | 419498 | AL036591  | Hs.20887  | hypothetical protein FLJ10392            | 6.3 |
| 25 | 446997 | AA383439  | Hs.16758  | Spir-1 protein                           | 6.3 |
|    | 427958 | AA418000  | Hs.98280  | potassium intermediate/small conductance | 6.3 |
|    | 445908 | R13580    | Hs.13436  | Homo sapiens clone 24425 mRNA sequence   | 6.3 |
|    | 412068 | S72043    | Hs.73133  | metallothionein 3 (growth inhibitory fac | 6.3 |
|    | 452834 | AI638627  | Hs.105685 | KIAA1688 protein                         | 6.3 |
| 30 | 408790 | AW580227  | Hs.47860  | neurotrophic tyrosine kinase, receptor,  | 6.3 |
|    | 418512 | AW498974  |           | diacylglycerol kinase, zeta (104kD)      | 6.2 |
|    | 410099 | AA081630  |           | KIAA0036 gene product                    | 6.2 |
|    | 452744 | AI267652  | Hs.246107 | Homo sapiens mRNA; cDNA DKFZp434E082 (fr | 6.2 |
| 35 | 427897 | NM_017413 | Hs.303084 | apelin; peptide ligand for APJ receptor  | 6.2 |
|    | 416427 | BE244050  | Hs.79307  | Rac/Cdc42 guanine exchange factor (GEF)  | 6.2 |
|    | 439274 | AF086092  | Hs.48372  | ESTs                                     | 6.2 |
|    | 431552 | AI815863  | Hs.259873 | axonal transport of synaptic vesicles    | 6.2 |
|    | 439607 | BE540565  | Hs.159460 | ESTs                                     | 6.2 |
| 40 | 408950 | AA707814  | Hs.14945  | long fatty acyl-CoA synthetase 2 gene    | 6.2 |
|    | 412709 | AL022327  | Hs.74518  | KIAA0027 protein                         | 6.2 |
|    | 435624 | AF218942  | Hs.24889  | formin 2                                 | 6.1 |
|    | 425977 | R15138    | Hs.165570 | Homo sapiens clone 25052 mRNA sequence   | 6.1 |
|    | 420077 | AW512260  | Hs.87767  | ESTs                                     | 6.1 |
|    | 457005 | AJ007421  | Hs.172597 | sal (Drosophila)-like 3                  | 6.1 |
| 45 | 440471 | AA886146  | Hs.307944 | ESTs                                     | 6.1 |
|    | 423770 | AW976766  | Hs.132776 | Homo sapiens cDNA FLJ10077 fis, clone HE | 6.1 |
|    | 438624 | AA889055  | Hs.123458 | ESTs                                     | 6.1 |
|    | 452752 | AW044058  | Hs.33578  | KIAA0820 protein                         | 6.1 |
|    | 438208 | AL041224  | Hs.65379  | ESTs                                     | 6.1 |
| 50 | 416072 | AL110370  | Hs.79000  | growth associated protein 43             | 6.1 |
|    | 407808 | AA663559  | Hs.279789 | histone deacetylase 3                    | 6.1 |
|    | 433701 | AW445023  | Hs.15155  | ESTs                                     | 6.1 |
|    | 419704 | AA429104  | Hs.45057  | ESTs                                     | 6.1 |
|    | 429250 | H56585    | Hs.198308 | tryptophan rich basic protein            | 6.1 |
| 55 | 433244 | AB040943  | Hs.271285 | KIAA1510 protein                         | 6.0 |
|    | 422544 | AB018259  | Hs.118140 | KIAA0716 gene product                    | 6.0 |
|    | 420133 | AA426117  | Hs.155543 | ESTs                                     | 6.0 |
|    | 440491 | R35252    | Hs.130558 | ESTs, Weakly similar to 2109260A B cell  | 6.0 |
|    | 422728 | AW937826  | Hs.103262 | ESTs, Weakly similar to ZN91_HUMAN ZINC  | 6.0 |
| 60 | 415257 | F03016    | Hs.27513  | ESTs                                     | 5.9 |
|    | 417160 | N76497    | Hs.1787   | proteolipid protein 1 (Pelizaeus-Merzbac | 5.9 |
|    | 430188 | AL049242  | Hs.234794 | Homo sapiens mRNA; cDNA DKFZp564B083 (fr | 5.9 |
|    | 437372 | AA323968  | Hs.283631 | hypothetical protein DKFZp547G183        | 5.9 |
|    | 430471 | AF064845  | Hs.241523 | hypothetical protein FLJ10142            | 5.9 |
| 65 | 433523 | H29882    |           | ESTs                                     | 5.9 |
|    | 408926 | AF217525  | Hs.49002  | Down syndrome cell adhesion molecule     | 5.9 |
|    | 427317 | AB028955  | Hs.175780 | KIAA1032 protein                         | 5.9 |
|    | 426140 | AF131798  | Hs.343768 | Homo sapiens clone 25119 mRNA sequence   | 5.9 |
|    | 409892 | AW956113  | Hs.7149   | gb:EST368183 MAGE resequences, MAGD Homo | 5.8 |
| 70 | 459516 | AI049662  | Hs.246858 | EST                                      | 5.8 |
|    | 442910 | AI365130  | Hs.11307  | ESTs, Weakly similar to T19326 hypotheti | 5.8 |
|    | 414737 | AI160386  | Hs.125087 | ESTs                                     | 5.8 |
|    | 424332 | AA338919  | Hs.101615 | ESTs                                     | 5.8 |
|    | 403142 |           |           | NM_002706*:Homo sapiens protein phosphat | 5.8 |
| 75 | 420111 | AA255652  |           | gb:zs21h11.r1 NCI_CGAP_GCB1 Homo sapiens | 5.8 |
|    | 450813 | AI739625  | Hs.203376 | ESTs                                     | 5.8 |
|    | 402145 |           |           | Target Exon                              | 5.8 |
|    | 434792 | AA649253  | Hs.132458 | ESTs                                     | 5.8 |
|    | 422421 | AA325138  | Hs.235873 | hypothetical protein FLJ22672            | 5.8 |
| 80 | 445745 | AB007924  | Hs.13245  | KIAA0455 gene product                    | 5.8 |
|    | 420608 | BE548277  | Hs.103104 | ESTs                                     | 5.8 |
|    | 451407 | AA131376  | Hs.343809 | fibroblast growth factor 12B             | 5.7 |
|    | 441102 | AA973905  |           | intermediate filament protein syncollin  | 5.7 |
|    | 424560 | AA158727  | Hs.150555 | protein predicted by clone 23733         | 5.7 |

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|    | 430287 | AW182459  | Hs.125759 | ESTs, Weakly similar to LEU5_HUMAN LEUKE | 5.7 |
|    | 405238 |           |           | Target Exon                              | 5.7 |
|    | 432890 | NM_014442 | Hs.279751 | sialic acid binding Ig-like lectin 8     | 5.7 |
| 5  | 440492 | R39127    | Hs.21433  | hypothetical protein DKFZp547J036        | 5.7 |
|    | 413492 | D87470    | Hs.75400  | KIAA0280 protein                         | 5.7 |
|    | 427624 | AA406245  | Hs.24895  | ESTs                                     | 5.7 |
|    | 418079 | R40058    | Hs.6911   | ESTs                                     | 5.6 |
|    | 424458 | M29273    | Hs.1780   | myelin associated glycoprotein           | 5.6 |
|    | 448299 | AA497044  | Hs.20887  | hypothetical protein FLJ10392            | 5.6 |
| 10 | 429698 | A1685086  | Hs.26339  | ESTs, Weakly similar to S21348 probable  | 5.6 |
|    | 430228 | AW950939  | Hs.5382   | ESTs, Highly similar to T00391 hypotheti | 5.6 |
|    | 445255 | NM_014841 | Hs.12477  | synaptosomal-associated protein, 91 kDa  | 5.6 |
|    | 436887 | AW953157  | Hs.193235 | hypothetical protein DKFZp547D155        | 5.6 |
|    | 452898 | AA814497  | Hs.78792  | ESTs                                     | 5.6 |
| 15 | 435538 | AB011540  | Hs.4930   | low density lipoprotein receptor-related | 5.6 |
|    | 436035 | AA703679  | Hs.106999 | ESTs, Weakly similar to SYT5_HUMAN SYNAP | 5.5 |
|    | 412190 | R16180    | Hs.274461 | ESTs                                     | 5.5 |
|    | 459278 | AW294659  | Hs.34054  | Homo sapiens cDNA: FLJ22488 fis, clone H | 5.5 |
|    | 416490 | AF090116  | Hs.79348  | regulator of G-protein signalling 7      | 5.5 |
| 20 | 423449 | AI497900  | Hs.33067  | ESTs                                     | 5.5 |
|    | 440866 | AI703103  | Hs.271360 | hypothetical protein MGC16275            | 5.5 |
|    | 432154 | AI701523  | Hs.112577 | ESTs                                     | 5.4 |
|    | 423476 | AI035633  |           | Human DNA sequence from clone RP5-1046G1 | 5.4 |
| 25 | 428588 | F12101    | Hs.185701 | Homo sapiens mRNA full length insert cDN | 5.4 |
|    | 447773 | AI423930  | Hs.36790  | ESTs, Weakly similar to putative p150 [H | 5.4 |
|    | 436936 | AL134451  | Hs.197478 | ESTs                                     | 5.4 |
|    | 427250 | R35941    | Hs.25418  | ESTs                                     | 5.4 |
|    | 427302 | AA400540  | Hs.135282 | Homo sapiens cDNA FLJ11554 fis, clone HE | 5.4 |
| 30 | 452856 | AF034799  | Hs.30881  | protein tyrosine phosphatase, receptor t | 5.4 |
|    | 428795 | R45503    | Hs.97469  | ESTs, Highly similar to A39769 N-acetyl  | 5.4 |
|    | 407385 | AA610150  | Hs.272072 | ESTs, Weakly similar to I38022 hypotheti | 5.4 |
|    | 405348 |           |           | C7001664:gi12698061 dbj BAB21849.1  (AB  | 5.4 |
|    | 438330 | AW450572  | Hs.257316 | ESTs                                     | 5.3 |
| 35 | 426503 | AA380153  |           | gb:EST93093 Skin tumor I Homo sapiens cD | 5.3 |
|    | 448148 | NM_016578 | Hs.20509  | HBV pX associated protein-8              | 5.3 |
|    | 410386 | VW26187   | Hs.3327   | Homo sapiens cDNA: FLJ22219 fis, clone H | 5.3 |
|    | 445225 | AI216555  | Hs.202398 | ESTs                                     | 5.3 |
|    | 428784 | Y12851    | Hs.193470 | purinergic receptor P2X, ligand-gated io | 5.3 |
| 40 | 418759 | AA227879  | Hs.187621 | ESTs                                     | 5.3 |
|    | 402605 |           |           | Target Exon                              | 5.3 |
|    | 412046 | Y07847    | Hs.73088  | RAS-related on chromosome 22             | 5.3 |
|    | 423869 | BE409301  | Hs.134012 | C1q-related factor                       | 5.2 |
|    | 430130 | AL137311  | Hs.234074 | Homo sapiens mRNA: cDNA DKFZp761G02121 ( | 5.2 |
| 45 | 453096 | AW294631  | Hs.11325  | ESTs                                     | 5.2 |
|    | 450475 | AW805634  | Hs.205015 | ESTs                                     | 5.2 |
|    | 429139 | F09092    | Hs.66087  | ESTs                                     | 5.2 |
|    | 451783 | R42554    | Hs.210862 | T-box, brain, 1                          | 5.2 |
|    | 436568 | H12049    | Hs.91564  | ESTs                                     | 5.2 |
| 50 | 424330 | AW073953  | Hs.333396 | Homo sapiens cDNA FLJ13596 fis, clone PL | 5.2 |
|    | 408453 | AI369838  | Hs.45127  | chondroitin sulfate proteoglycan 5 (neur | 5.2 |
|    | 447499 | AW262580  | Hs.147674 | protocadherin beta 16                    | 5.2 |
|    | 402855 |           |           | NM_001839: Homo sapiens calponin 3, acid | 5.2 |
|    | 420805 | L10333    | Hs.99947  | reticulon 1                              | 5.2 |
| 55 | 426457 | AW894667  | Hs.169965 | chimerin (chimaerin) 1                   | 5.2 |
|    | 417355 | D13168    | Hs.82002  | endothelin receptor type B               | 5.1 |
|    | 429469 | M64590    | Hs.27     | glycine dehydrogenase (decarboxylating;  | 5.1 |
|    | 450639 | AI703186  | Hs.277174 | ESTs                                     | 5.1 |
|    | 412811 | H06382    |           | ESTs                                     | 5.1 |
| 60 | 400379 | NM_018432 |           | Homo sapiens ovarian cancer related prot | 5.1 |
|    | 441869 | NM_003947 | Hs.8004   | huntingtin-associated protein interactin | 5.1 |
|    | 442832 | AW206560  | Hs.253569 | ESTs                                     | 5.1 |
|    | 422709 | AA315331  | Hs.153485 | ESTs                                     | 5.1 |
|    | 411555 | AF113537  | Hs.70669  | HMP19 protein                            | 5.1 |
| 65 | 419043 | T19167    | Hs.89566  | ets variant gene 1                       | 5.0 |
|    | 430979 | AI479755  | Hs.129010 | ESTs                                     | 5.0 |
|    | 451320 | AW118072  |           | diacylglycerol kinase, zeta (104kD)      | 5.0 |
|    | 423678 | AW963357  | Hs.7847   | ESTs                                     | 5.0 |
|    | 429918 | AW873986  | Hs.119383 | ESTs                                     | 5.0 |
| 70 | 452785 | AL359942  | Hs.296434 | erythroid differentiation and denucleati | 5.0 |
|    | 453128 | AW026516  | Hs.31791  | acylphosphatase 2, muscle type           | 5.0 |
|    | 428001 | H97428    | Hs.219907 | ESTs, Moderately similar to Transforming | 5.0 |
|    | 430183 | BE010038  |           | gb:PM3-BN0176-100400-001-g04 BN0176 Homo | 5.0 |
|    | 449969 | AW295142  | Hs.180187 | Homo sapiens cDNA FLJ14337 fis, clone PL | 5.0 |
| 75 | 439108 | AW163034  | Hs.6467   | synaptogyrin 3                           | 5.0 |
|    | 426271 | AF026547  | Hs.169047 | chondroitin sulfate proteoglycan 3 (neur | 5.0 |
|    | 451752 | AB032997  | Hs.26966  | KIAA1171 protein                         | 5.0 |
|    | 420578 | AA813546  | Hs.99034  | GTP-binding protein Rho7                 | 4.9 |
| 80 | 427315 | AA179949  | Hs.175563 | Homo sapiens mRNA: cDNA DKFZp564N0763 (f | 4.9 |
|    | 428186 | AW504300  | Hs.295605 | mannosidase, alpha, class 2A, member 2   | 4.9 |
|    | 445133 | AW157646  | Hs.198689 | ESTs                                     | 4.9 |
|    | 410359 | R38624    | Hs.106313 | ESTs                                     | 4.9 |
|    | 427144 | X95097    | Hs.2126   | vasoactive intestinal peptide receptor 2 | 4.9 |
|    | 448548 | R13209    | Hs.21413  | solute carrier family 12, (potassium-chl | 4.9 |

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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
|    | 457561 | AA331517  | Hs.286055 | chimerin (chimaerin) 2                   | 4.9 |
|    | 409100 | H98216    | Hs.42245  | ESTs, Moderately similar to I38022 hypot | 4.9 |
|    | 437117 | AL049256  | Hs.122593 | ESTs                                     | 4.9 |
|    | 415101 | R45531    | Hs.144534 | ESTs                                     | 4.9 |
| 5  | 438458 | AW975186  |           | gb:EST387294 MAGE resequences, MAGN Homo | 4.9 |
|    | 442026 | AI243749  | Hs.8074   | brain-specific angiogenesis inhibitor 3  | 4.9 |
|    | 438283 | AI458931  | Hs.37282  | ESTs                                     | 4.9 |
|    | 449714 | AB033015  | Hs.23941  | KIAA1189 protein                         | 4.9 |
|    | 420871 | AA702972  | Hs.65300  | ESTs                                     | 4.9 |
| 10 | 425256 | BE297611  | Hs.155392 | collapsin response mediator protein 1    | 4.9 |
|    | 424001 | W67883    | Hs.137476 | paternally expressed 10                  | 4.9 |
|    | 419103 | Z40229    | Hs.96423  | hypothetical protein FLJ23033            | 4.8 |
|    | 445727 | AB011095  | Hs.16032  | KIAA0523 protein                         | 4.8 |
|    | 408670 | AF160967  | Hs.46784  | potassium large conductance calcium-acti | 4.8 |
| 15 | 428189 | AA424030  | Hs.46627  | ESTs                                     | 4.8 |
|    | 420092 | AA814043  | Hs.88045  | ESTs                                     | 4.8 |
|    | 410631 | AA086469  | Hs.47171  | ESTs                                     | 4.8 |
|    | 449277 | AA001064  | Hs.43670  | ESTs                                     | 4.8 |
|    | 436282 | R91913    | Hs.272104 | ESTs, Moderately similar to ALU1_HUMAN A | 4.8 |
| 20 | 414706 | AW340125  | Hs.76989  | KIAA0097 gene product                    | 4.8 |
|    | 438703 | AI803373  | Hs.31599  | ESTs                                     | 4.8 |
|    | 439340 | AB032436  | Hs.6535   | brain-specific Na-dependent inorganic ph | 4.8 |
|    | 445890 | AF055019  | Hs.21506  | Homo sapiens clone 24570 mRNA sequence   | 4.7 |
|    | 436734 | AI937612  | Hs.273758 | hypothetical protein FLJ23112            | 4.7 |
| 25 | 408177 | AI241733  | Hs.43871  | ESTs                                     | 4.7 |
|    | 445740 | T78281    | Hs.13226  | Homo sapiens clone 25181 mRNA sequence   | 4.7 |
|    | 459527 | AW977556  | Hs.291735 | ESTs, Weakly similar to I78885 serine/th | 4.7 |
|    | 445523 | Z30118    | Hs.293788 | ESTs, Moderately similar to unnamed prot | 4.7 |
|    | 409172 | Z99399    | Hs.122593 | ESTs                                     | 4.7 |
| 30 | 437748 | AF234882  | Hs.5814   | suppression of tumorigenicity 7          | 4.7 |
|    | 421637 | AF035290  | Hs.106300 | Homo sapiens clone 23556 mRNA sequence   | 4.7 |
|    | 448044 | AI458682  |           | gb:tk13e01.x1 NCI_CGAP_Lu24 Homo sapiens | 4.7 |
|    | 459311 | R40192    | Hs.21527  | Human DNA sequence from clone GS1-115M3  | 4.7 |
| 35 | 447891 | R41754    | Hs.6496   | ESTs                                     | 4.7 |
|    | 426968 | U07616    | Hs.173034 | amphiphysin (Stiff-Mann syndrome with br | 4.7 |
|    | 404819 |           |           | NM_002688*:Homo sapiens peanut (Drosophi | 4.7 |
|    | 409125 | R17268    | Hs.343567 | axonal transport of synaptic vesicles    | 4.7 |
|    | 437762 | T78028    | Hs.154679 | synaptotagmin I                          | 4.7 |
| 40 | 441668 | AI611973  | Hs.136313 | ESTs                                     | 4.7 |
|    | 444190 | AI878918  | Hs.10526  | cysteine and glycine-rich protein 2      | 4.6 |
|    | 429269 | AA449013  | Hs.99203  | ESTs                                     | 4.6 |
|    | 433009 | AA761668  |           | gb:nz24c08.s1 NCI_CGAP_GCB1 Homo sapiens | 4.6 |
|    | 416586 | D44643    | Hs.14144  | secreted modular calcium-binding protein | 4.6 |
|    | 427701 | AA411101  | Hs.243886 | nuclear autoantigenic sperm protein (his | 4.6 |
| 45 | 426925 | NM_001196 | Hs.315689 | Homo sapiens cDNA: FLJ22373 fis, clone H | 4.6 |
|    | 410264 | AK001853  | Hs.61508  | Homo sapiens cDNA FLJ10991 fis, clone PL | 4.6 |
|    | 437698 | R61837    | Hs.7990   | ESTs, Moderately similar to I84505 calci | 4.6 |
|    | 445813 | Z42023    | Hs.106576 | alanine-glyoxylate aminotransferase 2-li | 4.6 |
|    | 424264 | D80400    | Hs.239388 | Human DNA sequence from clone RP1-304B14 | 4.6 |
| 50 | 448765 | R15337    | Hs.21958  | Homo sapiens mRNA: cDNA DKFZp547D086 (fr | 4.6 |
|    | 419723 | AL120193  | Hs.339810 | longevity assurance (LAG1, S. cerevisiae | 4.6 |
|    | 424282 | R76421    | Hs.135694 | ESTs                                     | 4.6 |
|    | 429401 | AW296102  | Hs.99272  | ESTs, Weakly similar to S32567 A4 protei | 4.6 |
| 55 | 426413 | AA377823  |           | gb:EST90805 Synovial sarcoma Homo sapien | 4.5 |
|    | 407896 | D76435    | Hs.41154  | Zic family member 1 (odd-paired Drosophi | 4.5 |
|    | 413248 | T64858    | Hs.21433  | hypothetical protein DKFZp547J036        | 4.5 |
|    | 443731 | AI083928  | Hs.145418 | ESTs                                     | 4.5 |
|    | 449539 | W80363    | Hs.58446  | ESTs                                     | 4.5 |
|    | 420362 | U79734    | Hs.97206  | huntingtin interacting protein 1         | 4.5 |
| 60 | 443301 | AI733614  | Hs.220587 | ESTs, Moderately similar to ALU5_HUMAN A | 4.5 |
|    | 423178 | AI033140  | Hs.124983 | Homo sapiens mRNA: cDNA DKFZp564C142 (fr | 4.5 |
|    | 437933 | AI276132  | Hs.146155 | ESTs                                     | 4.5 |
|    | 446544 | AI631932  | Hs.7047   | ESTs, Weakly similar to Unknown [H.sapie | 4.5 |
| 65 | 411642 | NM_014932 | Hs.71132  | neuroligin 1                             | 4.5 |
|    | 428282 | N34905    | Hs.44653  | Homo sapiens cDNA: FLJ22669 fis, clone H | 4.5 |
|    | 411498 | NM_014210 | Hs.70499  | ecotropic viral integration site 2A      | 4.5 |
|    | 408622 | AA056060  | Hs.202577 | Homo sapiens cDNA FLJ12166 fis, clone MA | 4.5 |
|    | 436637 | AI783629  | Hs.26765  | ESTs                                     | 4.5 |
| 70 | 438456 | AA913381  | Hs.20594  | ESTs                                     | 4.5 |
|    | 400533 |           |           | ENSP00000209376*:PRED65 protein (Fragmen | 4.4 |
|    | 413951 | AW051200  | Hs.75640  | natriuretic peptide precursor A          | 4.4 |
|    | 417632 | R20855    | Hs.5422   | glycoprotein M6B                         | 4.4 |
|    | 425138 | H08849    | Hs.167464 | glutamate receptor, ionotropic, N-methyl | 4.4 |
| 75 | 457211 | AW972565  | Hs.32399  | ESTs, Weakly similar to S51797 vasodilat | 4.4 |
|    | 413812 | AW188687  | Hs.44748  | ESTs                                     | 4.4 |
|    | 448451 | AW015994  | Hs.345433 | gb:U1-H-BI0p-abh-g-09-0-U1.s1 NCI_CGAP_S | 4.4 |
|    | 432281 | AK001239  | Hs.274263 | hypothetical protein FLJ10377            | 4.4 |
|    | 458760 | AI498631  | Hs.111334 | ferritin, light polypeptide              | 4.4 |
| 80 | 405819 |           |           | NM_002578:Homo sapiens p21 (CDKN1A)-acti | 4.4 |
|    | 447877 | AI435184  | Hs.164252 | ESTs                                     | 4.4 |
|    | 431342 | AW971018  | Hs.21659  | ESTs                                     | 4.4 |
|    | 408577 | H50572    | Hs.19515  | ESTs, Highly similar to NRG3_HUMAN PRO-N | 4.4 |
|    | 445729 | H21066    | Hs.13223  | Homo sapiens mRNA full length insert cDN | 4.4 |

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|    |        |           |           |   |     |
|----|--------|-----------|-----------|---|-----|
| 5  | 422253 | W81526    | Hs.118329 | ESTs, Moderately similar to GAD_HUMAN GA  | 4.4 |
|    | 419088 | A1538323  | Hs.52620  | integrin, beta 8                          | 4.4 |
|    | 428305 | AA446628  | Hs.2799   | cartilage linking protein 1               | 4.4 |
|    | 410768 | AF038185  | Hs.66187  | Homo sapiens clone 23700 mRNA sequence    | 4.4 |
|    | 428722 | U76456    | Hs.190787 | tissue inhibitor of metalloproteinase 4   | 4.4 |
| 10 | 451621 | A1879148  | Hs.26770  | fatty acid binding protein 7, brain       | 4.4 |
|    | 424240 | AB023185  | Hs.143535 | calcium/calmodulin-dependent protein kin  | 4.3 |
|    | 433932 | AW954599  | Hs.169330 | neuronal protein                          | 4.3 |
|    | 439935 | S75105    | Hs.8358   | glutamate receptor, ionotropic, kainate   | 4.3 |
|    | 436039 | AW023323  | Hs.121070 | ESTs                                      | 4.3 |
| 15 | 416220 | N49776    | Hs.170994 | hypothetical protein MGC10946             | 4.3 |
|    | 409953 | AA332277  | Hs.57691  | cadherin 18, type 2                       | 4.3 |
|    | 456497 | AW967956  | Hs.123648 | ESTs, Weakly similar to AF108460 1 ubinu  | 4.3 |
|    | 420352 | BE258835  | .         | gb:601117374F1 NIH_MGC_16 Homo sapiens c  | 4.3 |
|    | 454032 | W31790    | Hs.194293 | ESTs, Weakly similar to I54374 gene NF2   | 4.3 |
| 20 | 421790 | AW896201  | Hs.22654  | sodium channel, voltage-gated, type I, a  | 4.3 |
|    | 444218 | AF070641  | Hs.10684  | Homo sapiens clone 24421 mRNA sequence    | 4.3 |
|    | 436391 | AJ227892  | Hs.146274 | ESTs                                      | 4.3 |
|    | 452106 | AI141031  | Hs.21342  | ESTs                                      | 4.3 |
|    | 422465 | AF073710  | Hs.117149 | regulator of G-protein signalling 9       | 4.3 |
| 25 | 439285 | AL133916  | .         | hypothetical protein FLJ20093             | 4.3 |
|    | 404541 | .         | NM_030795 | Homo sapiens stathmin-like 4 (            | 4.3 |
|    | 424572 | M19650    | .         | 2',3'-cyclic nucleotide 3' phosphodiester | 4.3 |
|    | 449048 | Z45051    | Hs.22920  | similar to S68401 (cattle) glucose induc  | 4.3 |
|    | 409182 | AA064970  | Hs.122593 | ESTs                                      | 4.3 |
| 30 | 444600 | R41398    | Hs.6996   | ESTs                                      | 4.3 |
|    | 408838 | A1669535  | Hs.40369  | ESTs                                      | 4.3 |
|    | 410592 | R94088    | Hs.43569  | ESTs                                      | 4.3 |
|    | 440168 | AA868507  | Hs.126141 | ESTs                                      | 4.2 |
|    | 445078 | A1869975  | Hs.4775   | junctional protein 3                      | 4.2 |
| 35 | 428670 | AA431682  | Hs.134832 | ESTs                                      | 4.2 |
|    | 411656 | AF106564  | Hs.71346  | neurofilament 3 (150kD medium)            | 4.2 |
|    | 412505 | AA974491  | Hs.21734  | ESTs                                      | 4.2 |
|    | 418506 | AA084248  | Hs.85339  | G protein-coupled receptor 39             | 4.2 |
|    | 441707 | R42637    | Hs.21963  | hypothetical protein DKFZp761B0514        | 4.2 |
| 40 | 449433 | A1672096  | Hs.9012   | ESTs, Weakly similar to S26650 DNA-bind   | 4.2 |
|    | 441523 | AW514263  | Hs.301771 | ESTs, Weakly similar to ALUF_HUMAN !!!    | 4.2 |
|    | 448243 | AW369771  | Hs.52620  | integrin, beta 8                          | 4.2 |
|    | 429149 | AW193360  | Hs.197962 | ESTs, Weakly similar to I38022 hypotheti  | 4.2 |
|    | 430676 | AF084866  | .         | gb:Homo sapiens envelope protein RIC-3 (  | 4.2 |
| 45 | 404584 | .         | .         | Target Exon                               | 4.2 |
|    | 422798 | R92347    | Hs.34574  | ESTs, Weakly similar to ALU1_HUMAN ALU S  | 4.2 |
|    | 451254 | A1571016  | Hs.172967 | ESTs                                      | 4.2 |
|    | 428585 | AB007863  | Hs.185140 | KIAA0403 protein                          | 4.2 |
|    | 439231 | AW581935  | Hs.141480 | Homo sapiens mRNA; cDNA DKFZp434N079 (fr  | 4.2 |
| 50 | 425287 | R88249    | Hs.155524 | peanut (Drosophila)-like 2                | 4.2 |
|    | 425790 | AW136286  | Hs.288446 | ESTs                                      | 4.2 |
|    | 450407 | NM_000810 | Hs.24969  | gamma-aminobutyric acid (GABA) A recepto  | 4.2 |
|    | 425241 | AA324624  | Hs.155247 | aldolase C, fructose-bisphosphate         | 4.2 |
|    | 445292 | AV653264  | Hs.13982  | Homo sapiens cDNA FLJ14666 fis, clone NT  | 4.1 |
| 55 | 400777 | .         | .         | NM_007325*:Homo sapiens glutamate recept  | 4.1 |
|    | 422170 | A1791949  | Hs.112432 | anti-Mullerian hormone                    | 4.1 |
|    | 410765 | A1694972  | Hs.66180  | nucleosome assembly protein 1-like 2      | 4.1 |
|    | 425402 | A1215881  | Hs.24970  | ESTs, Weakly similar to B34323 GTP-bind   | 4.1 |
|    | 438461 | AW075485  | Hs.286049 | phosphoserine aminotransferase            | 4.1 |
| 60 | 421268 | A1126821  | Hs.30514  | ESTs                                      | 4.1 |
|    | 416439 | AA180363  | Hs.118769 | ESTs                                      | 4.1 |
|    | 419687 | A1638859  | Hs.227699 | ESTs, Weakly similar to T2D3_HUMAN TRANS  | 4.1 |
|    | 435040 | A1932350  | Hs.152825 | ESTs                                      | 4.1 |
|    | 439774 | AL360257  | Hs.213493 | Homo sapiens mRNA full length insert cDN  | 4.1 |
| 65 | 458435 | AI418718  | Hs.144121 | ESTs, Weakly similar to T46916 hypotheti  | 4.1 |
|    | 410320 | AA084071  | Hs.93816  | Homo sapiens mRNA; cDNA DKFZp547N093 (fr  | 4.1 |
|    | 436899 | AA764852  | Hs.291567 | ESTs                                      | 4.1 |
|    | 454171 | AW854832  | .         | gb:QV2-CT0261-201099-011-f05 CT0261 Homo  | 4.1 |
|    | 453118 | AW195849  | Hs.252757 | ESTs                                      | 4.1 |
| 70 | 428771 | AB028992  | Hs.193143 | KIAA1069 protein                          | 4.1 |
|    | 444185 | AW298350  | Hs.66020  | ESTs                                      | 4.1 |
|    | 422374 | AW732869  | Hs.1519   | protein kinase, cAMP-dependent, regulato  | 4.1 |
|    | 430147 | R60704    | Hs.234434 | hair/enhancer-of-split related with YRP   | 4.1 |
|    | 456060 | C14904    | Hs.45184  | Homo sapiens cDNA FLJ12284 fis, clone MA  | 4.1 |
| 75 | 433819 | AW511097  | Hs.112765 | ESTs                                      | 4.1 |
|    | 415827 | H17462    | Hs.23079  | ESTs                                      | 4.1 |
|    | 437397 | AA349847  | Hs.4221   | hypothetical protein DKFZp761H039         | 4.1 |
|    | 441390 | A1692560  | Hs.131175 | ESTs                                      | 4.1 |
|    | 440483 | A1200836  | Hs.150386 | ESTs                                      | 4.0 |
| 80 | 435294 | T84084    | Hs.196008 | Homo sapiens cDNA FLJ11723 fis, clone HE  | 4.0 |
|    | 447397 | BE247676  | Hs.18442  | E-1 enzyme                                | 4.0 |
|    | 425390 | AI092634  | Hs.156114 | protein tyrosine phosphatase, non-recept  | 4.0 |
|    | 432022 | AL162042  | Hs.272348 | Homo sapiens mRNA; cDNA DKFZp761L1212 (f  | 4.0 |
|    | 420602 | AF060877  | Hs.99236  | regulator of G-protein signalling 20      | 4.0 |
|    | 408081 | AW451597  | Hs.167409 | ESTs                                      | 4.0 |
|    | 453313 | BE005771  | Hs.153746 | hypothetical protein FLJ22490             | 4.0 |
|    | 436511 | AA721252  | Hs.291502 | ESTs                                      | 4.0 |

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|    | 448944 | AB014605  | Hs.22599  | atrophin-1 interacting protein 1; activi             | 4.0 |
|    | 419412 | AW161058  | Hs.90297  | synuclein, beta                                      | 4.0 |
|    | 409091 | AW970386  | Hs.269423 | ESTs   | 4.0 |
|    | 453438 | AI469935  | Hs.22792  | ESTs   | 4.0 |
| 5  | 450582 | AI339732  |           | G-rich RNA sequence binding factor 1                 | 4.0 |
|    | 440553 | AA889416  | Hs.344043 | Homo sapiens cDNA FLJ14459 fis, clone HE             | 4.0 |
|    | 437449 | AL390153  | Hs.208339 | Homo sapiens mRNA; cDNA DKFZp762G113 (fr             | 4.0 |
|    | 445888 | AF070564  | Hs.13415  | Homo sapiens clone 24571 mRNA sequence               | 4.0 |
|    | 439450 | RS1613    | Hs.125304 | ESTs   | 4.0 |
| 10 | 453792 | AL134539  | Hs.254129 | KIAA1678   | 4.0 |
|    | 459080 | AW192083  | Hs.290855 | ESTs   | 4.0 |
|    | 438810 | AW897846  | Hs.6421   | hypothetical protein DKFZp761N09121                  | 4.0 |
|    | 446233 | AI282028  | Hs.25205  | ESTs   | 4.0 |
| 15 | 412754 | AW160375  | Hs.74565  | amyloid beta (A4) precursor-like protein             | 4.0 |
|    | 412326 | R07566    | Hs.73817  | small inducible cytokine A3 (homologous              | 4.0 |
|    | 434859 | BE255080  | Hs.299315 | collapsin response mediator protein-5; C             | 4.0 |
|    | 423279 | AW959861  | Hs.290943 | ESTs   | 4.0 |
|    | 416340 | N31772    | Hs.79226  | fasciculation and elongation protein zet             | 3.9 |
|    | 410126 | BE169274  |           | KIAA0036 gene product                                | 3.9 |
| 20 | 431173 | AW971198  | Hs.294068 | ESTs   | 3.9 |
|    | 446936 | H10207    | Hs.47314  | ESTs   | 3.9 |
|    | 424899 | AL119387  | Hs.119062 | ESTs   | 3.9 |
|    | 419038 | AW134924  | Hs.190325 | ESTs   | 3.9 |
| 25 | 450530 | NM_006668 | Hs.25121  | cytochrome P450, subfamily 46 (cholester             | 3.9 |
|    | 438142 | T90309    | Hs.269651 | ESTs   | 3.9 |
|    | 412659 | AW753865  | Hs.74376  | olfactomedin related ER localized protei             | 3.9 |
|    | 412788 | AA120960  | Hs.198416 | ESTs   | 3.9 |
|    | 410909 | AW898161  | Hs.53112  | ESTs, Moderately similar to ALU8_HUMAN A             | 3.9 |
| 30 | 429433 | AA452899  | Hs.213586 | ESTs, Weakly similar to KIAA1353 protein             | 3.9 |
|    | 432809 | AA565509  | Hs.131703 | ESTs   | 3.9 |
|    | 424186 | AI536021  | Hs.288706 | Homo sapiens cDNA FLJ10281 fis, clone HE             | 3.9 |
|    | 425480 | AB023198  | Hs.158135 | KIAA0981 protein                                     | 3.9 |
|    | 449932 | AI675444  | Hs.263024 | ESTs   | 3.9 |
| 35 | 434072 | H70854    | Hs.283059 | Homo sapiens PRO1082 mRNA, complete cds              | 3.9 |
|    | 450590 | AI701507  | Hs.273740 | ESTs   | 3.9 |
|    | 419586 | AI088485  | Hs.144759 | ESTs, Weakly similar to I38022 hypothei              | 3.9 |
|    | 414040 | N58513    | Hs.32171  | ESTs   | 3.9 |
| 40 | 436480 | AJ271643  | Hs.87469  | putative acid-sensing ion channel                    | 3.9 |
|    | 443210 | AI692649  | Hs.9451   | hypothetical protein MGC13168                        | 3.9 |
|    | 448448 | NM_014954 | Hs.21239  | KIAA0985 protein                                     | 3.9 |
|    | 447067 | R42098    | Hs.21964  | ESTs   | 3.9 |
|    | 413199 | M62843    | Hs.75236  | ELAV (embryonic lethal, abnormal vision,             | 3.9 |
|    | 429421 | AL031658  |           | Human DNA sequence from clone RP1-310013             | 3.9 |
| 45 | 415796 | R87548    | Hs.78854  | ATPase, Na <sup>+</sup> transporting, beta 2 polypep | 3.8 |
|    | 417333 | AL157545  | Hs.173179 | bromodomain and PHD finger containing, 3             | 3.8 |
|    | 418771 | AA807881  | Hs.25329  | ESTs   | 3.8 |
|    | 417565 | AI203405  | Hs.47831  | ESTs   | 3.8 |
|    | 412420 | AL035668  | Hs.73853  | bone morphogenetic protein 2                         | 3.8 |
| 50 | 450202 | AW969756  | Hs.34145  | ESTs, Weakly similar to B49647 GTP-bind              | 3.8 |
|    | 435312 | AJ243396  | Hs.4865   | voltage-gated sodium channel beta-3 subu             | 3.8 |
|    | 435832 | AA425688  | Hs.41641  | Bruno (Drosophila)-like 4, RNA binding               | 3.8 |
|    | 435854 | AJ278120  | Hs.4996   | putative ankyrin-repeat containing prote             | 3.8 |
|    | 459079 | AI821122  |           | gbns91g10.y5 NCL_CGAP_Pr3 Homo sapiens               | 3.8 |
| 55 | 425905 | AB032959  | Hs.318584 | novel C3HC4 type Zinc finger (ring finger            | 3.8 |
|    | 421977 | W94197    | Hs.110165 | ribosomal protein L26 homolog                        | 3.8 |
|    | 437756 | AA767537  | Hs.197096 | ESTs   | 3.8 |
|    | 403696 |           |           | C4001100:gq15852342[gb]AAD54015.1[ AF0               | 3.8 |
|    | 453033 | AA325869  | Hs.31463  | KIAA0281 gene product                                | 3.8 |
| 60 | 441732 | AW298818  | Hs.127341 | ESTs   | 3.8 |
|    | 415884 | H22966    | Hs.13471  | ESTs   | 3.8 |
|    | 432646 | AW753310  |           | gb.RC3-CT0254-031099-012-c05 CT0254 Homo             | 3.8 |
|    | 451059 | AW297465  | Hs.267150 | KIAA1409 protein                                     | 3.8 |
|    | 447057 | AI423407  | Hs.157697 | ESTs   | 3.8 |
| 65 | 418915 | AI474778  | Hs.118977 | ESTs   | 3.8 |
|    | 441111 | AI806867  | Hs.126594 | ESTs   | 3.8 |
|    | 447818 | W79940    | Hs.21906  | Homo sapiens clone 24670 mRNA sequence               | 3.8 |
|    | 457183 | H91882    | Hs.118569 | Dvl-binding protein IDAX (inhibition of              | 3.8 |
|    | 418358 | L02840    | Hs.84244  | potassium voltage-gated channel, Shab-re             | 3.8 |
| 70 | 410711 | AB002316  | Hs.65746  | KIAA0318 protein                                     | 3.8 |
|    | 428878 | AA436884  | Hs.48926  | ESTs   | 3.8 |
|    | 438944 | AA302517  | Hs.92732  | KIAA1444 protein                                     | 3.8 |
|    | 420898 | AB002379  | Hs.100113 | KIAA0381 protein                                     | 3.8 |
|    | 418329 | AW247430  | Hs.84152  | cystathionine-beta-synthase                          | 3.8 |
|    | 427209 | H06509    | Hs.92423  | KIAA1566 protein                                     | 3.7 |
| 75 | 445319 | AF052108  | Hs.12513  | Homo sapiens clone 23687 mRNA sequence               | 3.7 |
|    | 428841 | AI418430  | Hs.104935 | ESTs   | 3.7 |
|    | 414821 | M53835    | Hs.77424  | Fc fragment of IgG, high affinity Ia, re             | 3.7 |
|    | 443310 | BE552018  | Hs.133152 | ESTs   | 3.7 |
| 80 | 407728 | AW071502  | Hs.175931 | ESTs   | 3.7 |
|    | 429643 | AA455889  | Hs.167279 | FYVE-finger-containing Rab5 effector pro             | 3.7 |
|    | 444127 | N63620    | Hs.13281  | ESTs   | 3.7 |
|    | 425652 | AB021742  | Hs.322431 | neurogenic differentiation 2                         | 3.7 |
|    | 458072 | AI890347  | Hs.271923 | Homo sapiens cDNA: FLJ22785 fis, clone K             | 3.7 |

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|    | 459660 | M79082    |           | ESTs                                     | 3.7 |
|    | 432188 | AI362952  | Hs.2928   | solute carrier family 7 (cationic amino  | 3.7 |
|    | 437627 | AW469925  | Hs.257837 | ESTs                                     | 3.7 |
| 5  | 408508 | AI806109  | Hs.135736 | KIAA1580 protein                         | 3.7 |
|    | 448999 | AF179274  | Hs.22791  | transmembrane protein with EGF-like and  | 3.7 |
|    | 410623 | AW958932  | Hs.293833 | ESTs                                     | 3.7 |
|    | 430744 | AA485229  | Hs.105649 | ESTs                                     | 3.7 |
|    | 454392 | BE260893  | Hs.236131 | homeodomain-interacting protein kinase 2 | 3.7 |
| 10 | 453739 | AL120266  |           | ESTs                                     | 3.7 |
|    | 407198 | H91679    |           | gb:yy04a07.s1 Soares fetal liver spleen  | 3.7 |
|    | 405239 | U89281    |           | oxidative 3 alpha hydroxysteroid dehydro | 3.7 |
|    | 433615 | AA732982  | Hs.269607 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 3.7 |
|    | 424800 | AL035588  | Hs.153203 | MyoD family inhibitor                    | 3.7 |
| 15 | 451027 | AW519204  | Hs.40808  | ESTs                                     | 3.7 |
|    | 415131 | D61119    |           | gb:HUM158C11B Clontech human fetal brain | 3.7 |
|    | 443454 | AI057494  | Hs.133421 | ESTs                                     | 3.7 |
|    | 423779 | AW071837  | Hs.57971  | ESTs                                     | 3.7 |
|    | 452092 | BE245374  | Hs.27842  | hypothetical protein FLJ11210            | 3.7 |
| 20 | 435910 | AI084152  | Hs.21782  | ESTs, Weakly similar to ALU7_HUMAN ALU S | 3.6 |
|    | 447028 | AI973128  | Hs.167257 | brain link protein-1                     | 3.6 |
|    | 452997 | N64777    | Hs.44656  | ESTs                                     | 3.6 |
|    | 408601 | U47928    | Hs.86122  | protein A                                | 3.6 |
|    | 407332 | AI801565  | Hs.200113 | Homo sapiens cDNA FLJ11379 fis, clone HE | 3.6 |
| 25 | 455646 | BE064420  |           | gb:RC4-BT0311-241199-012-c08 BT0311 Homo | 3.6 |
|    | 433657 | AI244368  | Hs.8124   | PH domain containing protein in retina 1 | 3.6 |
|    | 421679 | AI475110  | Hs.203933 | ESTs                                     | 3.6 |
|    | 448985 | AA324885  | Hs.22777  | carbonic anhydrase XI                    | 3.6 |
|    | 414709 | AA704703  | Hs.77031  | Sp2 transcription factor                 | 3.6 |
| 30 | 411775 | H08342    |           | gb:yl87b09.r1 Soares infant brain 1N1B H | 3.6 |
|    | 439099 | AB037800  | Hs.6462   | protein kinase C and casein kinase subst | 3.6 |
|    | 436315 | BE390513  | Hs.27935  | hypothetical protein MGC4837             | 3.6 |
|    | 423611 | AB011163  | Hs.129908 | KIAA0591 protein                         | 3.6 |
|    | 453169 | AB037815  | Hs.32156  | KIAA1394 protein                         | 3.6 |
| 35 | 436954 | AA740151  | Hs.130425 | ESTs                                     | 3.6 |
|    | 439249 | AF086060  | Hs.170053 | G-protein coupled receptor 88            | 3.6 |
|    | 432058 | AW665996  | Hs.130729 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 3.6 |
|    | 419390 | AI701162  | Hs.90207  | hypothetical protein MGC11138            | 3.6 |
|    | 428483 | AI908539  | Hs.184592 | KIAA0344 gene product                    | 3.6 |
| 40 | 409557 | BE182896  | Hs.211193 | ESTs                                     | 3.6 |
|    | 418049 | AA211467  | Hs.190488 | Homo sapiens, Similar to nuclear localiz | 3.6 |
|    | 443774 | AL117428  | Hs.9740   | DKFZP434A236 protein                     | 3.6 |
|    | 425331 | AW962128  |           | gb:EST374201 MAGE resequences, MAGG Homo | 3.6 |
|    | 445105 | AF238869  | Hs.283955 | Homo sapiens clone GLSH-2 similar to gli | 3.6 |
| 45 | 424051 | AL110203  | Hs.138411 | Homo sapiens mRNA; cDNA DKFZp586J1922 (f | 3.6 |
|    | 446420 | AW015693  | Hs.135614 | ESTs                                     | 3.6 |
|    | 428138 | AA773842  | Hs.293799 | ESTs                                     | 3.6 |
|    | 404185 |           |           | Target Exon                              | 3.6 |
|    | 427517 | AA644142  | Hs.7107   | ESTs, Weakly similar to ALU7_HUMAN ALU S | 3.6 |
| 50 | 443150 | AI034467  | Hs.34650  | ESTs                                     | 3.6 |
|    | 408065 | AW954272  |           | gb:EST366342 MAGE resequences, MAGC Homo | 3.6 |
|    | 435092 | AL137310  | Hs.4749   | Homo sapiens mRNA; cDNA DKFZp761E13121 ( | 3.6 |
|    | 418064 | BE387287  | Hs.83384  | S100 calcium-binding protein, beta (neur | 3.6 |
|    | 433560 | AI925195  | Hs.130891 | hypothetical protein MGC4400             | 3.6 |
| 55 | 432882 | NM_013257 | Hs.279696 | serum/glucocorticoid regulated kinase-II | 3.6 |
|    | 412350 | AI659306  | Hs.73826  | protein tyrosine phosphatase, non-recept | 3.6 |
|    | 439753 | BE262233  | Hs.7423   | hypothetical protein from EUROIMAGE 2168 | 3.6 |
|    | 451734 | NM_006176 | Hs.26944  | neurogranin (protein kinase C substrate, | 3.6 |
|    | 437056 | AI147061  |           | gb:ok33a11.s1 Soares_NSF_F8_9W_OT_PA_P_S | 3.6 |
| 60 | 438328 | AI492261  | Hs.32450  | ESTs                                     | 3.6 |
|    | 451489 | NM_005503 | Hs.26468  | amyloid beta (A4) precursor protein-bind | 3.6 |
|    | 423641 | AL137256  | Hs.130489 | ATPase, aminophospholipid transporter-II | 3.6 |
|    | 434784 | AA649051  | Hs.164007 | ESTs                                     | 3.5 |
|    | 441834 | AL138034  | Hs.7979   | KIAA0736 gene product                    | 3.5 |
| 65 | 421183 | AL135740  | Hs.102447 | TSC-22-like                              | 3.5 |
|    | 452108 | AW135982  | Hs.203013 | hypothetical protein FLJ12748            | 3.5 |
|    | 425870 | R13406    | Hs.56782  | ESTs                                     | 3.5 |
|    | 425115 | R44664    | Hs.123956 | ESTs                                     | 3.5 |
|    | 444471 | AB020684  | Hs.11217  | KIAA0877 protein                         | 3.5 |
| 70 | 419929 | U90268    | Hs.93810  | cerebral cavernous malformations 1       | 3.5 |
|    | 407792 | AI077715  | Hs.39384  | putative secreted ligand homologous to f | 3.5 |
|    | 422564 | AI148006  | Hs.222120 | ESTs                                     | 3.5 |
|    | 433323 | AA805132  | Hs.159142 | ESTs                                     | 3.5 |
|    | 435743 | T66861    | Hs.12962  | ESTs                                     | 3.5 |
| 75 | 450297 | AW901347  | Hs.38592  | hypothetical protein FLJ23342            | 3.5 |
|    | 403341 |           |           | Target Exon                              | 3.5 |
|    | 443761 | AI525743  | Hs.345187 | ESTs                                     | 3.5 |
|    | 458743 | R53169    | Hs.80712  | KIAA0202 protein                         | 3.5 |
|    | 447925 | AW292271  | Hs.250718 | ESTs                                     | 3.5 |
| 80 | 445424 | AB028945  | Hs.12696  | cortactin SH3 domain-binding protein     | 3.5 |
|    | 416874 | H98752    | Hs.42568  | ESTs                                     | 3.5 |
|    | 430456 | AA314998  | Hs.241503 | hypothetical protein                     | 3.5 |
|    | 419647 | AA348947  | Hs.91816  | hypothetical protein                     | 3.5 |
|    | 412707 | AW206373  | Hs.16443  | Homo sapiens cDNA: FLJ21721 fis, clone C | 3.5 |

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|    | 444458 | BE041526  | Hs.31746  | hypothetical protein DKFZp547F072        | 3.5 |
|    | 451066 | AI758660  | Hs.206132 | ESTs                                     | 3.5 |
|    | 425234 | AW152225  | Hs.165909 | ESTs, Weakly similar to I38022 hypotheti | 3.5 |
|    | 420071 | AB028985  | Hs.94806  | ATP-binding cassette, sub-family A (ABC1 | 3.5 |
| 5  | 432625 | AI243596  | Hs.94830  | ESTs, Moderately similar to T03094 A-kin | 3.5 |
|    | 442118 | AA976718  | Hs.202242 | ESTs                                     | 3.5 |
|    | 421686 | AB011156  | Hs.106794 | KIAA0584 protein                         | 3.5 |
|    | 428966 | AF059214  | Hs.194687 | cholesterol 25-hydroxylase               | 3.5 |
|    | 444326 | AI939357  | Hs.270710 | ESTs                                     | 3.5 |
| 10 | 443361 | AI792628  | Hs.133273 | ESTs                                     | 3.5 |
|    | 427527 | R87582    | Hs.179915 | guanine nucleotide binding protein (G pr | 3.4 |
|    | 434542 | AA769310  | Hs.61260  | hypothetical protein FLJ13164            | 3.4 |
|    | 419235 | AW470411  | Hs.288433 | neurotrimin                              | 3.4 |
|    | 440700 | AW952281  | Hs.296184 | guanine nucleotide binding protein (G pr | 3.4 |
| 15 | 417084 | H08370    | Hs.33067  | ESTs                                     | 3.4 |
|    | 432925 | AA878324  |           | ESTs                                     | 3.4 |
|    | 439920 | H05430    | Hs.288433 | neurotrimin                              | 3.4 |
|    | 453710 | AL119136  | Hs.236131 | homeodomain-interacting protein kinase 2 | 3.4 |
|    | 412783 | BE276738  | Hs.74578  | DEAD/H (Asp-Glu-Ala-Asp/His) box polypep | 3.4 |
| 20 | 435977 | AL138079  | Hs.5012   | brain-specific membrane-anchored protein | 3.4 |
|    | 431725 | X65724    | Hs.2839   | Norrie disease (pseudoglioma)            | 3.4 |
|    | 449611 | AI970394  | Hs.197075 | ESTs                                     | 3.4 |
|    | 448543 | AW897741  | Hs.21380  | Homo sapiens mRNA; cDNA DKFZp586P1124 (f | 3.4 |
|    | 430968 | AW972830  |           | gb:EST384925 MAGE resequences, MAGL Homo | 3.4 |
| 25 | 413530 | AA130158  | Hs.19977  | ESTs, Moderately similar to ALU8_HUMAN A | 3.4 |
|    | 412043 | BE156622  | Hs.333371 | Homo sapiens clone TA40 untranslated mRN | 3.4 |
|    | 445666 | R59960    | Hs.282386 | ESTs                                     | 3.4 |
|    | 412820 | BE001236  |           | gb:CM3-BN0075-240200-101-d11 BN0075 Homo | 3.4 |
|    | 458912 | AI911066  |           | ESTs                                     | 3.4 |
| 30 | 452449 | AW068658  | Hs.20943  | ESTs                                     | 3.4 |
|    | 437085 | AA743935  | Hs.202329 | ESTs                                     | 3.4 |
|    | 419852 | AW503756  | Hs.286184 | hypothetical protein dJ551D2.5           | 3.4 |
|    | 448750 | U95020    | Hs.21903  | calcium channel, voltage-dependent, beta | 3.4 |
|    | 435741 | AI240668  | Hs.113099 | ESTs                                     | 3.4 |
| 35 | 445828 | F05802    | Hs.81907  | ESTs                                     | 3.4 |
|    | 419347 | C15944    | Hs.90005  | superiorcervical ganglia, neural specifi | 3.4 |
|    | 431733 | AW298410  | Hs.21475  | ESTs                                     | 3.4 |
|    | 415949 | H10562    | Hs.21691  | ESTs                                     | 3.4 |
| 40 | 400205 |           |           | NM_006265*:Homo sapiens RAD21 (S. pombe) | 3.4 |
|    | 437528 | N59646    | Hs.169745 | crumbs (Drosophila) homolog 1            | 3.4 |
|    | 442593 | R39804    | Hs.31961  | ESTs                                     | 3.4 |
|    | 442927 | AI024347  | Hs.131519 | ESTs                                     | 3.4 |
|    | 429528 | AI985303  | Hs.99361  | ESTs                                     | 3.4 |
| 45 | 450756 | AI733488  | Hs.144062 | ESTs                                     | 3.4 |
|    | 437387 | AI198874  | Hs.28847  | ADO26 protein                            | 3.4 |
|    | 430347 | NM_002039 | Hs.239706 | GRB2-associated binding protein 1        | 3.4 |
|    | 404283 |           |           | ENSP00000244751*:Copine-like protein KIA | 3.4 |
|    | 433229 | AB040925  | Hs.91625  | KIAA1492 protein                         | 3.4 |
|    | 440274 | R24595    | Hs.7122   | scrapie responsive protein 1             | 3.4 |
| 50 | 436114 | AA778232  | Hs.19515  | ESTs, Highly similar to NRG3_HUMAN PRO-N | 3.4 |
|    | 439690 | AA843868  | Hs.190567 | ESTs                                     | 3.4 |
|    | 450784 | AW246803  | Hs.47289  | ESTs                                     | 3.3 |
|    | 417868 | AI078534  | Hs.122592 | ESTs                                     | 3.3 |
|    | 439793 | AA018825  | Hs.7934   | Kruppel-like factor 4 (gut)              | 3.3 |
| 55 | 456209 | W60633    | Hs.297792 | ESTs                                     | 3.3 |
|    | 421458 | NM_003654 | Hs.104576 | carbohydrate (keratan sulfate Gal-6) sul | 3.3 |
|    | 438201 | AA780243  | Hs.54647  | ESTs                                     | 3.3 |
|    | 400302 | N48056    | Hs.1915   | folate hydrolase (prostate-specific memb | 3.3 |
|    | 425897 | AA935315  | Hs.48965  | Homo sapiens cDNA: FLJ21693 fis, clone C | 3.3 |
| 60 | 423169 | BE047009  | Hs.21837  | ESTs, Weakly similar to KIAA0927 protein | 3.3 |
|    | 415539 | AI733881  | Hs.72472  | BMP-R1B                                  | 3.3 |
|    | 450337 | AI693256  | Hs.202427 | ESTs                                     | 3.3 |
|    | 408447 | AK002089  | Hs.45080  | Homo sapiens cDNA FLJ11227 fis, clone PL | 3.3 |
| 65 | 423420 | AI571364  | Hs.128382 | Homo sapiens mRNA; cDNA DKFZp7611224 (f  | 3.3 |
|    | 429084 | AJ001443  | Hs.195614 | splicing factor 3b, subunit 3, 130kD     | 3.3 |
|    | 440435 | AL042201  | Hs.21273  | transcription factor NYD-sp10            | 3.3 |
|    | 453785 | AI368236  | Hs.283732 | ESTs, Moderately similar to ALU1_HUMAN A | 3.3 |
|    | 448048 | BE281291  | Hs.170408 | ESTs, Moderately similar to A47582 B-cel | 3.3 |
| 70 | 436207 | AA334774  | Hs.12845  | hypothetical protein MGC13159            | 3.3 |
|    | 404632 |           |           | NM_022490:Homo sapiens hypothetical prot | 3.3 |
|    | 411565 | AW851728  |           | gb:MR2-CT0222-011199-007-d06 CT0222 Homo | 3.3 |
|    | 416945 | H95279    | Hs.293788 | gb:yu20h02.s1 Soares fetal liver spleen  | 3.3 |
|    | 436267 | AW450938  | Hs.180115 | ESTs                                     | 3.3 |
| 75 | 426625 | T78300    | Hs.300642 | serologically defined colon cancer antig | 3.3 |
|    | 401272 |           |           | C9000559*:gi12314195[emb]CAB99338.1}[A   | 3.3 |
|    | 435071 | D60683    | Hs.35495  | ESTs                                     | 3.3 |
|    | 433128 | AB021923  | Hs.23367  | EST-YD1 protein                          | 3.3 |
|    | 426920 | AA393351  | Hs.132121 | ESTs                                     | 3.3 |
| 80 | 423668 | Y10148    | Hs.131138 | neurotensin receptor 2                   | 3.3 |
|    | 435056 | AW023337  | Hs.5422   | glycoprotein M6B                         | 3.3 |
|    | 445534 | AL038823  | Hs.12840  | Homo sapiens germline mRNA sequence      | 3.3 |
|    | 425010 | T16837    | Hs.4241   | ESTs                                     | 3.3 |
|    | 445260 | AI218133  | Hs.147617 | ESTs                                     | 3.3 |



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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
|    | 421094 | AW978202  | Hs.289064 | hypothetical protein FLJ22251            | 3.3 |
|    | 450358 | AB010098  | Hs.24907  | coronin, actin-binding protein, 2B       | 3.3 |
|    | 411048 | AK001742  | Hs.67991  | hypothetical protein DKFZp434G0522       | 3.3 |
|    | 432488 | AA551010  | Hs.216540 | ESTs                                     | 3.3 |
| 5  | 443672 | AA323362  | Hs.9667   | butyrobetaine (gamma), 2-oxoglutarate di | 3.3 |
|    | 412719 | AW016610  | Hs.816    | ESTs                                     | 3.3 |
|    | 420050 | AL118615  | Hs.94653  | neurochondrin                            | 3.3 |
|    | 410082 | AA081594  | Hs.158311 | Musashi (Drosophila) homolog 1           | 3.3 |
|    | 408554 | AA836381  | Hs.315111 | nuclear receptor co-repressor/HDAC3 comp | 3.3 |
| 10 | 431462 | AW583672  | Hs.256311 | granin-like neuroendocrine peptide precu | 3.2 |
|    | 434574 | AI424458  | Hs.33470  | ESTs                                     | 3.2 |
|    | 432715 | AA247152  | Hs.200483 | ESTs, Weakly similar to KIAA1074 protein | 3.2 |
|    | 425757 | AW205640  | Hs.158206 | ESTs                                     | 3.2 |
|    | 428167 | AA770021  | Hs.16332  | ESTs                                     | 3.2 |
| 15 | 451597 | AW295250  | Hs.207536 | ESTs                                     | 3.2 |
|    | 400362 | AF068294  | Hs.272414 | Homo sapiens HDCMB45P mRNA, partial cds  | 3.2 |
|    | 417675 | AI808607  | Hs.3781   | similar to murine leucine-rich repeat pr | 3.2 |
|    | 429550 | AW293055  | Hs.119357 | ESTs                                     | 3.2 |
|    | 404120 |           |           | CS000537*:gij3298595[jb]AAC41376.1] (AF0 | 3.2 |
| 20 | 417123 | BE326521  | Hs.159450 | ESTs                                     | 3.2 |
|    | 450313 | AI038989  | Hs.332633 | Bardet-Biedl syndrome 2                  | 3.2 |
|    | 425999 | AW513051  | Hs.332981 | ESTs, Weakly similar to I38022 hypothe   | 3.2 |
|    | 430526 | AF181862  | Hs.242407 | G protein-coupled receptor, family C, gr | 3.2 |
| 25 | 452619 | AW298597  | Hs.61884  | Homo sapiens, clone IMAGE:4298026, mRNA, | 3.2 |
|    | 415558 | AA885143  | Hs.125719 | ESTs                                     | 3.2 |
|    | 451996 | AW514021  | Hs.245510 | ESTs                                     | 3.2 |
|    | 420560 | AW207748  | Hs.59115  | ESTs                                     | 3.2 |
|    | 432328 | AI572739  | Hs.195471 | 6-phosphofructo-2-kinase/fructose-2,6-bi | 3.2 |
| 30 | 417404 | NM_007350 | Hs.82101  | pleckstrin homology-like domain, family  | 3.2 |
|    | 414300 | AI304870  | Hs.188680 | ESTs                                     | 3.2 |
|    | 437834 | AA769294  | Hs.283654 | gb:nz36g03.s1 NC1_CGAP_GCB1 Homo sapiens | 3.2 |
|    | 430694 | AA810624  | Hs.30936  | ESTs, Weakly similar to H2BH_HUMAN HISTO | 3.2 |
|    | 447714 | AW296313  | Hs.255537 | ESTs                                     | 3.2 |
| 35 | 412021 | AW885592  |           | gb:RC4-OT0071-090300-011-g11 OT0071 Homo | 3.2 |
|    | 443431 | AI056847  | Hs.20654  | ESTs                                     | 3.2 |
|    | 445774 | AI254165  | Hs.339968 | ESTs                                     | 3.2 |
|    | 431327 | AW972220  | Hs.105426 | ESTs                                     | 3.2 |
|    | 413335 | AI613318  | Hs.48442  | ESTs                                     | 3.2 |
| 40 | 430809 | AI791150  | Hs.262009 | ESTs, Moderately similar to I38022 hypot | 3.2 |
|    | 445858 | AL133811  |           | solute carrier family 1 (glial high affi | 3.2 |
|    | 450692 | H50603    | Hs.94037  | hypothetical protein FLJ23053            | 3.2 |
|    | 439039 | AI656707  | Hs.48713  | ESTs                                     | 3.2 |
|    | 401720 |           |           | NM_014587*:Homo sapiens SRY (sex determi | 3.2 |
| 45 | 453740 | AL120295  | Hs.311809 | ESTs, Moderately similar to PC4259 ferri | 3.2 |
|    | 451032 | W03692    | Hs.323079 | Homo sapiens mRNA: cDNA DKFZp564P116 (fr | 3.2 |
|    | 413834 | BE296896  | Hs.224179 | ESTs, Weakly similar to I38022 hypothe   | 3.2 |
|    | 438138 | R98299    | Hs.177502 | ESTs                                     | 3.2 |
|    | 436338 | W92147    | Hs.118394 | ESTs                                     | 3.2 |
| 50 | 417169 | R13550    | Hs.246773 | ESTs                                     | 3.2 |
|    | 424066 | Z99348    | Hs.112461 | ESTs, Weakly similar to I38022 hypothe   | 3.2 |
|    | 435767 | H73505    | Hs.117874 | ESTs                                     | 3.2 |
|    | 415314 | N88802    | Hs.5422   | glycoprotein M6B                         | 3.2 |
|    | 448475 | BE613134  | Hs.247474 | hypothetical protein FLJ21032            | 3.2 |
| 55 | 414699 | AI815523  | Hs.76930  | synuclein, alpha (non A4 component of am | 3.2 |
|    | 438549 | BE386801  | Hs.21858  | trinucleotide repeat containing 3        | 3.2 |
|    | 453896 | AW293483  | Hs.255205 | KIAA1853 protein                         | 3.2 |
|    | 419539 | AF070530  | Hs.90869  | Homo sapiens clones 24622 and 24623 mRNA | 3.1 |
|    | 428832 | AA578229  | Hs.324239 | ESTs, Moderately similar to ZN91_HUMAN Z | 3.1 |
| 60 | 446636 | AC002563  | Hs.15767  | citron (rho-interacting, serine/threonin | 3.1 |
|    | 429046 | X57436    | Hs.194772 | oligodendrocyte myelin glycoprotein      | 3.1 |
|    | 421896 | N62293    | Hs.45107  | ESTs                                     | 3.1 |
|    | 413995 | BE048146  | Hs.75671  | syntaxin 1A (brain)                      | 3.1 |
|    | 414734 | AA151712  | Hs.82572  | ESTs                                     | 3.1 |
|    | 446147 | AL133064  | Hs.14051  | Homo sapiens mRNA: cDNA DKFZp434A2417 (f | 3.1 |
| 65 | 427712 | AI368024  | Hs.283696 | ESTs                                     | 3.1 |
|    | 406481 |           |           | Target Exon                              | 3.1 |
|    | 453204 | R10799    | Hs.191990 | ESTs                                     | 3.1 |
|    | 422890 | Z43784    |           | ankyrin 3, node of Ranvier (ankyrin G)   | 3.1 |
| 70 | 422991 | H10940    | Hs.48965  | Homo sapiens cDNA: FLJ21693 fis, clone C | 3.1 |
|    | 421030 | AW161357  |           | microtubule-associated protein tau       | 3.1 |
|    | 423603 | AB007880  | Hs.129883 | Homo sapiens KIAA0420 mRNA, complete cds | 3.1 |
|    | 413985 | AI018666  | Hs.75667  | synaptophysin                            | 3.1 |
|    | 431721 | AB032996  | Hs.268044 | KIAA1170 protein                         | 3.1 |
| 75 | 434164 | AW207019  | Hs.148135 | serine/threonine kinase 33               | 3.1 |
|    | 429876 | AB028977  | Hs.225974 | KIAA1054 protein                         | 3.1 |
|    | 423175 | W27595    | Hs.347310 | hypothetical protein FLJ14627            | 3.1 |
|    | 412799 | AI267606  |           | gb:aq91h03.x1 Stanley Frontal SB pool 1  | 3.1 |
|    | 459318 | NM_000038 |           | gb:Homo sapiens adenomatosis polyposis c | 3.1 |
| 80 | 453324 | W26592    | Hs.232089 | ESTs                                     | 3.1 |
|    | 424009 | F11690    |           | gb:HSC30D041 normalized infant brain cDN | 3.1 |
|    | 436222 | AI208737  | Hs.122810 | Homo sapiens cDNA FLJ11489 fis, clone HE | 3.1 |
|    | 414884 | R54418    | Hs.183745 | hypothetical protein FLJ13456            | 3.1 |
|    | 446862 | AV660697  | Hs.282700 | ESTs                                     | 3.1 |

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|    |        |           |           |   |     |
|----|--------|-----------|-----------|---|-----|
| 5  | 427241 | AA399988  | Hs.112087 | Human DNA sequence from clone RP11-530N1  | 3.1 |
|    | 455388 | AW936234  |           | gb:QV0-DT0020-090200-106-g05 DT0020 Homo  | 3.1 |
|    | 415838 | R44336    | Hs.7093   | ESTs                                      | 3.1 |
|    | 451692 | AL137422  | Hs.26849  | Homo sapiens mRNA; cDNA DKFZp761A1623 (f  | 3.1 |
|    | 445294 | Z45978    |           | Human clone 23826 mRNA sequence           | 3.1 |
|    | 434460 | AA478486  | Hs.3852   | KIAA0368 protein                          | 3.1 |
|    | 449919 | AI674685  | Hs.200141 | ESTs                                      | 3.1 |
|    | 440688 | AW404591  | Hs.147440 | ESTs, Weakly similar to Z192_HUMAN ZINC   | 3.1 |
| 10 | 416801 | X98834    | Hs.79971  | sal (Drosophila)-like 2                   | 3.1 |
|    | 428060 | AA420616  | Hs.249483 | ESTs                                      | 3.1 |
|    | 423597 | AL043117  | Hs.129872 | sperm associated antigen 9                | 3.1 |
|    | 452454 | AW820480  |           | gb:QV2-ST0298-140200-042-f10 ST0298 Homo  | 3.1 |
|    | 445337 | NM_013280 | Hs.12523  | fibronectin leucine rich transmembrane p  | 3.1 |
|    | 413974 | BE208636  | Hs.27788  | ESTs                                      | 3.1 |
| 15 | 422772 | AL119585  | Hs.120228 | KIAA0749 protein                          | 3.1 |
|    | 423872 | AB020316  | Hs.134015 | uronyl 2-sulfotransferase                 | 3.1 |
|    | 435375 | AI733610  | Hs.187832 | ESTs                                      | 3.1 |
|    | 450661 | AW952160  | Hs.83849  | ESTs                                      | 3.1 |
| 20 | 428647 | AA830050  | Hs.124344 | ESTs                                      | 3.1 |
|    | 400658 |           |           | ENSP00000237081*:KIAA1217 PROTEIN (FRAGM  | 3.0 |
|    | 443845 | AI590084  | Hs.148485 | ESTs, Weakly similar to A47161 Mac-2-bin  | 3.0 |
|    | 446619 | AU076643  | Hs.313    | secreted phosphoprotein 1 (osteopontin,   | 3.0 |
|    | 433980 | AA137152  | Hs.286049 | phosphoserine aminotransferase            | 3.0 |
| 25 | 437738 | AA766914  | Hs.203475 | ESTs, Weakly similar to ALU1_HUMAN ALU S  | 3.0 |
|    | 444772 | AW450800  | Hs.176859 | ESTs                                      | 3.0 |
|    | 453825 | AL157475  | Hs.35453  | Homo sapiens mRNA; cDNA DKFZp761G151 (fr  | 3.0 |
|    | 439971 | W32474    | Hs.301745 | RAP2A, member of RAS oncogene family      | 3.0 |
|    | 408449 | NM_004408 | Hs.166161 | dynamitin 1                               | 3.0 |
| 30 | 432821 | BE170702  | Hs.279005 | solute carrier family 21 (organic anion   | 3.0 |
|    | 453657 | W23237    | Hs.296162 | AD037 protein                             | 3.0 |
|    | 407235 | D20569    | Hs.169407 | SAC2 (suppressor of actin mutations 2, y  | 3.0 |
|    | 428862 | NM_000346 | Hs.2316   | SRY (sex determining region Y)-box 9 (ca  | 3.0 |
|    | 424726 | AK001007  | Hs.138760 | Homo sapiens cDNA FLJ10145 fs, clone HE   | 3.0 |
| 35 | 454253 | AV660717  | Hs.47144  | DKFZP586N0819 protein                     | 3.0 |
|    | 450650 | T65617    | Hs.101257 | hypothetical protein MGC3295              | 3.0 |
|    | 418211 | BE244746  | Hs.247474 | hypothetical protein FLJ21032             | 3.0 |
|    | 440461 | R52728    | Hs.7193   | KIAA1183 protein                          | 3.0 |
|    | 452850 | H23230    | Hs.22481  | ESTs, Moderately similar to A46010 X-link | 3.0 |
| 40 | 431431 | AL096711  | Hs.252953 | Human DNA sequence from clone RP3-403A15  | 3.0 |
|    | 447881 | BE620886  | Hs.75354  | GCN1 (general control of amino-acid synt  | 3.0 |
|    | 454042 | H22570    |           | hypothetical protein FLJ20093             | 3.0 |
|    | 429168 | AA984682  | Hs.146589 | ESTs, Weakly similar to JCS238 galactosy  | 3.0 |
|    | 451391 | AA017410  | Hs.40568  | ESTs                                      | 3.0 |
| 45 | 446377 | AW014022  | Hs.170953 | ESTs                                      | 3.0 |
|    | 430251 | AA609246  | Hs.181451 | ESTs                                      | 3.0 |
|    | 420658 | AW965215  | Hs.130707 | ESTs                                      | 3.0 |
|    | 454119 | BE549773  | Hs.40510  | uncoupling protein 4                      | 3.0 |
|    | 451018 | AW965599  | Hs.247324 | mitochondrial ribosomal protein S14       | 3.0 |
| 50 | 435321 | R16814    | Hs.112062 | ESTs                                      | 3.0 |
|    | 412494 | AL133900  | Hs.792    | ADP-ribosylation factor domain protein 1  | 3.0 |
|    | 423858 | AL137326  | Hs.133483 | Homo sapiens mRNA; cDNA DKFZp434B0650 (f  | 3.0 |
|    | 431242 | AA987742  | Hs.347534 | KIAA1201 protein                          | 3.0 |
|    | 403022 |           |           | C21000178".gi 7341207 gb AA61215.1 AF22   | 3.0 |
| 55 | 445899 | AI263736  | Hs.145626 | ESTs                                      | 3.0 |
|    | 440261 | M81886    | Hs.7117   | glutamate receptor, ionotropic, AMPA 1    | 3.0 |
|    | 446809 | AW590171  | Hs.101413 | ESTs                                      | 3.0 |
|    | 434269 | AK001991  | Hs.3781   | similar to murine leucine-rich repeat pr  | 3.0 |
|    | 418951 | F07809    | Hs.89506  | paired box gene 6 (anindia, keratilis)    | 3.0 |
| 60 | 448499 | BE613280  | Hs.77550  | hypothetical protein MGC1780              | 3.0 |
|    | 432229 | AW290976  | Hs.143587 | ESTs                                      | 3.0 |
|    | 443726 | AI083825  | Hs.148382 | ESTs                                      | 3.0 |

TABLE 13B:

|    |             |                                       |
|----|-------------|---------------------------------------|
| 65 | Pkey:       | Unique Eos probeset identifier number |
|    | CAT number: | Gene cluster number                   |
|    | Accession:  | Genbank accession numbers             |

|    |        |            |  |
|----|--------|------------|--|
| 70 | Pkey   | CAT Number | Accession  |
|    | 408085 | 103646_1   | AW954272 AI003154 AA059300 AA046911  |
|    | 410099 | 117647_1   | AA081630 T08671 AI174254 D83874 AW959843 AA364503 AA693467 AW993370 BE327037 AA167714 N79906 AW901977 AW901980 W52882          |
|    |        |            | T07735 AA484549 W60090 D52685 T23811 BE327043 AW901768 BE551237 AA917004 AA716027 AI439658 AA283724 AI805992 AI457096          |
|    |        |            | AA084618 BE467736 AI092635 AI887863 AI697593 AA436618 AI167419 AI418634 T31586 AA436630 AA706191 AI041169 AI422304 T03534      |
|    |        |            | AA211402 AI204899 AI366472 AW827081 AA788593 T32736 AI767935 AA167791 AA747914 AA663870 AI865504                               |
| 75 | 410126 | 117761_1   | BE169274 AW893230 AA210998 H24222 AA081774 BE000935 BE000834 AA334880  |
|    | 411565 | 1249756_1  | AW851728 AW851607 AW851621 AW851702 AW851647 AW851727 AW851658 AW851617 AW851628   |
|    | 411775 | 125757_1   | H08342 R52430 Z42067 AA095285  |
|    | 412021 | 1272156_1  | AW885592 AW885594 AW885579 AW885551  |
|    | 412799 | 132817_1   | AI267606 AA121045 AA126521   |
| 80 | 412811 | 132943_1   | H06382 AW957730 AA352014 R13591 AA121201 D60420 BE263253 BE047862 Z41952 AI424991 AI693507 AI863108 AA599060 AI091148 AA598689 |
|    |        |            | R39887 AA813482 AW016452 H05383 R41807 AI364268 AA620528 AI241940 AW089149 AW090733 AW088875 Z38240 AA121202 R17734            |
|    | 412820 | 1330039_1  | BE001236 BE001177 BE001180 BE001234  |
|    | 415131 | 1523680_1  | D61119 DB1508 DB1734   |

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|  |        |          |   |
|--|--------|----------|---|
|  | 418512 | 176394_1 | AW498974 T09332 R58460 AA350990 T33786 T30936 AA350905 T08592 T09274 AA224297 D54678 T08951 R15346 AW953188 AA350074<br>AW890649<br>AA255652 AA280911 AW967920 AA26284<br>BE258835 AW968316 AA258918 AW843305 R14744 A1580388 BE071923 R36280<br>D51397 AA213981 BE548002 A1056359 AA001560 AW952113 AA317769 A1857477 A1857475 AW249771 AW162661 H38943 AA018628 R5885<br>A1984613 A1934765 A1796172 AW157488 A1929191 R85523 D51221 D53851 H85610 A1749674 F21582 AA323145 AA019127 AA687444 T06745<br>A1699293 H29532 AA214029 AA223656 NM_016834 X14474 R19697 H09695 R17455 R13812 R19056 A1681231 A1590200 R37671 AA861828<br>A1990023 A1935669 AW005821 AA324581 H17335 R37659 R42802 R46242 R60936 R59731 H28993 AA479907 R44570 A1890696 AA308884<br>AA507078 R41274 A1365507 T16348 A1560453 F03259 F04722 T16312 AA016081 AW073061 BE314824 W28930 R44098 R51045<br>Z43784 R13382 AW572911 AA449369 H17037 R19603 A1632565 AW004030 BE502530 Z25032 AA805324 AA449241 A1651825 A1264863 AW196918<br>AA948267 A1953735 A1263703 AA319159 AW964436 A1903440 AW594171 A1867447 AW204071 AW956110 C15616 D81142 H17038 AW162343<br>T87230 A1366013 H10064 A1190479 A1093318 A1867923 BE219303 BE048820 A1198397 AA654667 Z39851 F02655 Z28734 F04161 T16575 F10145<br>AA318815 R40898<br>AL035633 T11794 F11783 H18042 T66089 H29379 R19493 AW134660 A1299437 A1133995 AA057405 T8357 AA917450 A1002692 T09262 T65008<br>H29290 A1200874 AA894415 A1732887 A1791768 A1733447 AA988785 N62128 T09261 AW956936<br>F11690 AW965370 AA333586 D30830<br>M19650 R18810 R18721 AW896146 AW889520 AA192362 AA176814 F12085 BE255264 BE251393 T65248 AA380585 AA380465 BE408684<br>AA459037 AW498869 AA776107 BE274289 D45269 M61958 AA378818 AW663180 AW672958 H08611 M78164 BE393721 AA348660 R36303<br>AW498662 AA019090 AA001087 AA054302 AA019775 AA018808 AA019132 A1858240 R73218 H30477 H17776 AA659570 BE276750 A118655<br>A1935861 AA352427 AW581695 A114188 N63474 AA654162 H17659 A120696 T28867 AW498868 A1355918 AA902349 AA569098 A1088231<br>A1042604 AA555133 A1183611 A1608822 A1275941 AW316805 AA349486 A1355233 R85117 AW613626 R49234 AA458846 N20669 H18693 AA977567<br>T15423 AW002084 A1824721 N36242 A1417281 A1018212 AA912337 F09722 AA749449 AW879172 AA885427 AA916639 A1872560 F00482 H45184<br>A1217251 AA775807 BE390071 AA303517 AA001050 BE515169 N44066 AL133684 A1807085 AA808009 AA915914 F00007 AA019749 A121560<br>AW675544 AW090233 AW072071 A1810932 A1089733 AW026222 AA770155 A1089647 A1085733 AW516061 A1037636 A1037635 A1863947 H50420<br>R11203 AA019133 N94772 N71842 N29047 AA778138 AA554336 AA179865 N59453 T65212 AA054270 AW806630 AA533375 D13145 AA349487<br>AU077160 BE255671 BE276795 BE250823 AL120301 BE311390 BE252483<br>A1221913 Z19967 AA348780 AW964077 AW166028 BE540193 N94800 AA452368 N99604 A1341345 AW298800 AA724961 AA931158 A1741227<br>A1806660 A1982626 D81263 D53937 D52496 AA974487 F0043854 N50483 Z39997 A1492961 A1361526 F04002 AA452141 T23551 A1472655<br>A193667 A1341984 N92658 T32870 R52664 N50428 AW089291 A1934175 A1423737 D60665<br>AW962128 AA355353 AA427363<br>AA377823 AW954494 A1022688<br>AA380153 AA380233 AW963529<br>AL041228 D82004 D61361 A1203314 A1990307 AW900295 A1018308 AW087473 AW183530 AA393346 H50055 AA935601<br>A1739168 AA426249 A1199636 AW505198 AW977291 AA824583 AA883419 AA724079 A1015524 A1377728 AW293682 A1928140 AA731438 A1092404<br>A1085630 AA731340<br>D80642 AA443145 AL119015 AW904500<br>AL031658 A1693758 AL040619 AW977914 AA811957 A1352198 AW104364 AA648367 AA897604 AW341668 A1201382 AL040620<br>BE010038 AA676833 A1311783 T86895 W88032 BE064393 BE064394 BE157228 BE183282 A1936370 AA552514 T67280 AA039909<br>AF084866 AF084870 AF084864 AF084867 AF084869 AF084865 AF084868 AW818206 AW812038 BE144813 BE144812 AW812041 AW812040<br>AW812067 BE061583 BE061604 T05808 A1352469 AA580921 BE141783 BE141782 BE061601 AW814393 AW885029<br>AW972830 AA527647 AA489820 AA570362<br>AW753310 AW974000 AA557840 AA558570 AW751539<br>AA878324 A1863159 A1619686 AA570406 A1014377<br>AA761668 AA573621 R92814 R09670<br>H29882 AW665533 AW149901 A1572917 AA598500 A1686466 A1336390 AW864390 AW864320<br>AA742643 AA808575 AW976668<br>A1147061 AA743380 AA765223 AW976338 A1803927<br>AW975186 AA807807 D29548<br>AL133916 N79113 AF086101 N76721 AW950828 AA364013 AW955684 A1346341 A1867454 N54784 A1655270 A1421279 AW014882 AA775552<br>N62351 N59253 AA626243 A1341407 BE175639 AA456898 A1358918 AA457077<br>AA973905 A1298888 AA917019 H63235 T90771<br>Z45978 U79248 T77277 R24952 AA361008 AW953678 T10376 AW860579 AW860657 AW364889 AW860635 AW860658 AW905164 W21226<br>AA448954 W69484 AA993098 AA287413 AA449682 A1961815 W57612 AW271363 R45215 AW136256 A1865103 W69577 A1961826 AA747542<br>AA173746 A1961816 F07706 R39461 F04829 F05938 AA172385<br>AL133811 M78538 T07792 AW895859 AW895589 AL119422 T79876 R19494 AF131756 H18570 T08285 F11532 Z42038 AW961964 AA683391<br>M62092 AL119616 Z21141 AA663820 Z19748 H18462 AL120152 R43841 R37594 AA775980 F09194 A1207884 Z38142 F01555 AA020737 AL120362<br>AW952737 T04912<br>Z44514 A1352097 A1803984 AW235923 AW196558 A1954637 A1336983<br>R36075 A1366546 R36167<br>A1458882 H24240 R14537 R18426 AW867082<br>A1339732 AA010300 AW515041 AA768334 N29860 AA425874 AA425118 AA865829 AW936878<br>AW118072 A1631982 T15734 AA224195 A1701458 W20198 F26326 AA890570 N90552 AW071907 A1671352 A1375892 T03517 R88265 A1124088<br>AA224388 A1084316 A1354686 T33652 A1140719 A1720211 T03490 A1372637 T15415 AW205836 AA630384 T03515 T33230 AA017131 AA443303<br>T33623 A1222556 T33511 T33785 A1419606 D56512<br>AW820480 AW820288 A1902522<br>AL120266 AW269469 AW890114<br>H22570 AW292267 AW137298 AW874199 A1206120 H45263 AA788851 R49056 AW241428 A1921013 AW129293 A1684910 BE466753 AA340613<br>AW025969 A1202561 A1243913 AW771106 F04969 A1654847 A194436 AW771447 AW103715 N64350 AA347011 A1431587 AA779107 AA041195<br>A1358894 A1421678 A1018523 AA707199 AA410309 A1366468 AW020049 A1880103 AL119553 R42410 R55722 T66767 R43035 H17396 H45331<br>F01659 Z38381 AA708686 A1081305 R53955 AA041432 W27787<br>AW854832 AW854798 AW854857 AW854816 AW854834 AW854817<br>AW936234 AW936074 AW936181 AW936179 AW936217 AW936077 AW936227 AW936191<br>BE064420 BE064435 BE064429 BE064414 BE064400 BE064517<br>A1911066 A1933734 A1680888 A1003599<br>A1821122 A1821865 |
|--|--------|----------|---|

|    |            |   |
|----|------------|---|
| 80 | TABLE 13C: |   |
|    | Pkey:      | Unique number corresponding to an Eos probe set   |
|    | Ref:       | Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <u>Nature</u> 402:489-495. |
|    | Strand:    | Indicates DNA strand from which exons were predicted.   |

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NL\_position: Indicates nucleotide positions of predicted exons.

|    | Pkey   | Ref     | Strand | NL_position  |
|----|--------|---------|--------|--|
| 5  | 400533 | 6981826 | Minus  | 277132-277595  |
|    | 400658 | 8118459 | Minus  | 73525-73644  |
|    | 400777 | 8131663 | Plus   | 70745-71121  |
|    | 401272 | 9797373 | Minus  | 98374-98509  |
|    | 401720 | 6468551 | Plus   | 7783-8468  |
| 10 | 402145 | 8018280 | Plus   | 113086-114800  |
|    | 402604 | 9909420 | Plus   | 20393-20767  |
|    | 402605 | 9909420 | Minus  | 47680-47973  |
|    | 402855 | 9662953 | Minus  | 59763-59909  |
|    | 403022 | 3132351 | Plus   | 92097-92864  |
| 15 | 403142 | 9444521 | Plus   | 89286-90131  |
|    | 403341 | 8569175 | Plus   | 30699-30910  |
|    | 403696 | 3135242 | Minus  | 143467-143634  |
|    | 404120 | 7342152 | Plus   | 135775-136000  |
|    | 404185 | 4572584 | Minus  | 129171-129327  |
| 20 | 404283 | 2276311 | Minus  | 99460-99564  |
|    | 404541 | 8318559 | Plus   | 103456-103664  |
|    | 404584 | 9857511 | Plus   | 138651-139153  |
|    | 404632 | 9796668 | Plus   | 45096-45229  |
|    | 404819 | 4678240 | Plus   | 16223-16319, 16427-16513, 16736-16859, 16941-17075, 17170-17287, 17389-17529, 18261-18357, 18443-18578 |
| 25 | 405238 | 7249119 | Minus  | 51728-51836  |
|    | 405239 | 7249119 | Plus   | 144345-144464, 144690-144836, 151750-151883, 152407-152484   |
|    | 405348 | 2914717 | Minus  | 43310-43462  |
|    | 405819 | 4007557 | Plus   | 2830-2967  |
|    | 406481 | 9864741 | Minus  | 91439-91579  |

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## TABLE 14A: ABOUT 1111 GENES UP-REGULATED IN GLIOBLASTOMA COMPARED TO NORMAL CENTRAL NERVOUS SYSTEM

Table 14A lists about 1111 genes up-regulated in glioblastoma compared to normal central nervous system (CNS). These were selected from 59680 probesets on the Affymetrix/Eos HuO3 GeneChip array such that the ratio of "average" glioblastoma to "average" CNS tissues was greater than or equal to 2.5. The "average" glioblastoma level was set to the 85<sup>th</sup> percentile amongst various brain tumors. The "average" normal CNS tissue level was set to the 85<sup>th</sup> percentile amongst various CNS tissues. In order to remove gene-specific background levels of non-specific hybridization, the 10<sup>th</sup> percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

35  
40  
Pkey: Unique Eos probeset identifier number  
ExAccn: Exemplar Accession number, Genbank accession number  
UnigeneID: Unigene number  
Unigene Title: Unigene gene title  
R1: Ratio of GLIOBLASTOMA to CNS

|    | Pkey   | ExAccn   | UnigeneID | Unigene Title                             | R1   |
|----|--------|----------|-----------|---|------|
| 45 | 422737 | M26939   | Hs.119571 | collagen, type III, alpha 1 (Ehlers-Dan   | 32.8 |
|    | 423961 | D13666   | Hs.136348 | periostin (OSF-2os)                       | 28.0 |
|    | 433001 | AF217513 | Hs.279905 | clone HQ0310 PRD0310p1                    | 25.3 |
|    | 414555 | N98569   | Hs.76422  | phospholipase A2, group IIA (platelets,   | 24.3 |
|    | 424800 | AL035588 | Hs.153203 | MyoD family inhibitor                     | 22.6 |
| 50 | 417308 | H60720   | Hs.81892  | KIAA0101 gene product                     | 22.2 |
|    | 449539 | W80363   | Hs.58446  | ESTs                                      | 20.7 |
|    | 453392 | U23752   | Hs.32964  | SRY (sex determining region Y)-box 11     | 18.7 |
|    | 414825 | X06370   | Hs.77432  | epidermal growth factor receptor (avian   | 18.6 |
|    | 444190 | AI878918 | Hs.10526  | cysteine and glycine-rich protein 2       | 17.2 |
| 55 | 412420 | AL035668 | Hs.73853  | bone morphogenetic protein 2              | 16.7 |
|    | 417130 | AW276858 | Hs.81256  | S100 calcium-binding protein A4 (calcium  | 16.7 |
|    | 414217 | AI309298 | Hs.279898 | Homo sapiens cDNA: FLJ23165 fis, clone L  | 14.3 |
|    | 431941 | AK000106 | Hs.272227 | Homo sapiens cDNA: FLJ20099 fis, clone CO | 14.3 |
|    | 425397 | J04088   | Hs.156346 | topoisomerase (DNA) II alpha (170kD)      | 14.1 |
| 60 | 446584 | U53445   | Hs.15432  | downregulated in ovarian cancer 1         | 13.9 |
|    | 422672 | X12784   | Hs.119129 | collagen, type IV, alpha 1                | 13.6 |
|    | 402604 |          |           | Target Exon                               | 13.6 |
|    | 424635 | AA420687 | Hs.115455 | Homo sapiens cDNA FLJ14259 fis, clone PL  | 13.0 |
|    | 428330 | L22524   | Hs.2256   | matrix metalloproteinase 7 (matrilysin,   | 12.9 |
| 65 | 434078 | AW880709 | Hs.283683 | chromosome 8 open reading frame 4         | 12.5 |
|    | 414761 | AU077228 | Hs.77256  | enhancer of zeste (Drosophila) homolog 2  | 12.4 |
|    | 442432 | BE093589 | Hs.38178  | hypothetical protein FLJ23468             | 12.2 |
|    | 456759 | BE259150 | Hs.127792 | delta (Drosophila)-like 3                 | 12.1 |
|    | 409638 | AW450420 | Hs.21335  | ESTs                                      | 11.5 |
| 70 | 441269 | AW015206 | Hs.178784 | ESTs                                      | 10.5 |
|    | 435020 | AW505076 | Hs.301855 | DiGeorge syndrome critical region gene 8  | 10.5 |
|    | 422163 | AF027208 | Hs.112360 | prominin (mouse)-like 1                   | 10.1 |
|    | 444969 | AI203334 | Hs.160628 | ESTs                                      | 10.1 |
|    | 430132 | AA204686 | Hs.234149 | hypothetical protein FLJ20647             | 9.9  |
| 75 | 433437 | U20536   | Hs.3280   | caspase 6, apoptosis-related cysteine pr  | 9.4  |
|    | 445101 | T75202   | Hs.12314  | Homo sapiens mRNA: cDNA DKFZp586C1019 (f  | 9.2  |
|    | 413929 | BE501689 | Hs.75617  | collagen, type IV, alpha 2                | 9.1  |
|    | 425187 | AW014486 | Hs.22509  | ESTs                                      | 9.1  |
|    | 449722 | BE280074 | Hs.23960  | cyclin B1                                 | 8.9  |
| 80 | 449611 | AI970394 | Hs.197075 | ESTs                                      | 8.9  |
|    | 428242 | H55709   | Hs.2250   | leukemia inhibitory factor (cholenergic   | 8.9  |
|    | 419239 | AA468183 | Hs.184598 | Homo sapiens cDNA: FLJ23241 fis, clone C  | 8.9  |
|    | 443731 | AI083928 | Hs.145418 | ESTs                                      | 8.8  |
|    | 402855 |          |           | NM_001839*:Homo sapiens calponin 3, acid  | 8.7  |

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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
|    | 447342 | AI199268  | Hs.19322  | Homo sapiens, Similar to RIKEN cDNA 2010 | 8.6 |
|    | 410102 | AW248508  | Hs.279727 | ESTs; homologue of PEM-3 [Ciona savignyi | 8.5 |
|    | 420602 | AF060877  | Hs.99236  | regulator of G-protein signalling 20     | 8.4 |
|    | 417426 | NM_002291 | Hs.82124  | tannin, beta 1                           | 8.4 |
| 5  | 433800 | AI034361  | Hs.135150 | lung type-I cell membrane-associated gly | 8.3 |
|    | 417061 | AI675944  | Hs.188691 | Homo sapiens cDNA FLJ12033 fis, clone HE | 8.1 |
|    | 409461 | AA382169  | Hs.54483  | N-myc (and STAT) interactor              | 8.1 |
|    | 414622 | AI752666  | Hs.76669  | nicotinamide N-methyltransferase         | 8.1 |
|    | 430691 | C14187    | Hs.103538 | ESTs                                     | 8.0 |
| 10 | 447726 | AI137638  | Hs.19368  | matrilin 2                               | 8.0 |
|    | 417043 | NM_004369 | Hs.80988  | collagen, type VI, alpha 3               | 7.9 |
|    | 447004 | AW296968  | Hs.157539 | ESTs                                     | 7.9 |
|    | 409799 | D11928    | Hs.76845  | phosphoserine phosphatase-like           | 7.8 |
|    | 426075 | AW513691  | Hs.270149 | ESTs, Weakly similar to 2109260A B cell  | 7.8 |
| 15 | 419938 | AU076772  | Hs.1279   | complement component 1, r subcomponent   | 7.7 |
|    | 419508 | AW997938  | Hs.90786  | ATP-binding cassette, sub-family C (CFTR | 7.7 |
|    | 411411 | AA345241  | Hs.55950  | ESTs, Weakly similar to KIAA1330 protein | 7.5 |
|    | 436291 | BE568452  | Hs.344037 | protein regulator of cytokinesis 1       | 7.5 |
|    | 422048 | NM_012445 | Hs.288126 | spondin 2, extracellular matrix protein  | 7.5 |
| 20 | 406972 | M32053    |           | gb:Human H19 RNA gene, complete cds.     | 7.4 |
|    | 442802 | AL133035  | Hs.8728   | hypothetical protein DKFZp434G171        | 7.4 |
|    | 427581 | NM_014788 | Hs.179703 | KIAA0129 gene product                    | 7.3 |
|    | 409142 | AL136877  | Hs.50758  | SMC4 (structural maintenance of chromoso | 7.3 |
|    | 409902 | AI337658  | Hs.156351 | ESTs                                     | 7.3 |
| 25 | 418113 | AI272141  | Hs.83484  | SRY (sex determining region Y)-box 4     | 7.2 |
|    | 449961 | AW265634  | Hs.133100 | ESTs                                     | 7.2 |
|    | 418203 | X54942    | Hs.83758  | CDC28 protein kinase 2                   | 7.2 |
|    | 424840 | D79987    | Hs.153479 | extra spindle poles, S. cerevisiae, homo | 7.2 |
|    | 428728 | NM_016625 | Hs.191381 | hypothetical protein                     | 7.1 |
| 30 | 429183 | AB014604  | Hs.197955 | KIAA0704 protein                         | 7.1 |
|    | 439451 | AF086270  | Hs.278554 | heterochromatin-like protein 1           | 7.1 |
|    | 422106 | D84239    | Hs.111732 | Fc fragment of IgG binding protein       | 7.0 |
|    | 406850 | AI624300  | Hs.172928 | collagen, type I, alpha 1                | 7.0 |
|    | 453941 | U39817    | Hs.36820  | Bloom syndrome                           | 6.9 |
| 35 | 425234 | AW152225  | Hs.165909 | ESTs, Weakly similar to I38022 hypotheti | 6.9 |
|    | 421977 | W94197    | Hs.110165 | ribosomal protein L26 homolog            | 6.8 |
|    | 411078 | AI222020  | Hs.182364 | CocoaCrisp                               | 6.7 |
|    | 427019 | AA001732  | Hs.173233 | hypothetical protein FLJ10970            | 6.7 |
|    | 448769 | N66037    | Hs.38173  | ESTs                                     | 6.7 |
| 40 | 418400 | BE243026  | Hs.301989 | KIAA0246 protein                         | 6.6 |
|    | 408161 | AW952912  | Hs.300383 | hypothetical protein MGC3032             | 6.6 |
|    | 440210 | AW674562  | Hs.125296 | ESTs                                     | 6.6 |
|    | 437036 | AI571514  | Hs.133022 | ESTs                                     | 6.6 |
|    | 411968 | AI207410  | Hs.69280  | Homo sapiens, clone IMAGE:3636299, mRNA, | 6.6 |
| 45 | 416658 | U03272    | Hs.79432  | fibrillin 2 (congenital contractural ara | 6.6 |
|    | 449300 | AI656959  | Hs.346514 | ESTs                                     | 6.5 |
|    | 440052 | AI633744  | Hs.195648 | ESTs, Weakly similar to I38022 hypotheti | 6.5 |
|    | 412326 | R07566    | Hs.73817  | small inducible cytokine A3 (homologous  | 6.5 |
|    | 434808 | AF155108  | Hs.256150 | Homo sapiens, Similar to RIKEN cDNA 2810 | 6.5 |
| 50 | 452461 | N78223    | Hs.108106 | transcription factor                     | 6.5 |
|    | 408243 | Y00787    | Hs.624    | interleukin 8                            | 6.5 |
|    | 424954 | NM_000546 | Hs.1846   | tumor protein p53 (Li-Fraumeni syndrome) | 6.4 |
|    | 450375 | AA009647  |           | a disintegrin and metalloproteinase doma | 6.4 |
|    | 406478 |           |           | Target Exon                              | 6.4 |
| 55 | 427528 | AU077143  | Hs.179565 | minichromosome maintenance deficient (S. | 6.4 |
|    | 439710 | AF086543  |           | gb:Homo sapiens full length insert cDNA  | 6.4 |
|    | 458814 | AI498957  | Hs.170861 | ESTs, Weakly similar to Z195_HUMAN ZINC  | 6.4 |
|    | 410276 | AI554545  | Hs.68301  | angiotensin-2                            | 6.4 |
|    | 425289 | AW139342  | Hs.155530 | interferon, gamma-inducible protein 16   | 6.3 |
| 60 | 427871 | AW992405  | Hs.59622  | Homo sapiens, clone IMAGE:3507281, mRNA, | 6.3 |
|    | 436895 | AF037335  | Hs.5338   | carbonic anhydrase XII                   | 6.3 |
|    | 447458 | AI741082  | Hs.158961 | ESTs                                     | 6.3 |
|    | 447439 | AA313565  | Hs.145020 | ESTs, Weakly similar to KIAA1205 protein | 6.3 |
|    | 413719 | BE439580  | Hs.75498  | small inducible cytokine subfamily A (Cy | 6.3 |
| 65 | 449969 | AW295142  | Hs.180187 | Homo sapiens cDNA FLJ14337 fis, clone PL | 6.2 |
|    | 440704 | M69241    | Hs.162    | insulin-like growth factor binding prote | 6.2 |
|    | 400419 | AF084545  |           | Target                                   | 6.2 |
|    | 412140 | AA219691  | Hs.73625  | RAB6 interacting, kinesin-like (rabkines | 6.2 |
|    | 409731 | AA125985  | Hs.56145  | thymosin, beta, identified in neuroblast | 6.2 |
| 70 | 424085 | NM_002914 | Hs.139226 | replication factor C (activator 1) 2 (40 | 6.2 |
|    | 429469 | M64590    | Hs.27     | glycine dehydrogenase (decarboxylating;  | 6.1 |
|    | 430630 | AW269920  | Hs.2621   | cystatin A (stefin A)                    | 6.0 |
|    | 410064 | X53416    | Hs.195464 | filamin A, alpha (actin-binding protein- | 6.0 |
|    | 432281 | AK001239  | Hs.274263 | hypothetical protein FLJ10377            | 6.0 |
| 75 | 413627 | BE182082  | Hs.246973 | ESTs                                     | 6.0 |
|    | 413063 | AL035737  | Hs.75184  | chitinase 3-like 1 (cartilage glycoprote | 5.9 |
|    | 421899 | AJ011895  | Hs.109281 | Nef-associated factor 1                  | 5.9 |
|    | 407182 | AA312551  | Hs.230157 | ESTs                                     | 5.9 |
|    | 410286 | AI739159  | Hs.61898  | DKFZP586N2124 protein                    | 5.9 |
| 80 | 409829 | M33552    | Hs.56729  | lymphocyte-specific protein 1            | 5.9 |
|    | 446657 | AI335191  | Hs.260702 | ESTs, Weakly similar to 2109260A B cell  | 5.8 |
|    | 418097 | R45137    | Hs.21868  | ESTs                                     | 5.8 |
|    | 428450 | NM_014791 | Hs.184339 | KIAA0175 gene product                    | 5.8 |

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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
|    | 419741 | NM_007019 | Hs.93002  | ubiquitin carrier protein E2-C             | 5.7 |
|    | 421988 | AW450481  | Hs.161333 | ESTs                                       | 5.7 |
|    | 422283 | AW411307  | Hs.114311 | CDC45 (cell division cycle 45, S.cerevis   | 5.7 |
|    | 416111 | AA033813  | Hs.79018  | chromatin assembly factor 1, subunit A (   | 5.7 |
| 5  | 434846 | AW295389  | Hs.119768 | ESTs                                       | 5.7 |
|    | 412567 | AI750979  | Hs.74034  | Homo sapiens clone 24651 mRNA sequence     | 5.7 |
|    | 452372 | AI885742  | Hs.228474 | ESTs                                       | 5.6 |
|    | 443247 | BE614387  | Hs.333893 | c-Myc target JPO1                          | 5.6 |
| 10 | 423198 | M81933    | Hs.1634   | cell division cycle 25A                    | 5.6 |
|    | 445873 | AA250970  | Hs.251946 | poly(A)-binding protein, cytoplasmic 1-I   | 5.6 |
|    | 437034 | AA742643  |           | gb:ny91c01.s1 NCI_CGAP_GCB1 Homo sapiens   | 5.6 |
|    | 429447 | AW812452  | Hs.83286  | ESTs, Weakly similar to S14747 sphingomy   | 5.6 |
|    | 424687 | J05070    | Hs.151738 | matrix metalloproteinase 9 (gelatinase B   | 5.6 |
|    | 437695 | AA769202  | Hs.192142 | ESTs                                       | 5.6 |
| 15 | 426935 | NM_000088 | Hs.172928 | collagen, type I, alpha 1                  | 5.6 |
|    | 453361 | AA035197  | Hs.107375 | ESTs                                       | 5.5 |
|    | 418293 | AI224483  | Hs.16063  | hypothetical protein FLJ21877              | 5.5 |
|    | 405348 |           |           | C7001664.gij12698061[dbj]BAB21849.1 (AB    | 5.5 |
| 20 | 458079 | AI796870  | Hs.54277  | DNA segment on chromosome X (unique) 992   | 5.4 |
|    | 452799 | AI948829  | Hs.213786 | ESTs                                       | 5.4 |
|    | 448935 | AL078596  | Hs.22591  | nuclear receptor subfamily 2, group E, m   | 5.4 |
|    | 422809 | AK001379  | Hs.121028 | hypothetical protein FLJ10549              | 5.4 |
|    | 442547 | AA306997  | Hs.217484 | ESTs, Weakly similar to ALU1_HUMAN ALU S   | 5.4 |
| 25 | 424009 | F11690    |           | gb:HSC30D041 normalized infant brain cDN   | 5.4 |
|    | 440332 | AI218517  | Hs.188051 | ESTs                                       | 5.4 |
|    | 422094 | AF129535  | Hs.272027 | F-box only protein 5                       | 5.4 |
|    | 443884 | N20617    | Hs.194397 | leptin receptor                            | 5.4 |
|    | 422493 | AW474183  | Hs.250173 | hypothetical protein FLJ13158              | 5.4 |
| 30 | 432731 | R31178    | Hs.287820 | fibronectin 1                              | 5.4 |
|    | 426108 | AA622037  | Hs.166468 | programmed cell death 5                    | 5.3 |
|    | 407624 | AW157431  | Hs.248941 | ESTs                                       | 5.3 |
|    | 411048 | AK001742  | Hs.67991  | hypothetical protein DKFZp434G0522         | 5.3 |
|    | 412471 | M63193    | Hs.73946  | endothelial cell growth factor 1 (platelet | 5.3 |
| 35 | 414020 | NM_002984 | Hs.75703  | small inducible cytokine A4 (homologous    | 5.2 |
|    | 414774 | X02419    | Hs.77274  | plasminogen activator, urokinase           | 5.2 |
|    | 413786 | AW613780  | Hs.13500  | ESTs                                       | 5.2 |
|    | 454860 | AW835767  |           | gb:QV4-LT0016-240200-110-b08 LT0016 Homo   | 5.2 |
| 40 | 428037 | N47474    | Hs.89230  | potassium intermediate/small conductance   | 5.2 |
|    | 420311 | AW445044  | Hs.38207  | Human DNA sequence from clone RP4-53015    | 5.1 |
|    | 416737 | AF154335  | Hs.79691  | LIM domain protein                         | 5.1 |
|    | 445837 | AI261700  | Hs.145544 | ESTs                                       | 5.1 |
|    | 425882 | U83115    | Hs.161002 | absent in melanoma 1                       | 5.1 |
| 45 | 415682 | AI347128  | Hs.191870 | ESTs                                       | 5.1 |
|    | 414053 | BE391635  | Hs.75725  | transgelin 2                               | 5.1 |
|    | 453884 | AA355925  | Hs.36232  | KIAA0186 gene product                      | 5.1 |
|    | 431512 | BE270734  | Hs.2795   | lactate dehydrogenase A                    | 5.1 |
|    | 432593 | AW301003  | Hs.51483  | ESTs, Weakly similar to hypothetical pro   | 5.0 |
|    | 433323 | AA805132  | Hs.159142 | ESTs                                       | 5.0 |
| 50 | 443744 | AI084326  | Hs.271548 | ESTs, Weakly similar to I78885 serine/th   | 5.0 |
|    | 410434 | AF051152  | Hs.63668  | tol-like receptor 2                        | 5.0 |
|    | 420018 | U56387    | Hs.94376  | proprotein convertase subtilisin/kexin 1   | 5.0 |
|    | 419485 | AA489023  | Hs.99807  | ESTs, Weakly similar to unnamed protein    | 4.9 |
|    | 446131 | NM_000929 | Hs.290    | phospholipase A2, group V                  | 4.9 |
| 55 | 412777 | AI335773  | Hs.270123 | ESTs                                       | 4.9 |
|    | 449246 | AW411209  | Hs.23363  | hypothetical protein FLJ10983              | 4.9 |
|    | 433244 | AB040943  | Hs.271285 | KIAA1510 protein                           | 4.9 |
|    | 407235 | D20569    | Hs.169407 | SAC2 (suppressor of actin mutations 2, y   | 4.9 |
|    | 445118 | AI208762  | Hs.345572 | ESTs                                       | 4.9 |
| 60 | 417404 | NM_007350 | Hs.82101  | pleckstrin homology-like domain, family    | 4.9 |
|    | 420092 | AA814043  | Hs.88045  | ESTs                                       | 4.9 |
|    | 412811 | H06382    |           | ESTs                                       | 4.9 |
|    | 436607 | AW661783  | Hs.211061 | ESTs                                       | 4.9 |
|    | 438456 | AA913381  | Hs.20594  | ESTs                                       | 4.9 |
| 65 | 443883 | AA114212  | Hs.9930   | serine (or cysteine) proteinase inhibito   | 4.9 |
|    | 431553 | X78075    | Hs.2799   | cartilage linking protein 1                | 4.9 |
|    | 439999 | AA115811  | Hs.6838   | ras homolog gene family, member E          | 4.9 |
|    | 411252 | AB018549  | Hs.69328  | MD-2 protein                               | 4.9 |
|    | 444381 | BE387335  | Hs.283713 | ESTs, Weakly similar to S64054 hypothei    | 4.8 |
| 70 | 429433 | AA452899  | Hs.213586 | ESTs, Weakly similar to KIAA1353 protein   | 4.8 |
|    | 403349 | NM_001406 |           | ephrin-B3                                  | 4.8 |
|    | 402274 |           |           | C19000498*.gij4567179[gb]AAD23607.1[AC00   | 4.8 |
|    | 426044 | AA502490  | Hs.170290 | ESTs                                       | 4.8 |
|    | 423600 | AI633559  | Hs.310359 | ESTs                                       | 4.8 |
| 75 | 425905 | AB032959  | Hs.318584 | novel C3HC4 type Zinc finger (ring finger  | 4.8 |
|    | 431117 | AF003522  | Hs.250500 | della (Drosophila)-like 1                  | 4.8 |
|    | 418054 | NM_002318 | Hs.83354  | lysyl oxidase-like 2                       | 4.7 |
|    | 441703 | AW390054  | Hs.192843 | leucine zipper protein FKSG14              | 4.7 |
|    | 439627 | BE521702  | Hs.29076  | hypothetical protein FLJ21841              | 4.7 |
| 80 | 445900 | AF070526  | Hs.125036 | Homo sapiens clone 24787 mRNA sequence     | 4.7 |
|    | 435937 | AA830893  | Hs.119769 | ESTs                                       | 4.7 |
|    | 403961 |           |           | Target Exon                                | 4.7 |
|    | 407862 | BE548267  | Hs.337986 | Homo sapiens cDNA FLJ10934 fis, clone OV   | 4.6 |
|    | 408523 | AW833259  | Hs.314287 | ESTs                                       | 4.6 |

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|    |        |           |             |  |     |
|----|--------|-----------|-------------|--|-----|
|    | 403481 |           | Target Exon | 4.6                                      |     |
|    | 423529 | T87318    | Hs.120411   | ESTs                                     | 4.6 |
|    | 416847 | L43821    | Hs.80261    | enhancer of filamentation 1 (cas-like do | 4.6 |
|    | 453362 | H14988    | Hs.107375   | ESTs                                     | 4.6 |
| 5  | 407013 | U35637    |             | gb:Human nebulin mRNA, partial cds       | 4.6 |
|    | 423757 | AL049337  | Hs.132571   | Homo sapiens mRNA; cDNA DKFZp564P016 (fr | 4.6 |
|    | 432363 | AA534489  |             | gb:nf76g11.s1 NCI_CGAP_Co3 Homo sapiens  | 4.6 |
|    | 408380 | AF123050  | Hs.44532    | diubiquitin                              | 4.6 |
|    | 429149 | AW193360  | Hs.197962   | ESTs, Weakly similar to I38022 hypotheti | 4.6 |
| 10 | 422170 | AI791949  | Hs.112432   | anti-Mullerian hormone                   | 4.6 |
|    | 405558 |           |             | Target Exon                              | 4.6 |
|    | 410295 | AA741357  | Hs.5174     | nidogen (enactin)                        | 4.6 |
|    | 450166 | AA429504  |             | ESTs                                     | 4.6 |
|    | 451418 | BE387790  | Hs.26369    | hypothetical protein FLJ20287            | 4.5 |
| 15 | 420075 | AF142482  | Hs.203846   | TEA domain family member 3               | 4.5 |
|    | 422158 | L10343    | Hs.112341   | protease inhibitor 3, skin-derived (SKAL | 4.5 |
|    | 457465 | AW301344  | Hs.122908   | DNA replication factor                   | 4.5 |
|    | 436827 | H72187    | Hs.5322     | guanine nucleotide binding protein (G pr | 4.5 |
|    | 452620 | AA436504  | Hs.119286   | ESTs                                     | 4.5 |
| 20 | 424381 | AA285249  | Hs.146329   | protein kinase Chk2                      | 4.5 |
|    | 444656 | AI277924  | Hs.145199   | ESTs                                     | 4.5 |
|    | 450639 | AI703186  | Hs.277174   | ESTs                                     | 4.5 |
|    | 424247 | X14008    | Hs.234734   | lysozyme (renal amyloidosis)             | 4.5 |
|    | 423178 | AI033140  | Hs.124983   | Homo sapiens mRNA; cDNA DKFZp564C142 (fr | 4.5 |
| 25 | 447072 | D61594    | Hs.17279    | tyrosylprotein sulfotransferase 1        | 4.5 |
|    | 447444 | AK000318  | Hs.18616    | hypothetical protein FLJ20311            | 4.4 |
|    | 401454 |           |             | NM_014226*:Homo sapiens renal tumor anti | 4.4 |
|    | 420560 | AW207748  | Hs.59115    | ESTs                                     | 4.4 |
|    | 409205 | AI952884  | Hs.14832    | ESTs, Moderately similar to unnamed prot | 4.4 |
| 30 | 451129 | BE072881  |             | gb:RC2-BT0548-200300-012-e09 BT0548 Homo | 4.4 |
|    | 412530 | AA766268  | Hs.266273   | hypothetical protein FLJ13346            | 4.4 |
|    | 447752 | M73700    | Hs.105938   | lactotransferrin                         | 4.4 |
|    | 429083 | Y09397    | Hs.227817   | BCL2-related protein A1                  | 4.4 |
| 35 | 418283 | S79895    | Hs.83942    | cathepsin K (pseudosclerosis)            | 4.3 |
|    | 424736 | AF230877  | Hs.152701   | microtubule-interacting protein that ass | 4.3 |
|    | 416379 | N38857    | Hs.203933   | ESTs                                     | 4.3 |
|    | 452994 | AW962597  | Hs.31305    | KIAA1547 protein                         | 4.3 |
|    | 437834 | AA769294  | Hs.283854   | gb:nz36g03.s1 NCI_CGAP_GCB1 Homo sapiens | 4.3 |
| 40 | 441035 | AI694309  | Hs.126458   | ESTs                                     | 4.3 |
|    | 425292 | NM_005824 | Hs.155545   | 37 kDa leucine-rich repeat (LRR) protein | 4.3 |
|    | 418030 | BE207573  | Hs.83321    | neuromedin B                             | 4.3 |
|    | 450811 | AI739486  | Hs.245497   | ESTs                                     | 4.3 |
|    | 438458 | AW975186  |             | gb:EST387294 MAGE resequences, MAGN Homo | 4.3 |
|    | 442201 | AW516704  | Hs.208726   | ESTs                                     | 4.3 |
| 45 | 429732 | U20158    | Hs.2488     | lymphocyte cytosolic protein 2 (SH2 doma | 4.3 |
|    | 435677 | AA694142  | Hs.293726   | ESTs, Weakly similar to TSGA RAT TESTIS  | 4.3 |
|    | 442832 | AW206560  | Hs.253569   | ESTs                                     | 4.3 |
|    | 449318 | AW236021  | Hs.78531    | Homo sapiens, Similar to RIKEN cDNA 5730 | 4.2 |
| 50 | 421027 | AA751198  | Hs.55254    | ESTs                                     | 4.2 |
|    | 414300 | AI304870  | Hs.188680   | ESTs                                     | 4.2 |
|    | 452874 | AK001061  | Hs.30925    | hypothetical protein FLJ10199            | 4.2 |
|    | 444161 | N52543    | Hs.142940   | ESTs                                     | 4.2 |
|    | 416908 | AA333990  | Hs.80424    | coagulation factor XIII, A1 polypeptide  | 4.2 |
| 55 | 418483 | W26076    | Hs.221847   | ESTs                                     | 4.2 |
|    | 443318 | AI051603  | Hs.133141   | ESTs                                     | 4.2 |
|    | 415079 | R43179    | Hs.22895    | hypothetical protein FLJ23548            | 4.2 |
|    | 416871 | H98716    |             | gb:yx13d08.s1 Soares melanocyte 2NbHM Ho | 4.2 |
|    | 423678 | AW963357  | Hs.7847     | ESTs                                     | 4.2 |
| 60 | 429643 | AA455889  | Hs.167279   | FYVE-finger-containing Rab5 effector pro | 4.2 |
|    | 438875 | AA827640  | Hs.189069   | ESTs                                     | 4.2 |
|    | 428600 | AW863261  | Hs.242413   | hypothetical protein DKFZp434K1421       | 4.2 |
|    | 430968 | AW972830  |             | gb:EST384925 MAGE resequences, MAGL Homo | 4.2 |
|    | 406872 | AI760903  |             | gb:wi09h08.x1 NCI_CGAP_CLL1 Homo sapiens | 4.2 |
| 65 | 403790 |           |             | NM_001334*:Homo sapiens cathepsin O (CTS | 4.1 |
|    | 409112 | BE243971  | Hs.50649    | quinone oxidoreductase homolog           | 4.1 |
|    | 435703 | AW630133  | Hs.83313    | GK003 protein                            | 4.1 |
|    | 432625 | AI243596  | Hs.94830    | ESTs, Moderately similar to T03094 A-kin | 4.1 |
|    | 404407 |           |             | Target Exon                              | 4.1 |
| 70 | 412568 | AI878826  | Hs.74034    | caveolin 1, caveolae protein, 22kD       | 4.1 |
|    | 422087 | X58968    | Hs.111301   | matrix metalloproteinase 2 (gelatinase A | 4.1 |
|    | 435143 | R12375    | Hs.194600   | ESTs                                     | 4.1 |
|    | 447497 | AW167254  | Hs.205722   | ESTs                                     | 4.1 |
|    | 455304 | AI820973  |             | gb:nc21c02.y5 NCI_CGAP_Pr1 Homo sapiens  | 4.1 |
|    | 427676 | AA394062  | Hs.300772   | tropomyosin 2 (beta)                     | 4.1 |
| 75 | 436508 | AA628980  |             | down syndrome critical region protein DS | 4.1 |
|    | 453331 | AI240665  |             | ESTs                                     | 4.0 |
|    | 420004 | AW975532  | Hs.164039   | ESTs, Moderately similar to I38022 hypot | 4.0 |
|    | 412125 | Y17114    | Hs.73393    | eyes absent (Drosophila) homolog 4       | 4.0 |
|    | 426215 | AW963419  | Hs.155223   | stanniocalcin 2                          | 4.0 |
| 80 | 407603 | AW955705  | Hs.62604    | Homo sapiens, clone IMAGE:4299322, mRNA, | 4.0 |
|    | 450581 | AF081513  | Hs.25195    | TGF-beta 4                               | 4.0 |
|    | 415323 | BE269352  | Hs.949      | neutrophil cytosolic factor 2 (65kD, chr | 4.0 |
|    | 409893 | AW247090  | Hs.57101    | minichromosome maintenance deficient (S. | 4.0 |

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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
| 5  | 432058 | AW665996  | Hs.130729 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 4.0 |
|    | 444609 | AW571659  | Hs.278081 | ESTs                                     | 4.0 |
|    | 445666 | R59960    | Hs.282386 | ESTs                                     | 4.0 |
|    | 437814 | AI088192  | Hs.135474 | ESTs, Weakly similar to DDX9_HUMAN ATP-D | 4.0 |
|    | 414948 | C15240    | Hs.182155 | ESTs                                     | 4.0 |
| 10 | 435542 | AA687376  |           | ESTs                                     | 4.0 |
|    | 422564 | AI148006  | Hs.222120 | ESTs                                     | 4.0 |
|    | 449571 | AW016812  | Hs.200266 | ESTs                                     | 4.0 |
|    | 433556 | W56321    | Hs.111460 | calcium/calmodulin-dependent protein kin | 4.0 |
|    | 458946 | AA009716  | Hs.42311  | ESTs                                     | 4.0 |
| 15 | 449655 | AI021987  | Hs.59970  | ESTs                                     | 4.0 |
|    | 426649 | AI914936  | Hs.97152  | ESTs                                     | 4.0 |
|    | 457292 | AI921270  | Hs.281462 | hypothetical protein FLJ14251            | 4.0 |
|    | 440435 | AL042201  | Hs.21273  | transcription factor NYD-sp10            | 4.0 |
|    | 456977 | AK000252  | Hs.169758 | hypothetical protein FLJ20245            | 4.0 |
| 20 | 420649 | AI866964  | Hs.124704 | ESTs, Moderately similar to S65657 alpha | 4.0 |
|    | 416406 | D86961    | Hs.79299  | lipoma HMGIC fusion partner-like 2       | 4.0 |
|    | 446291 | BE397753  | Hs.14623  | interferon, gamma-inducible protein 30   | 3.9 |
|    | 449256 | AA059050  | Hs.59847  | ESTs                                     | 3.9 |
|    | 421637 | AF035290  | Hs.106300 | Homo sapiens clone 23556 mRNA sequence   | 3.9 |
| 25 | 456306 | AA225313  | Hs.222886 | ESTs, Weakly similar to TRHY_HUMAN TRICH | 3.9 |
|    | 438372 | AI140189  | Hs.123191 | ESTs                                     | 3.9 |
|    | 427375 | AL035460  | Hs.177536 | metallocarboxypeptidase CPX-1            | 3.9 |
|    | 415131 | D61119    |           | gb:HUM158C11B Clontech human fetal brain | 3.9 |
|    | 439231 | AW581935  | Hs.141480 | Homo sapiens mRNA; cDNA DKFZp434N079 (fr | 3.9 |
| 30 | 424998 | U58515    | Hs.154138 | chitinase 3-like 2                       | 3.9 |
|    | 433376 | AI249361  | Hs.74122  | caspase 4, apoptosis-related cysteine pr | 3.9 |
|    | 455104 | BE064863  |           | gb:RC1-BT0313-110300-015-f06 BT0313 Homo | 3.9 |
|    | 443426 | AF098158  | Hs.9329   | chromosome 20 open reading frame 1       | 3.9 |
|    | 419594 | AA013051  | Hs.91417  | topoisomerase (DNA) II binding protein   | 3.9 |
| 35 | 417576 | AA339449  | Hs.82285  | phosphoribosylglycinamide formyltransfer | 3.9 |
|    | 416857 | AA188775  | Hs.292453 | ESTs                                     | 3.9 |
|    | 434784 | AA649051  | Hs.164007 | ESTs                                     | 3.8 |
|    | 438898 | AI819863  | Hs.106243 | ESTs                                     | 3.8 |
|    | 408102 | U46351    | Hs.521    | lectin, galactoside-binding, soluble, 3  | 3.8 |
| 40 | 422081 | AW136820  | Hs.196011 | ESTs                                     | 3.8 |
|    | 411688 | AW953440  |           | gb:EST365510 MAGE resequences, MAGB Homo | 3.8 |
|    | 447343 | AA256641  | Hs.236894 | ESTs, Highly similar to S02392 alpha-2-m | 3.8 |
|    | 406395 |           |           | Target Exon                              | 3.8 |
|    | 433675 | AW977653  | Hs.75319  | ribonucleotide reductase M2 polypeptide  | 3.8 |
| 45 | 403696 |           |           | C4001100*.gil5852342[gb]AAD54015.1[ (AF0 | 3.8 |
|    | 443740 | R56434    | Hs.21062  | ESTs                                     | 3.8 |
|    | 413076 | U10564    | Hs.75188  | wee1 (S. pombe) homolog                  | 3.8 |
|    | 409189 | AA125984  |           | gb:zn27h06.r1 Stratagene neuroepithelium | 3.8 |
|    | 444326 | AI939357  | Hs.270710 | ESTs                                     | 3.8 |
| 50 | 436899 | AA764852  | Hs.291567 | ESTs                                     | 3.8 |
|    | 445075 | AI651827  | Hs.344767 | ESTs                                     | 3.8 |
|    | 416892 | L24498    | Hs.80409  | growth arrest and DNA-damage-inducible,  | 3.8 |
|    | 429163 | AA884766  |           | gb:am20a10.s1 Soares_NFL_T_GBC_S1 Homo s | 3.8 |
|    | 416114 | AI695549  | Hs.183868 | glucuronidase, beta                      | 3.8 |
| 55 | 417018 | M16038    | Hs.80887  | v-yes-1 Yamaguchi sarcoma viral related  | 3.8 |
|    | 446839 | BE091926  | Hs.16244  | mitotic spindle coiled-coil related prot | 3.8 |
|    | 454117 | BE410100  | Hs.40368  | adaptor-related protein complex 1, sigma | 3.8 |
|    | 416664 | H72780    | Hs.20289  | ESTs                                     | 3.8 |
|    | 449444 | AW818436  | Hs.23590  | solute carrier family 16 (monocarboxylic | 3.8 |
| 60 | 419735 | AW750056  | Hs.169577 | Homo sapiens cDNA FLJ14743 fis, clone NT | 3.8 |
|    | 448275 | BE514434  | Hs.20830  | kinesin-like 2                           | 3.7 |
|    | 405141 | Y14443    |           | zinc finger protein 200                  | 3.7 |
|    | 411537 | BE073250  |           | gb:MR0-BT0551-060300-102-e05 BT0551 Homo | 3.7 |
|    | 422648 | D86983    | Hs.118893 | Melanoma associated gene                 | 3.7 |
| 65 | 449145 | AI632122  | Hs.198408 | ESTs                                     | 3.7 |
|    | 428060 | AA420616  | Hs.249483 | ESTs                                     | 3.7 |
|    | 404584 |           |           | Target Exon                              | 3.7 |
|    | 418596 | AW976721  | Hs.293327 | ESTs                                     | 3.7 |
|    | 458072 | AI890347  | Hs.271923 | Homo sapiens cDNA: FLJ22785 fis, clone K | 3.7 |
| 70 | 445908 | R13580    | Hs.13436  | Homo sapiens clone 24425 mRNA sequence   | 3.7 |
|    | 439979 | AW600291  | Hs.6823   | hypothetical protein FLJ10430            | 3.7 |
|    | 431770 | BE221880  | Hs.268555 | 5'-3' exonuclease 2                      | 3.7 |
|    | 427809 | M26380    | Hs.180878 | lipoprotein lipase                       | 3.7 |
|    | 436674 | AA725002  | Hs.272018 | low molecular mass ubiquinone-binding pr | 3.7 |
| 75 | 413450 | Z99716    | Hs.75372  | N-acetyl/galactosaminidase, alpha-       | 3.7 |
|    | 434467 | BE552368  | Hs.231853 | Homo sapiens cDNA FLJ13445 fis, clone PL | 3.7 |
|    | 448048 | BE281291  | Hs.170408 | ESTs, Moderately similar to A47582 B-cel | 3.7 |
|    | 422798 | R92347    | Hs.34574  | ESTs, Weakly similar to ALU1_HUMAN ALU S | 3.7 |
|    | 402082 |           |           | C18000743*.gil6678363[ref]NP_033416.1[ t | 3.7 |
| 80 | 448019 | AW947164  | Hs.195641 | ESTs, Moderately similar to I38022 hypot | 3.7 |
|    | 428873 | AI701609  | Hs.98908  | ESTs                                     | 3.7 |
|    | 437323 | AA371145  | Hs.194397 | leptin receptor                          | 3.7 |
|    | 413095 | AA494359  | Hs.30715  | potassium voltage-gated channel, Isk-rel | 3.7 |
|    | 425139 | AW630488  | Hs.25338  | protease, serine, 23                     | 3.7 |
|    | 452279 | AA286844  | Hs.61260  | hypothetical protein FLJ13164            | 3.7 |
|    | 439574 | AI469788  | Hs.165190 | ESTs                                     | 3.7 |
|    | 408829 | NM_006042 | Hs.48384  | heparan sulfate (glucosamine) 3-O-sulfot | 3.7 |



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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
|    | 407838 | BE146411  | Hs.40342  | putative nuclear protein                 | 3.7 |
|    | 437748 | AF234882  | Hs.5814   | suppression of tumorigenicity 7          | 3.6 |
|    | 437470 | AL390147  | Hs.134742 | hypothetical protein DKFZp547D065        | 3.6 |
|    | 400288 | X06256    | Hs.149609 | integrin, alpha 5 (fibronectin receptor, | 3.6 |
| 5  | 453438 | AI68935   | Hs.22792  | ESTs                                     | 3.6 |
|    | 415024 | AI983981  | Hs.189114 | ESTs                                     | 3.6 |
|    | 419713 | AW968058  | Hs.92381  | nudix (nucleoside diphosphate linked moi | 3.6 |
|    | 441523 | AW514263  | Hs.301771 | ESTs, Weakly similar to ALUF_HUMAN !!!   | 3.6 |
| 10 | 416427 | BE244050  | Hs.79307  | Rac/Cdc42 guanine exchange factor (GEF)  | 3.6 |
|    | 448002 | Y15227    | Hs.20149  | deleted in lymphocytic leukemia, 1       | 3.6 |
|    | 441362 | BE614410  | Hs.23044  | RAD51 (S. cerevisiae) homolog (E coli Re | 3.6 |
|    | 456534 | X91195    | Hs.100623 | phospholipase C, beta 3, neighbor pseudo | 3.6 |
|    | 402239 |           |           | Target Exon                              | 3.6 |
| 15 | 450297 | AW901347  | Hs.38592  | hypothetical protein FLJ23342            | 3.6 |
|    | 443715 | AI583187  | Hs.9700   | cyclin E1                                | 3.6 |
|    | 403011 |           |           | ENSP00000215330*:Probable serine/threoni | 3.6 |
|    | 428403 | AI393048  | Hs.326159 | leucine rich repeat (in FLII) interactin | 3.6 |
|    | 425202 | AW962282  | Hs.152049 | ESTs, Weakly similar to I38022 hypotheti | 3.6 |
| 20 | 409557 | BE182896  | Hs.211193 | ESTs                                     | 3.6 |
|    | 453948 | AI970797  | Hs.64859  | ESTs                                     | 3.6 |
|    | 440225 | BE295782  | Hs.159    | tumor necrosis factor receptor superfam  | 3.6 |
|    | 425331 | AW962128  |           | gb:EST374201 MAGE resequences, MAGG Homo | 3.6 |
|    | 442326 | H92962    | Hs.124813 | hypothetical protein MGC14817            | 3.6 |
| 25 | 437640 | AA764893  | Hs.272155 | ESTs, Weakly similar to I38022 hypotheti | 3.6 |
|    | 424051 | AL110203  | Hs.138411 | Homo sapiens mRNA; cDNA DKFZp586J1922 (f | 3.6 |
|    | 405481 |           |           | Target Exon                              | 3.6 |
|    | 433835 | AI806185  |           | gb:wf26a10.x1 Soares_NFL_T_GBC_S1 Homo s | 3.6 |
| 30 | 456052 | BE311901  | Hs.28935  | gb:601142614F1 NIH_MGC_14 Homo sapiens c | 3.6 |
|    | 453857 | AL080235  | Hs.35861  | DKFZP586E1621 protein                    | 3.5 |
|    | 439726 | AW449893  | Hs.293707 | ESTs, Weakly similar to I38598 zinc fing | 3.5 |
|    | 416913 | AW934714  |           | gb:RC1-DT0001-031299-011-a11 DT0001 Homo | 3.5 |
|    | 419402 | Z68155    | Hs.90291  | laminin, beta 2 (laminin S)              | 3.5 |
|    | 403108 |           |           | ENSP00000241415*:Hypothetical 67.7 kDa p | 3.5 |
| 35 | 426509 | M31166    | Hs.2050   | pentaxin-related gene, rapidly induced b | 3.5 |
|    | 418883 | BE387036  | Hs.1211   | acid phosphatase 5, tartrate resistant   | 3.5 |
|    | 432188 | AI362952  | Hs.2928   | solute carrier family 7 (cationic amino  | 3.5 |
|    | 448789 | BE539108  | Hs.22051  | hypothetical protein MGC15548            | 3.5 |
|    | 427299 | AA830210  | Hs.214263 | ESTs, Moderately similar to ALU1_HUMAN A | 3.5 |
| 40 | 425212 | AW962253  | Hs.171618 | ESTs                                     | 3.5 |
|    | 422938 | NM_001809 | Hs.1594   | centromere protein A (17kD)              | 3.5 |
|    | 442264 | AI278777  | Hs.263455 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 3.5 |
|    | 407253 | AA411175  | Hs.141939 | ESTs, Moderately similar to S65657 alpha | 3.5 |
|    | 457211 | AW972565  | Hs.32399  | ESTs, Weakly similar to S51797 vasodilat | 3.5 |
| 45 | 452682 | AA456193  | Hs.9071   | progesterone membrane binding protein    | 3.5 |
|    | 421247 | BE391727  | Hs.102910 | general transcription factor IIH, polype | 3.5 |
|    | 418049 | AA211467  | Hs.190488 | Homo sapiens, Similar to nuclear localiz | 3.5 |
|    | 453792 | AL134539  | Hs.254129 | KIAA1678                                 | 3.5 |
|    | 416425 | AA180256  | Hs.210473 | Homo sapiens cDNA FLJ14872 fis, clone PL | 3.5 |
| 50 | 412014 | AI620650  | Hs.43761  | ESTs, Weakly similar to A46010 X-linked  | 3.5 |
|    | 440370 | AA884000  | Hs.8173   | hypothetical protein FLJ10803            | 3.5 |
|    | 407729 | T40707    | Hs.270862 | ESTs                                     | 3.5 |
|    | 438527 | AI969251  | Hs.115325 | RAB7, member RAS oncogene family-like 1  | 3.5 |
|    | 456646 | BE064420  |           | gb:RC4-BT0311-241199-012-c08 BT0311 Homo | 3.5 |
| 55 | 418630 | AI351311  | Hs.251946 | poly(A)-binding protein, cytoplasmic 1-l | 3.5 |
|    | 432242 | AW022715  | Hs.162160 | ESTs, Weakly similar to ALU4_HUMAN ALU S | 3.5 |
|    | 424503 | NM_002205 | Hs.149609 | integrin, alpha 5 (fibronectin receptor, | 3.4 |
|    | 449932 | AI675444  | Hs.263024 | ESTs                                     | 3.4 |
|    | 427700 | AA262294  | Hs.180383 | dual specificity phosphatase 6           | 3.4 |
| 60 | 403849 |           |           | Target Exon                              | 3.4 |
|    | 429747 | M87507    | Hs.2490   | caspase 1, apoptosis-related cysteine pr | 3.4 |
|    | 451446 | AI826288  | Hs.171637 | hypothetical protein MGC2628             | 3.4 |
|    | 434589 | AF147363  |           | gb:Homo sapiens full length insert cDNA  | 3.4 |
|    | 403361 |           |           | NM_002210*:Homo sapiens integrin, alpha  | 3.4 |
| 65 | 420841 | AI625251  | Hs.94037  | hypothetical protein FLJ23053            | 3.4 |
|    | 438206 | AA780385  | Hs.187885 | ESTs                                     | 3.4 |
|    | 425295 | AA431366  | Hs.37251  | ESTs                                     | 3.4 |
|    | 411789 | AF245505  | Hs.72157  | Adlican                                  | 3.4 |
|    | 440948 | AW188311  | Hs.128619 | ESTs                                     | 3.4 |
| 70 | 439518 | W76326    |           | gb:zd60d04.r1 Soares_fetal_heart_NbHH19W | 3.4 |
|    | 418821 | AA436002  | Hs.183161 | ESTs                                     | 3.4 |
|    | 459660 | M79082    |           | ESTs                                     | 3.4 |
|    | 404209 |           |           | Target Exon                              | 3.4 |
|    | 443950 | NM_001425 | Hs.9999   | epithelial membrane protein 3            | 3.4 |
| 75 | 430694 | AA810624  | Hs.30936  | ESTs, Weakly similar to H2BH_HUMAN HISTO | 3.4 |
|    | 425300 | AW601773  | Hs.270259 | ESTs                                     | 3.4 |
|    | 420300 | AA258245  | Hs.127573 | Homo sapiens FKSG41 (FKSG41)mRNA, compl  | 3.4 |
|    | 458438 | AI141520  | Hs.151464 | ESTs, Weakly similar to ALUC_HUMAN !!!   | 3.4 |
|    | 444911 | U06117    | Hs.250    | xanthene dehydrogenase                   | 3.4 |
| 80 | 421064 | AI245432  | Hs.101382 | tumor necrosis factor, alpha-induced pro | 3.4 |
|    | 441287 | AW293132  | Hs.131373 | ESTs                                     | 3.4 |
|    | 446960 | AW294936  | Hs.156762 | ESTs                                     | 3.4 |
|    | 405605 |           |           | C2001342:gi127814 sp P26434 NAH4_RAT SO  | 3.4 |
|    | 433791 | AA719352  | Hs.112718 | ESTs                                     | 3.4 |

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|----|--------|-----------|--|-----|
|    | 405238 |           | Target Exon  | 3.4 |
|    | 412986 | X81120    | Hs.75110 cannabinoid receptor 1 (brain)            | 3.4 |
|    | 414372 | AA143654  | gb:zo65a02.r1 Stratagene pancreas (93720           | 3.4 |
| 5  | 435523 | T62849    | Hs.11090 membrane-spanning 4-domains, subfamily A  | 3.4 |
|    | 406739 | A1566709  | Hs.182426 ribosomal protein S2                     | 3.4 |
|    | 442710 | A1015631  | Hs.23210 ESTs                                      | 3.4 |
|    | 452526 | W38537    | Hs.280740 hypothetical protein MGC3040             | 3.4 |
|    | 456060 | C14904    | Hs.45184 Homo sapiens cDNA FLJ12284 fis, clone MA  | 3.4 |
| 10 | 435005 | U80743    | Hs.306094 trinucleotide repeat containing 12       | 3.4 |
|    | 421674 | T10707    | Hs.296355 hypothetical protein FLJ23138            | 3.4 |
|    | 425242 | D13635    | Hs.155287 KIAA0010 gene product                    | 3.4 |
|    | 436805 | AA731533  | Hs.270751 ESTs                                     | 3.4 |
|    | 418641 | BE243136  | Hs.86947 a disintegrin and metalloproteinase doma  | 3.4 |
|    | 430809 | A1791150  | Hs.262009 ESTs, Moderately similar to I38022 hypot | 3.4 |
| 15 | 428878 | AA436884  | Hs.48926 ESTs                                      | 3.3 |
|    | 413774 | AA131782  | Hs.182314 ESTs                                     | 3.3 |
|    | 400533 |           | ENSP00000209376*:PRED65 protein (Fragmen           | 3.3 |
|    | 422448 | AW372922  | Hs.116774 integrin, alpha 1                        | 3.3 |
| 20 | 423905 | AW579960  | Hs.135150 lung type-I cell membrane-associated gly | 3.3 |
|    | 430637 | BE160081  | Hs.256290 S100 calcium-binding protein A11 (calgi  | 3.3 |
|    | 427899 | AA829286  | Hs.332053 serum amyloid A1                         | 3.3 |
|    | 434206 | AW136973  | Hs.180479 ESTs, Weakly similar to S69890 mitogen i | 3.3 |
|    | 453387 | A1990741  | Hs.252809 ESTs                                     | 3.3 |
| 25 | 436265 | AA731331  | Hs.190668 ESTs                                     | 3.3 |
|    | 412971 | AA889628  | Hs.35125 ESTs                                      | 3.3 |
|    | 441701 | AW339828  | Hs.127497 ESTs                                     | 3.3 |
|    | 418967 | NM_001725 | Hs.89535 bactericidal/permeability-increasing pro  | 3.3 |
|    | 434577 | R37316    | Hs.179769 Homo sapiens cDNA: FLJ22487 fis, clone H | 3.3 |
| 30 | 418216 | AA662240  | Hs.283099 AF15q14 protein                          | 3.3 |
|    | 436137 | A1056769  | Hs.133512 ESTs                                     | 3.3 |
|    | 428715 | AW293716  | Hs.53126 ESTs                                      | 3.3 |
|    | 449249 | T52285    | Hs.193115 Homo sapiens mRNA for KIAA1764 protein,  | 3.3 |
|    | 440074 | AA863045  | Hs.10669 ESTs, Weakly similar to T00050 hypotheti  | 3.3 |
| 35 | 405046 |           | C3000978:gi 5280045 dbj BAB01579.1  (ABO           | 3.3 |
|    | 437816 | A1823445  | Hs.280699 ESTs                                     | 3.3 |
|    | 401272 |           | C9000559*:gi 12314195 emb CAB99338.1  (A           | 3.3 |
|    | 408896 | A1610447  | Hs.48778 niban protein                             | 3.3 |
| 40 | 432343 | NM_002960 | Hs.2961 S100 calcium-binding protein A3            | 3.3 |
|    | 407881 | AW072003  | Hs.40968 heparan sulfate (glucosamine) 3-O-sulfot  | 3.3 |
|    | 439978 | BE139460  | Hs.124673 Homo sapiens cDNA FLJ11477 fis, clone HE | 3.3 |
|    | 421094 | AW978202  | Hs.289064 hypothetical protein FLJ22251            | 3.3 |
|    | 428722 | U76456    | Hs.190787 tissue inhibitor of metalloproteinase 4  | 3.3 |
|    | 446134 | AW161234  | Hs.13993 TBP-like 1                                | 3.3 |
| 45 | 412281 | A1810054  | Hs.14119 ESTs                                      | 3.3 |
|    | 436282 | R91913    | Hs.272104 ESTs, Moderately similar to ALU1_HUMAN A | 3.3 |
|    | 452203 | X57522    | transporter 1, ATP-binding cassette, sub           | 3.3 |
|    | 421307 | BE539976  | Hs.103305 Homo sapiens mRNA: cDNA DKFZp434B0425 (f | 3.3 |
|    | 409463 | A1458165  | Hs.17296 hypothetical protein MGC2376              | 3.3 |
| 50 | 411565 | AW851728  | gb:MR2-CT0222-011199-007-d06 CT0222 Homo           | 3.3 |
|    | 410422 | AL042014  | Hs.63348 Homo sapiens, clone MGC:15203, mRNA, com  | 3.3 |
|    | 450506 | NM_004460 | fibroblast activation protein, alpha               | 3.3 |
|    | 451254 | A1571016  | Hs.172967 ESTs                                     | 3.3 |
|    | 423784 | AK000039  | Hs.132826 Homo sapiens cDNA FLJ14913 fis, clone PL | 3.3 |
| 55 | 433325 | AW206986  | Hs.143905 ESTs                                     | 3.3 |
|    | 419896 | Z99362    | gb:HSZ99362 DKFZphamy1 Homo sapiens cDNA           | 3.3 |
|    | 420552 | AK000492  | Hs.98806 hypothetical protein                      | 3.3 |
|    | 451778 | A1826131  | Hs.62954 ESTs, Weakly similar to zinc finger prot  | 3.3 |
|    | 427584 | BE410293  | Hs.179718 v-myb avian myeloblastosis viral oncogen | 3.2 |
| 60 | 433507 | A1817336  | Hs.191791 ESTs                                     | 3.2 |
|    | 418661 | NM_001949 | Hs.1189 E2F transcription factor 3                 | 3.2 |
|    | 440933 | A1208217  | Hs.142879 ESTs                                     | 3.2 |
|    | 426746 | J03626    | Hs.2057 uridine monophosphate synthetase (protat   | 3.2 |
|    | 404120 |           | C5000537*:gi 3298595 gb AAC41376.1  (AF0           | 3.2 |
| 65 | 453920 | A1133148  | Hs.36602 I factor (complement)                     | 3.2 |
|    | 437014 | AA808757  | Hs.222531 ESTs, Weakly similar to S59501 interfero | 3.2 |
|    | 424479 | AF064238  | Hs.149098 smoothelin                               | 3.2 |
|    | 413278 | BE563085  | Hs.833 interferon-stimulated protein, 15 kDa       | 3.2 |
|    | 425922 | AL157466  | Hs.162751 Homo sapiens mRNA: cDNA DKFZp761E2423 (f | 3.2 |
| 70 | 407304 | AA565832  | gb:nj32b03.s1 NCI_CGAP_AA1 Homo sapiens            | 3.2 |
|    | 411671 | BE049094  | ESTs   | 3.2 |
|    | 420352 | BE258835  | gb:601117374F1 NIH_MGC_16 Homo sapiens c           | 3.2 |
|    | 454765 | AW819629  | gb:RC5-ST0293-140200-014-H05 ST0293 Homo           | 3.2 |
|    | 410407 | X66839    | Hs.63287 carbonic anhydrase IX                     | 3.2 |
| 75 | 412490 | AW803564  | Hs.288850 Homo sapiens cDNA: FLJ22528 fis, clone H | 3.2 |
|    | 434563 | AW083994  | Hs.9469 pleckstrin homology domain-containing, f   | 3.2 |
|    | 417124 | BE122762  | Hs.25338 ESTs                                      | 3.2 |
|    | 407378 | AA299264  | Hs.57776 ESTs, Moderately similar to I38022 hypot  | 3.2 |
|    | 439764 | T26535    | Hs.22744 hypothetical protein MGC13105             | 3.2 |
| 80 | 445936 | BE543594  | Hs.61478 hypothetical protein FLJ22329             | 3.2 |
|    | 446523 | NM_003063 | Hs.334629 sarcophilin                              | 3.2 |
|    | 406060 |           | Target Exon  | 3.2 |
|    | 432250 | AA452088  | Hs.274170 Opa-interacting protein 2                | 3.2 |
|    | 437269 | AA334384  | Hs.149420 ESTs                                     | 3.2 |

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|    |        |           |           |   |     |
|----|--------|-----------|-----------|---|-----|
|    | 449115 | AW959952  | Hs.37528  | ESTs, Weakly similar to AF090944 1 PRO06  | 3.2 |
|    | 425146 | AW954627  |           | gb:EST366597 MAGE resequences, MAGC Homo  | 3.2 |
|    | 436210 | AI825420  | Hs.197824 | ESTs                                      | 3.2 |
|    | 437698 | R61837    | Hs.7990   | ESTs, Moderately similar to I84505 calci  | 3.2 |
| 5  | 444371 | BE540274  | Hs.239    | forkhead box M1                           | 3.2 |
|    | 410006 | AW732308  | Hs.57783  | eukaryotic translation initiation factor  | 3.2 |
|    | 445828 | F05802    | Hs.81907  | ESTs                                      | 3.2 |
|    | 450810 | BE207588  | Hs.334360 | transforming growth factor beta 1 induce  | 3.2 |
| 10 | 439533 | W76021    |           | gb:zd64c04.r1 Soares_fetal_heart_NbHH19W  | 3.2 |
|    | 418079 | R40058    | Hs.6911   | ESTs                                      | 3.2 |
|    | 418781 | T41160    | Hs.8404   | ESTs                                      | 3.2 |
|    | 422765 | AW409701  | Hs.1578   | baculoviral IAP repeat-containing 5 (sur  | 3.2 |
|    | 431319 | AA873350  | Hs.302232 | ESTs                                      | 3.2 |
| 15 | 445413 | AA151342  | Hs.12677  | CGI-147 protein                           | 3.2 |
|    | 424947 | R77952    |           | ESTs, Weakly similar to alternatively sp  | 3.2 |
|    | 429490 | AI971131  | Hs.23889  | ESTs, Weakly similar to ALU7_HUMAN ALU S  | 3.2 |
|    | 426765 | AA743603  | Hs.172108 | nucleoporin 88kD                          | 3.2 |
|    | 419726 | U50330    | Hs.1274   | bone morphogenetic protein 1              | 3.2 |
| 20 | 425849 | AJ000512  | Hs.295323 | serum/glucocorticoid regulated kinase     | 3.1 |
|    | 439566 | AF086387  |           | gb:Homo sapiens full length insert cDNA   | 3.1 |
|    | 452574 | AF127481  | Hs.301946 | lymphoid blast crisis oncogene            | 3.1 |
|    | 439753 | BE262233  | Hs.7423   | hypothetical protein from EUROIIMAGE 2168 | 3.1 |
|    | 435256 | AF193766  | Hs.13872  | cytokine-like protein C17                 | 3.1 |
| 25 | 439570 | T79925    | Hs.269165 | ESTs, Weakly similar to ALU1_HUMAN ALU S  | 3.1 |
|    | 443431 | AI056847  | Hs.20654  | ESTs                                      | 3.1 |
|    | 428289 | M26301    | Hs.2253   | complement component 2                    | 3.1 |
|    | 415849 | R20529    | Hs.6806   | ESTs                                      | 3.1 |
|    | 419652 | AL157485  | Hs.91973  | hypothetical protein                      | 3.1 |
| 30 | 429500 | X78565    | Hs.289114 | hexabrachion (tenascin C, cytactin)       | 3.1 |
|    | 457579 | AB030816  | Hs.36761  | HRAS-like suppressor                      | 3.1 |
|    | 420579 | AA278449  | Hs.137429 | ESTs                                      | 3.1 |
|    | 408116 | AA251393  | Hs.289052 | Homo sapiens, Similar to RIKEN cDNA 5430  | 3.1 |
|    | 408247 | AA053451  | Hs.225632 | leucine zipper protein 3                  | 3.1 |
| 35 | 405183 |           |           | NM_016358*.Homo sapiens iroquois homeobo  | 3.1 |
|    | 420676 | AI434780  | Hs.4248   | vav 2 oncogene                            | 3.1 |
|    | 440286 | U29589    | Hs.7138   | cholinergic receptor, muscarinic 3        | 3.1 |
|    | 431176 | AI026984  | Hs.293662 | ESTs                                      | 3.1 |
|    | 417918 | AA209205  | Hs.163754 | hypothetical protein FLJ12606             | 3.1 |
| 40 | 437945 | T78519    |           | gb:yd68c08.r1 Soares fetal liver spleen   | 3.1 |
|    | 404632 |           |           | NM_022490:Homo sapiens hypothetical prot  | 3.1 |
|    | 428917 | AA437337  | Hs.16689  | ESTs                                      | 3.1 |
|    | 429940 | W25215    |           | gb:zb87a09.r1 Soares_senescent_fibroblas  | 3.1 |
|    | 444016 | AA448154  |           | gb:zw82h09.r1 Soares_testis_NHT Homo sap  | 3.1 |
| 45 | 430701 | AI760833  | Hs.293971 | ESTs                                      | 3.1 |
|    | 402229 | BE262804  |           | mitochondrial ribosomal protein S2        | 3.1 |
|    | 454177 | AW807321  |           | gb:MR4-ST0062-240300-003-g05 ST0062 Homo  | 3.1 |
|    | 400090 |           |           | Eos Control                               | 3.1 |
|    | 419326 | W94915    | Hs.42419  | ESTs                                      | 3.1 |
| 50 | 435644 | AA700867  | Hs.269659 | ESTs                                      | 3.1 |
|    | 433042 | AW193534  | Hs.281895 | Homo sapiens cDNA FLJ11660 fis, clone HE  | 3.1 |
|    | 456810 | BE407125  | Hs.231510 | ESTs                                      | 3.1 |
|    | 414403 | AW969551  | Hs.76064  | ribosomal protein L27a                    | 3.1 |
|    | 449670 | F07693    | Hs.85603  | Homo sapiens mRNA; cDNA DKFZp434K2172 (f  | 3.1 |
| 55 | 403288 |           |           | C1001737*.gi 7511201 pir T27904 hypothe   | 3.1 |
|    | 430535 | AW968485  |           | gb:EST380561 MAGE resequences, MAGJ Homo  | 3.1 |
|    | 455899 | BE155112  |           | gb:PM1-HT0350-151299-003-a03 HT0350 Homo  | 3.1 |
|    | 432044 | AW972727  |           | gb:EST384819 MAGE resequences, MAGL Homo  | 3.1 |
|    | 443105 | X96753    | Hs.9004   | chondroitin sulfate proteoglycan 4 (mela  | 3.1 |
| 60 | 423789 | AK002084  | Hs.132851 | hypothetical protein FLJ11222             | 3.1 |
|    | 439538 | AA837323  | Hs.56407  | ESTs                                      | 3.1 |
|    | 437681 | AI207958  | Hs.166556 | Homo sapiens, Similar to TEA domain fami  | 3.1 |
|    | 433577 | AW007080  | Hs.284192 | ESTs                                      | 3.1 |
|    | 443021 | AA368546  | Hs.8904   | Ig superfamily protein                    | 3.1 |
| 65 | 433894 | AI907682  | Hs.243293 | ESTs                                      | 3.1 |
|    | 414884 | R54418    | Hs.183745 | hypothetical protein FLJ13456             | 3.1 |
|    | 408996 | AI979168  | Hs.344096 | glycoprotein (transmembrane) nmb          | 3.1 |
|    | 449162 | AI632740  | Hs.10476  | ESTs                                      | 3.1 |
|    | 417893 | AA290605  | Hs.190002 | ESTs                                      | 3.1 |
| 70 | 433578 | BE336886  | Hs.3416   | adipose differentiation-related protein   | 3.0 |
|    | 438380 | T06430    | Hs.6194   | chondroitin sulfate proteoglycan BEHAB/b  | 3.0 |
|    | 450756 | AI733488  | Hs.144062 | ESTs                                      | 3.0 |
|    | 422631 | BE218919  | Hs.118793 | hypothetical protein FLJ10688             | 3.0 |
|    | 414733 | BE514535  | Hs.77171  | minichromosome maintenance deficient (S.  | 3.0 |
| 75 | 431019 | NM_005249 | Hs.2714   | forkhead box G1B                          | 3.0 |
|    | 434503 | T96231    | Hs.17762  | ESTs                                      | 3.0 |
|    | 455481 | AW948317  |           | gb:RC0-MT0015-280300-021-a09 MT0015 Homo  | 3.0 |
|    | 427413 | BE547647  | Hs.177781 | hypothetical protein MGC5618              | 3.0 |
|    | 414396 | BE548266  | Hs.76057  | galactose-4-epimerase, UDP-               | 3.0 |
| 80 | 458760 | AI498631  | Hs.111334 | femlin, light polypeptide                 | 3.0 |
|    | 410555 | U92649    | Hs.64311  | a disintegrin and metalloproteinase doma  | 3.0 |
|    | 411543 | AW851248  |           | gb:IL3-CT0220-160200-066-F01 CT0220 Homo  | 3.0 |
|    | 435375 | AI733610  | Hs.187832 | ESTs                                      | 3.0 |
|    | 407047 | X65965    |           | gb:H.sapiens SOD-2 gene for manganese su  | 3.0 |

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|    |        |           |           |   |     |
|----|--------|-----------|-----------|---|-----|
|    | 432065 | AA401039  | Hs.2903   | protein phosphatase 4 (formerly X), cata  | 3.0 |
|    | 443338 | R99575    | Hs.302908 | ESTs                                      | 3.0 |
|    | 433062 | AK001757  | Hs.281348 | hypothetical protein FLJ10895             | 3.0 |
|    | 412135 | AW895309  |           | gb:QV4-NN0038-300300-155-e07 NN0038 Homo  | 3.0 |
| 5  | 418669 | U85992    | Hs.87197  | Human clone IMAGE:35527 unknown protein   | 3.0 |
|    | 449385 | AI650471  | Hs.347290 | ESTs                                      | 3.0 |
|    | 426384 | AI472078  | Hs.303662 | hypothetical protein FLJ13189 (FLJ13189)  | 3.0 |
|    | 436267 | AW450938  | Hs.180115 | ESTs                                      | 3.0 |
| 10 | 440388 | AI693520  | Hs.223000 | ESTs                                      | 3.0 |
|    | 427235 | AI126288  | Hs.192232 | ESTs                                      | 3.0 |
|    | 420116 | NM_013241 | Hs.95231  | FH1/FH2 domain-containing protein         | 3.0 |
|    | 419764 | BE262524  | Hs.93183  | vasodilator-stimulated phosphoprotein     | 3.0 |
|    | 406673 | M34996    | Hs.198253 | major histocompatibility complex, class   | 3.0 |
| 15 | 445921 | AW015211  | Hs.146181 | ESTs                                      | 3.0 |
|    | 427695 | R88483    | Hs.172862 | ESTs                                      | 3.0 |
|    | 453324 | W26592    | Hs.232089 | ESTs                                      | 3.0 |
|    | 404272 |           |           | Target Exon                               | 3.0 |
|    | 428538 | AA446440  | Hs.98643  | ESTs                                      | 3.0 |
| 20 | 442786 | H50733    | Hs.258261 | ESTs, Moderately similar to ALU8_HUMAN A  | 3.0 |
|    | 444396 | T65213    | Hs.4257   | ESTs                                      | 3.0 |
|    | 440483 | AI200836  | Hs.150386 | ESTs                                      | 3.0 |
|    | 429973 | AI423317  | Hs.164680 | ESTs                                      | 3.0 |
|    | 450125 | AA005418  | Hs.158186 | ESTs                                      | 3.0 |
| 25 | 417409 | BE272506  | Hs.82109  | syndecan 1                                | 3.0 |
|    | 429569 | AA454993  | Hs.138343 | ESTs, Weakly similar to I78885 serine/th  | 3.0 |
|    | 455778 | BE088746  |           | gb:CM2-BT0693-210300-123-d09 BT0693 Homo  | 3.0 |
|    | 427954 | J03060    | Hs.247551 | metaxin 1                                 | 3.0 |
|    | 422418 | AK001383  | Hs.116385 | hypothetical protein FLJ10521             | 3.0 |
| 30 | 427527 | AI809057  | Hs.293441 | immunoglobulin heavy constant mu          | 3.0 |
|    | 416677 | T83470    | Hs.334840 | ESTs, Moderately similar to I78885 serin  | 3.0 |
|    | 451130 | AI762250  | Hs.345554 | ESTs                                      | 3.0 |
|    | 431431 | AL096711  | Hs.252953 | Human DNA sequence from clone RP3-403A15  | 3.0 |
|    | 425248 | AW957442  | Hs.252766 | ESTs                                      | 3.0 |
| 35 | 422757 | AI909935  | Hs.65551  | Homo sapiens, Similar to DNA segment, Ch  | 3.0 |
|    | 431836 | AF178532  | Hs.271411 | beta-site APP-cleaving enzyme 2           | 3.0 |
|    | 416355 | H49875    | Hs.268906 | ESTs                                      | 3.0 |
|    | 426406 | AI742501  | Hs.169756 | complement component 1, s subcomponent    | 3.0 |
| 40 | 419829 | AI924228  | Hs.115185 | ESTs, Moderately similar to PC4259 feri   | 3.0 |
|    | 412646 | NM_005825 | Hs.74368  | transmembrane protein (53kD), endoplasmic | 2.9 |
|    | 423869 | BE409301  | Hs.134012 | C1q-related factor                        | 2.9 |
|    | 422710 | AW936566  | Hs.201876 | ESTs                                      | 2.9 |
|    | 445906 | N28939    | Hs.13434  | Homo sapiens clone 24418 mRNA sequence    | 2.9 |
|    | 429751 | M55210    | Hs.214982 | laminin, gamma 1 (formerly LAMB2)         | 2.9 |
| 45 | 430413 | AW842182  | Hs.241392 | small inducible cytokine A5 (RANTES)      | 2.9 |
|    | 443433 | R44743    | Hs.301667 | ESTs                                      | 2.9 |
|    | 444145 | BE153823  | Hs.282385 | ESTs, Weakly similar to 2004399A chromos  | 2.9 |
|    | 425262 | D87119    | Hs.155418 | GS3955 protein                            | 2.9 |
|    | 442476 | AF069475  |           | gb:AF069475 Homo sapiens astrocytoma lib  | 2.9 |
| 50 | 443361 | AI792628  | Hs.133273 | ESTs                                      | 2.9 |
|    | 427144 | X95097    | Hs.2126   | vasoactive intestinal peptide receptor 2  | 2.9 |
|    | 415709 | AA649850  | Hs.278558 | ESTs                                      | 2.9 |
|    | 453385 | AW296101  | Hs.252806 | ESTs                                      | 2.9 |
|    | 442609 | AL020996  | Hs.8518   | selenoprotein N                           | 2.9 |
| 55 | 443378 | AW392550  | Hs.9280   | proteasome (prosome, macropain) subunit,  | 2.9 |
|    | 414416 | AW409985  | Hs.76084  | hypothetical protein MGC2721              | 2.9 |
|    | 443502 | AI074528  | Hs.133949 | ESTs                                      | 2.9 |
|    | 444143 | AW747996  | Hs.160999 | ESTs, Moderately similar to A56194 throm  | 2.9 |
|    | 416308 | AW291942  | Hs.23628  | 3 beta-hydroxy-delta 5-C27-steroid oxido  | 2.9 |
| 60 | 447674 | BE270640  | Hs.19192  | cyclin-dependent kinase 2                 | 2.9 |
|    | 408989 | AW361666  | Hs.49500  | KIAA0746 protein                          | 2.9 |
|    | 427418 | AA402537  | Hs.325520 | LAT1-3TM protein                          | 2.9 |
|    | 408788 | AL134947  | Hs.213956 | Homo sapiens BAC clone RP11-102Q5 from Y  | 2.9 |
|    | 426827 | AW067805  | Hs.172665 | methylene tetrahydrofolate dehydrogenase  | 2.9 |
| 65 | 403290 |           |           | C10001011*:gil4758212[ref]NP_004411.1] d  | 2.9 |
|    | 430890 | X54232    | Hs.2699   | glypican 1                                | 2.9 |
|    | 441217 | AI922183  | Hs.213246 | ESTs                                      | 2.9 |
|    | 418287 | AI872319  | Hs.78935  | methionine aminopeptidase; eIF-2-associat | 2.9 |
|    | 443836 | BE221613  | Hs.140553 | ESTs                                      | 2.9 |
| 70 | 451527 | AF022813  | Hs.26518  | transmembrane 4 superfamily member 7      | 2.9 |
|    | 418110 | R43523    | Hs.217754 | hypothetical protein FLJ22202             | 2.9 |
|    | 420886 | AA805453  |           | ESTs, Weakly similar to T29012 hypotheti  | 2.9 |
|    | 439379 | AA835002  | Hs.125611 | ESTs                                      | 2.9 |
|    | 426197 | AA004410  | Hs.100009 | acyl-Coenzyme A oxidase 1, palmitoyl      | 2.9 |
| 75 | 406679 | AA070786  |           | gb:zm66b07.r1 Stralagene neuroepithelium  | 2.9 |
|    | 454120 | AB032990  | Hs.40719  | hypothetical protein KIAA1164             | 2.9 |
|    | 457244 | AA581385  | Hs.162473 | ESTs, Weakly similar to I38022 hypotheti  | 2.9 |
|    | 432036 | AF224266  | Hs.272373 | interleukin 20                            | 2.9 |
|    | 457364 | AW971037  |           | gb:EST383123 MAGE resequences, MAGK Homo  | 2.9 |
| 80 | 437860 | AA333063  | Hs.279898 | Homo sapiens cDNA: FLJ23165 fis, clone L  | 2.9 |
|    | 453544 | AA831785  | Hs.171914 | Homo sapiens cDNA FLJ14209 fis, clone NT  | 2.9 |
|    | 454968 | AW849046  |           | gb:IL3-CT0214-150300-085-H06 CT0214 Homo  | 2.9 |
|    | 437528 | N59646    | Hs.169745 | crumbs (Drosophila) homolog 1             | 2.9 |
|    | 400850 |           |           | Target Exon                               | 2.9 |

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|----|--------|-----------|-----------|---|-----|
|    | 426896 | AW291932  | Hs.98936  | ESTs                                      | 2.9 |
|    | 426140 | AF131798  | Hs.343768 | Homo sapiens clone 25119 mRNA sequence    | 2.9 |
|    | 408872 | AI476139  | Hs.13291  | ESTs                                      | 2.9 |
| 5  | 414799 | AI752416  | Hs.77326  | insulin-like growth factor binding prote  | 2.9 |
|    | 406646 | M33600    | Hs.308026 | major histocompatibility complex, class   | 2.9 |
|    | 416569 | H64891    |           | gb:yr68h03.r1 Soares fetal liver spleen   | 2.9 |
|    | 439130 | AA306090  | Hs.124707 | ESTs                                      | 2.9 |
|    | 451433 | AA021140  | Hs.269265 | ESTs, Weakly similar to A46010 X-linked   | 2.9 |
| 10 | 430314 | AA369601  | Hs.239138 | pre-B-cell colony-enhancing factor        | 2.9 |
|    | 424308 | AW975531  | Hs.154443 | minichromosome maintenance deficient (S.  | 2.9 |
|    | 420172 | AA601122  | Hs.95655  | secreted and transmembrane 1              | 2.9 |
|    | 442485 | BE092285  | Hs.29724  | hypothetical protein FLJ13187             | 2.9 |
|    | 416505 | H66470    | Hs.16004  | ESTs                                      | 2.9 |
| 15 | 415198 | AW009480  | Hs.943    | natural killer cell transcript 4          | 2.9 |
|    | 420674 | NM_000055 | Hs.1327   | butyrylcholinesterase                     | 2.9 |
|    | 452139 | AA099969  | Hs.16331  | Homo sapiens cDNA: FLJ21482 fis, clone C  | 2.8 |
|    | 447499 | AW262580  | Hs.147674 | protocadherin beta 16                     | 2.8 |
|    | 411373 | BE326276  | Hs.8861   | ESTs                                      | 2.8 |
| 20 | 456816 | AK001509  | Hs.144391 | hypothetical protein FLJ10647             | 2.8 |
|    | 414232 | W86946    | Hs.238246 | hypothetical protein FLJ22479             | 2.8 |
|    | 416188 | BE157260  | Hs.79070  | v-myc avian myelocytomatosis viral oncog  | 2.8 |
|    | 447733 | AF157482  | Hs.19400  | MAD2 (mitotic arrest deficient, yeast, h  | 2.8 |
|    | 438624 | AA889055  | Hs.123468 | ESTs                                      | 2.8 |
| 25 | 452102 | U04343    | Hs.27954  | CD86 antigen (CD28 antigen ligand 2, B7-  | 2.8 |
|    | 408716 | AI567839  | Hs.151714 | Homo sapiens mRNA for KIAA1769 protein,   | 2.8 |
|    | 424028 | AF055084  | Hs.153692 | Homo sapiens cDNA FLJ14354 fis, clone Y7  | 2.8 |
|    | 421679 | AI475110  | Hs.203933 | ESTs                                      | 2.8 |
|    | 450651 | W79000    | Hs.44545  | ESTs, Weakly similar to B34087 hypothe    | 2.8 |
| 30 | 452785 | AL359942  | Hs.296434 | erythroid differentiation and denucleati  | 2.8 |
|    | 432842 | AW674093  | Hs.334822 | hypothetical protein MGC4485              | 2.8 |
|    | 403291 |           |           | Target Exon                               | 2.8 |
|    | 453096 | AW294631  | Hs.11325  | ESTs                                      | 2.8 |
| 35 | 422545 | X02761    | Hs.287820 | fibronectin 1                             | 2.8 |
|    | 440296 | D30829    | Hs.180610 | splicing factor proline/glutamine rich (  | 2.8 |
|    | 427154 | AL137262  | Hs.325630 | hypothetical protein MGC4289              | 2.8 |
|    | 422282 | AF019225  | Hs.114309 | apolipoprotein L                          | 2.8 |
|    | 434868 | R50032    | Hs.159263 | collagen, type VI, alpha 2                | 2.8 |
| 40 | 414727 | BE466904  | Hs.190162 | gb:h28f03.x1 NC1_CGAP_GC6 Homo sapiens    | 2.8 |
|    | 437437 | AA226869  |           | hypothetical protein DKFZp762L0311        | 2.8 |
|    | 427722 | AK000123  | Hs.180479 | hypothetical protein FLJ20115             | 2.8 |
|    | 443623 | AA345519  | Hs.9641   | complement component 1, q subcomponent,   | 2.8 |
|    | 444006 | BE395085  | Hs.10086  | type I transmembrane protein Fn14         | 2.8 |
|    | 448432 | AI783586  | Hs.208575 | ESTs                                      | 2.8 |
| 45 | 453682 | T79703    |           | gb:yd71e08.r1 Soares fetal liver spleen   | 2.8 |
|    | 447527 | AI702896  | Hs.42091  | ESTs                                      | 2.8 |
|    | 418557 | BE140602  | Hs.246645 | ESTs                                      | 2.8 |
|    | 409157 | AA064631  |           | gb:zf72c03.s1 Soares_pineal_gland_N3HPG   | 2.8 |
|    | 457653 | AI820719  | Hs.154662 | DnaJ (Hsp40) homolog, subfamily A, membe  | 2.8 |
| 50 | 456908 | AI953671  | Hs.220994 | hypothetical protein FLJ14129             | 2.8 |
|    | 439220 | AW295340  | Hs.130417 | ESTs, Weakly similar to Z195_HUMAN ZINC   | 2.8 |
|    | 418312 | AW972468  | Hs.170307 | Rai guanine nucleotide exchange factor R  | 2.8 |
|    | 454581 | AW809189  |           | gb:MR4-ST0118-261099-012-e10 ST0118 Homo  | 2.8 |
|    | 419169 | AW851980  | Hs.262346 | ESTs, Weakly similar to S72482 hypothe    | 2.8 |
| 55 | 400645 |           |           | Target Exon                               | 2.8 |
|    | 413951 | AW051200  | Hs.75640  | natriuretic peptide precursor A           | 2.8 |
|    | 441360 | AI091713  | Hs.106597 | Homo sapiens, Similar to RIKEN cDNA 1110  | 2.8 |
|    | 404150 |           |           | Target Exon                               | 2.8 |
|    | 402936 |           |           | ENSP000000217246*.DJ803K15.1 (novel prote | 2.8 |
| 60 | 454457 | AW753456  |           | gb:QV2-CT0261-261099-011-d11 CT0261 Homo  | 2.8 |
|    | 439544 | W26354    | Hs.28891  | hypothetical protein FLJ11360; artemis p  | 2.8 |
|    | 403969 |           |           | ENSP00000034663:Zinc finger protein 131   | 2.8 |
|    | 447183 | AI554733  | Hs.173182 | ESTs                                      | 2.8 |
|    | 446566 | H95741    | Hs.17914  | membrane-spanning 4-domains, subfamily A  | 2.8 |
| 65 | 426141 | C06886    | Hs.293972 | ESTs                                      | 2.8 |
|    | 440146 | AW014231  | Hs.90790  | Homo sapiens cDNA: FLJ22930 fis, clone K  | 2.8 |
|    | 430335 | D80007    | Hs.239499 | KIAA0185 protein                          | 2.8 |
|    | 447071 | AW236867  | Hs.244376 | ESTs                                      | 2.8 |
|    | 428899 | AA744610  | Hs.194431 | palladin                                  | 2.8 |
| 70 | 400658 |           |           | ENSP00000237081*KIAA1217 PROTEIN (FRAGM   | 2.8 |
|    | 403942 |           |           | Target Exon                               | 2.8 |
|    | 420565 | AI806770  | Hs.30258  | ESTs                                      | 2.8 |
|    | 409734 | BE161664  | Hs.56155  | hypothetical protein                      | 2.8 |
|    | 456645 | AF227156  | Hs.110103 | RNA polymerase I transcription factor RR  | 2.8 |
| 75 | 401841 |           |           | NM_015113:Homo sapiens KIAA0399 protein   | 2.8 |
|    | 447247 | AW369351  | Hs.287955 | Homo sapiens cDNA FLJ13090 fis, clone NT  | 2.8 |
|    | 450150 | AI754391  | Hs.23510  | Kruppel-like factor 12                    | 2.8 |
|    | 409154 | U72882    | Hs.50842  | interferon-induced protein 35             | 2.8 |
|    | 410267 | AW978005  | Hs.12600  | N-ethylmaleimide-sensitive factor attach  | 2.8 |
| 80 | 448224 | R48700    | Hs.20733  | Homo sapiens cDNA: FLJ22356 fis, clone H  | 2.8 |
|    | 410268 | AA316181  | Hs.61635  | six transmembrane epithelial antigen of   | 2.8 |
|    | 447512 | AW958148  | Hs.129454 | ESTs                                      | 2.8 |
|    | 417749 | U09196    | Hs.82520  | polymerase (DNA-directed), delta 4        | 2.8 |
|    | 415293 | R49462    | Hs.106541 | ESTs                                      | 2.8 |

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|    | 416207 | NM_014745 | Hs.79077  | Homo sapiens, clone MGC:2908. mRNA, comp | 2.8 |
|    | 423337 | NM_004655 | Hs.127337 | axin 2 (conductin, axil)                 | 2.8 |
|    | 425128 | BE561929  | Hs.154718 | tumor protein D52-like 2                 | 2.7 |
|    | 444491 | AI151091  | Hs.270714 | ESTs                                     | 2.7 |
| 5  | 428311 | NM_005651 | Hs.183671 | tryptophan 2,3-dioxygenase               | 2.7 |
|    | 430377 | NM_001922 | Hs.301865 | dopachrome tautomerase (dopachrome delta | 2.7 |
|    | 417944 | AU077196  | Hs.82985  | collagen, type V, alpha 2                | 2.7 |
|    | 444153 | AK001610  | Hs.10414  | hypothetical protein FLJ10748            | 2.7 |
| 10 | 438138 | R98299    | Hs.177502 | ESTs                                     | 2.7 |
|    | 425421 | L11669    | Hs.157145 | tetracycline transporter-like protein    | 2.7 |
|    | 431070 | AW408164  | Hs.249184 | transcription factor 19 (SC1)            | 2.7 |
|    | 451748 | AK001612  | Hs.25962  | Homo sapiens cDNA FLJ10750 fis, clone NT | 2.7 |
|    | 452085 | AW239140  | Hs.25514  | ESTs, Weakly similar to PC4396 mucin 3 T | 2.7 |
|    | 405941 |           |           | Target Exon                              | 2.7 |
| 15 | 417395 | BE564245  | Hs.82084  | integrin beta 3 binding protein (beta3-e | 2.7 |
|    | 449667 | AB023227  | Hs.23860  | KIAA1010 protein                         | 2.7 |
|    | 428808 | AA436007  | Hs.188780 | ESTs                                     | 2.7 |
|    | 425843 | BE313280  | Hs.159627 | death associated protein 3               | 2.7 |
| 20 | 438025 | AW501360  | Hs.258910 | ESTs                                     | 2.7 |
|    | 400924 |           |           | Target Exon                              | 2.7 |
|    | 412898 | AI129903  | Hs.74669  | vesicle-associated membrane protein 5 (m | 2.7 |
|    | 413634 | BE296896  | Hs.224179 | ESTs, Weakly similar to I38022 hypotheti | 2.7 |
|    | 453785 | AI368236  | Hs.283732 | ESTs, Moderately similar to ALU1_HUMAN A | 2.7 |
| 25 | 406736 | AI254733  | Hs.182426 | ribosomal protein S2                     | 2.7 |
|    | 414280 | BE410769  | Hs.75873  | zyxin                                    | 2.7 |
|    | 434203 | BE262677  | Hs.283558 | hypothetical protein PRO1855             | 2.7 |
|    | 442621 | AI004333  | Hs.130553 | ESTs, Weakly similar to ALUA_HUMAN !!!!  | 2.7 |
|    | 414591 | AI888490  | Hs.55902  | ESTs, Weakly similar to ALU8_HUMAN ALU S | 2.7 |
| 30 | 416547 | H62914    | Hs.268946 | ESTs, Weakly similar to PC4259 ferritin  | 2.7 |
|    | 416784 | AA334592  | Hs.79914  | lumican                                  | 2.7 |
|    | 413851 | AW897510  | Hs.137387 | ESTs                                     | 2.7 |
|    | 451767 | AI625014  | Hs.187328 | ESTs                                     | 2.7 |
|    | 441668 | AI611973  | Hs.136313 | ESTs                                     | 2.7 |
| 35 | 435664 | AI032087  | Hs.269819 | ESTs                                     | 2.7 |
|    | 435046 | AA662772  | Hs.174330 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 2.7 |
|    | 439467 | AW292275  | Hs.158365 | ESTs                                     | 2.7 |
|    | 441329 | AI203575  | Hs.46821  | hypothetical protein FLJ20086            | 2.7 |
|    | 426925 | NM_001196 | Hs.315689 | Homo sapiens cDNA: FLJ22373 fis, clone H | 2.7 |
| 40 | 427241 | AA399988  | Hs.112087 | Human DNA sequence from clone RP11-530N1 | 2.7 |
|    | 449919 | AI674685  | Hs.200141 | ESTs                                     | 2.7 |
|    | 458070 | AW503578  | Hs.209406 | ESTs, Weakly similar to I38600 zinc fing | 2.7 |
|    | 444794 | AI419991  | Hs.145225 | ESTs                                     | 2.7 |
|    | 410781 | AI375672  | Hs.165028 | ESTs                                     | 2.7 |
| 45 | 449520 | R34993    | Hs.226666 | ESTs, Moderately similar to I54374 gene  | 2.7 |
|    | 439481 | AF086294  | Hs.125844 | ESTs                                     | 2.7 |
|    | 401702 |           |           | NM_001171*:Homo sapiens ATP-binding cass | 2.7 |
|    | 432890 | NM_014442 | Hs.279751 | sialic acid binding Ig-like lectin 8     | 2.7 |
|    | 435545 | AA687415  | Hs.28107  | ESTs                                     | 2.7 |
| 50 | 416422 | H60457    |           | ESTs, Moderately similar to ZN91_HUMAN Z | 2.7 |
|    | 429415 | NM_002593 | Hs.202097 | procollagen C-endopeptidase enhancer     | 2.7 |
|    | 420982 | AW576160  | Hs.100729 | KIAA0692 protein                         | 2.7 |
|    | 431421 | AW969118  | Hs.108144 | ESTs, Weakly similar to unnamed protein  | 2.7 |
|    | 444168 | AW379879  |           | gb:RC1-HT0256-081199-011-f01 HT0256 Homo | 2.7 |
| 55 | 419964 | AA811657  | Hs.220913 | ESTs                                     | 2.7 |
|    | 424480 | AA341442  | Hs.205299 | ESTs                                     | 2.7 |
|    | 436314 | AI983409  | Hs.189226 | ESTs                                     | 2.7 |
|    | 405516 |           |           | ENSP00000200457*:Thyroid receptor intera | 2.7 |
|    | 449340 | AW235786  | Hs.195359 | hypothetical protein MGC10954            | 2.7 |
| 60 | 457876 | AI821940  |           | ESTs, Moderately similar to ALU8_HUMAN A | 2.7 |
|    | 423799 | AW026300  | Hs.132906 | 19A24 protein                            | 2.7 |
|    | 422551 | AW967284  |           | gb:EST379359 MAGE resequences, MAGJ Homo | 2.7 |
|    | 404592 |           |           | NM_022739*:Homo sapiens E3 ubiquitin lig | 2.7 |
|    | 424200 | AA337221  |           | gb:EST41944 Endometrial tumor Homo sapie | 2.7 |
| 65 | 428612 | AA770001  | Hs.188778 | ESTs                                     | 2.7 |
|    | 446139 | H77395    | Hs.39749  | ESTs                                     | 2.7 |
|    | 440478 | AI733047  | Hs.130005 | ESTs                                     | 2.7 |
|    | 429612 | AF062649  | Hs.252587 | pituitary tumor-transforming 1           | 2.7 |
|    | 422530 | AW972300  | Hs.118110 | bone marrow stromal cell antigen 2       | 2.7 |
| 70 | 423713 | AW754182  |           | gb:RC2-CT0321-131199-011-c01 CT0321 Homo | 2.7 |
|    | 402032 |           |           | ENSP00000251056*:Plasma membrane calcium | 2.7 |
|    | 424186 | AI536021  | Hs.288706 | Homo sapiens cDNA FLJ10281 fis, clone HE | 2.7 |
|    | 402799 |           |           | Target Exon                              | 2.7 |
|    | 423352 | AA324808  | Hs.193576 | ESTs                                     | 2.7 |
| 75 | 412021 | AW885592  |           | gb:RC4-OT0071-090300-011-g11 OT0071 Homo | 2.7 |
|    | 458617 | Z25900    | Hs.18724  | Homo sapiens mRNA: cDNA DKFZp564F093 (fr | 2.7 |
|    | 404170 |           |           | NM_000636*:Homo sapiens superoxide dismu | 2.7 |
|    | 410886 | AW809324  |           | gb:MR4-ST0121-141099-010-G06_1 ST0121 Ho | 2.7 |
|    | 414988 | C17535    |           | gb:C17535 Human placenta cDNA (TFujiwara | 2.7 |
| 80 | 450325 | AI935962  | Hs.26289  | ESTs                                     | 2.7 |
|    | 458918 | H56499    | Hs.252692 | ESTs, Weakly similar to I38022 hypotheti | 2.7 |
|    | 405760 |           |           | Target Exon                              | 2.7 |
|    | 406789 | AI041403  |           | ribosomal protein L29                    | 2.7 |
|    | 424686 | AA345504  |           | gb:EST51529 Gall bladder II Homo sapiens | 2.7 |

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|----|--------|-----------|-----------|---|-----|
|    | 400335 | Y13187    | Hs.248068 | Homo sapiens dmd gene, intron 11          | 2.7 |
|    | 435065 | BE064391  |           | gb:RC4-BT0310-110300-015-b08 BT0310 Homo  | 2.7 |
|    | 419373 | NM_003244 | Hs.90077  | TG-interacting factor (TALE family homeo  | 2.7 |
|    | 406785 | AA588061  |           | gb:nk10d03.s1 NCL_CGAP_Co2 Homo sapiens   | 2.7 |
| 5  | 433006 | BE242758  | Hs.190223 | ESTs, Moderately similar to T29285 hypot  | 2.7 |
|    | 428690 | AI948490  | Hs.98765  | ESTs                                      | 2.7 |
|    | 432692 | AW974944  | Hs.200577 | ESTs                                      | 2.7 |
|    | 439699 | AF086534  | Hs.187561 | ESTs, Moderately similar to ALU1_HUMAN A  | 2.7 |
|    | 452811 | AA937079  | Hs.118983 | hypothetical protein FLJ12150             | 2.6 |
| 10 | 457035 | AA398074  | Hs.119143 | ESTs, Moderately similar to KIAA1513 pro  | 2.6 |
|    | 427725 | U66839    | Hs.180533 | mitogen-activated protein kinase kinase   | 2.6 |
|    | 433681 | AI004377  | Hs.200360 | Homo sapiens cDNA FLJ13027 fis, clone NT  | 2.6 |
|    | 423748 | AI149048  | Hs.30211  | hypothetical protein FLJ22313             | 2.6 |
|    | 422764 | AI767727  | Hs.47522  | ESTs                                      | 2.6 |
| 15 | 403431 |           |           | Target Exon                               | 2.6 |
|    | 439332 | AW842747  | Hs.300870 | Homo sapiens mRNA; cDNA DKFZp547M072 (fr  | 2.6 |
|    | 412749 | AA378417  | Hs.74564  | signal sequence receptor, beta (transloc  | 2.6 |
|    | 409703 | NM_006187 | Hs.56009  | Z'-5'-oligoadenylate synthetase 3 (100 k  | 2.6 |
|    | 405717 |           |           | CX000838:gil10092633[ref NP_055314.1] pu  | 2.6 |
| 20 | 426503 | AA380153  |           | gb:EST93093 Skin tumor I Homo sapiens cD  | 2.6 |
|    | 414039 | M83221    | Hs.858    | v-rel avian reticuloendotheliosis viral   | 2.6 |
|    | 452683 | AI089575  | Hs.9071   | progesterone membrane binding protein     | 2.6 |
|    | 447587 | AW292139  | Hs.115789 | ESTs                                      | 2.6 |
|    | 408605 | AF025374  | Hs.46465  | T-cell, immune regulator 1                | 2.6 |
| 25 | 407103 | AA424881  | Hs.256301 | hypothetical protein MGC13170             | 2.6 |
|    | 427395 | AW298741  | Hs.97861  | ESTs, Moderately similar to I38022 hypot  | 2.6 |
|    | 435113 | AA665469  | Hs.117136 | ESTs                                      | 2.6 |
|    | 419015 | T79262    | Hs.14463  | ESTs                                      | 2.6 |
|    | 427648 | AI376722  | Hs.180062 | proteasome (prosome, macropain) subunit,  | 2.6 |
| 30 | 453707 | AW003879  | Hs.126522 | Homo sapiens, clone MGC:16722, mRNA, com  | 2.6 |
|    | 411927 | BE274009  | Hs.772    | glycogen synthase 1 (muscle)              | 2.6 |
|    | 404053 |           |           | Target Exon                               | 2.6 |
|    | 415069 | AA159831  | Hs.29286  | ESTs, Weakly similar to I49636 DNA-bindi  | 2.6 |
| 35 | 449625 | NM_014253 |           | odz (odd Oz/ten-m, Drosophila) homolog 1  | 2.6 |
|    | 438033 | T26483    | Hs.6059   | EGF-containing fibulin-like extracellular | 2.6 |
|    | 451593 | AF151879  | Hs.26706  | CGI-121 protein                           | 2.6 |
|    | 435828 | AA700705  | Hs.13852  | ESTs                                      | 2.6 |
|    | 443753 | AW367578  | Hs.134749 | ESTs                                      | 2.6 |
|    | 416097 | BE387371  | Hs.118964 | hypothetical protein FLJ20085             | 2.6 |
| 40 | 413986 | Z43567    |           | gb:HSC1FC021 normalized infant brain cDN  | 2.6 |
|    | 439755 | AW748482  | Hs.77873  | B7 homolog 3                              | 2.6 |
|    | 408371 | AF161545  | Hs.44439  | hypothetical protein                      | 2.6 |
|    | 445658 | AI469062  | Hs.172660 | ESTs                                      | 2.6 |
|    | 438166 | N30158    | Hs.122645 | ESTs                                      | 2.6 |
| 45 | 449426 | T92251    | Hs.198882 | ESTs                                      | 2.6 |
|    | 422605 | H16646    | Hs.118666 | hypothetical protein PP591                | 2.6 |
|    | 415788 | AW628686  | Hs.78851  | KIAA0217 protein                          | 2.6 |
|    | 448966 | AW372914  | Hs.86149  | phosphoinositol 3-phosphate-binding prot  | 2.6 |
| 50 | 400295 | W72838    |           | AI905687:IL-BT095-190199-019 BT095 Homo   | 2.6 |
|    | 441128 | AA570256  |           | ESTs, Weakly similar to T23273 hypotheti  | 2.6 |
|    | 420372 | AW960049  | Hs.293660 | Homo sapiens, clone IMAGE:3535476, mRNA,  | 2.6 |
|    | 428977 | AK001404  | Hs.194698 | cyclin B2                                 | 2.6 |
|    | 424278 | AK000723  | Hs.144517 | hypothetical protein FLJ20716             | 2.6 |
|    | 445211 | BE045601  | Hs.118248 | ESTs, Weakly similar to YC18_HUMAN HYPOT  | 2.6 |
| 55 | 412715 | NM_000947 | Hs.74519  | primase, polypeptide 2A (58kD)            | 2.6 |
|    | 417838 | R24713    | Hs.22514  | ESTs                                      | 2.6 |
|    | 420670 | AW973577  |           | ESTs                                      | 2.6 |
|    | 403267 |           |           | Target Exon                               | 2.6 |
| 60 | 454354 | AW389896  |           | gb:RC4-ST0173-191099-032-e12 ST0173 Homo  | 2.6 |
|    | 452903 | AI953425  | Hs.345291 | ESTs, Weakly similar to I38022 hypotheti  | 2.6 |
|    | 427830 | AA416598  | Hs.98233  | ESTs                                      | 2.6 |
|    | 435953 | AI767087  | Hs.114142 | ESTs                                      | 2.6 |
|    | 430744 | AA485229  | Hs.105649 | ESTs                                      | 2.6 |
|    | 413335 | AI613318  | Hs.48442  | ESTs                                      | 2.6 |
| 65 | 416370 | N90470    | Hs.203697 | ESTs, Weakly similar to I38022 hypotheti  | 2.6 |
|    | 431865 | AA521106  | Hs.136375 | ESTs, Weakly similar to S65824 reverse t  | 2.6 |
|    | 434274 | AA628539  | Hs.116252 | ESTs, Moderately similar to ALU1_HUMAN A  | 2.6 |
|    | 447854 | AW138454  | Hs.11594  | ESTs                                      | 2.6 |
| 70 | 412799 | AI267606  |           | gb:aq91h03.x1 Stanley Frontal SB pool 1   | 2.6 |
|    | 455409 | AW936832  |           | gb:PM2-DT0023-050400-003-h03 DT0023 Homo  | 2.6 |
|    | 408212 | AA297567  | Hs.43728  | hypothetical protein                      | 2.6 |
|    | 453055 | AW291436  | Hs.31917  | Homo sapiens, clone MGC:9658, mRNA, comp  | 2.6 |
|    | 443539 | AI076182  | Hs.134074 | ESTs, Moderately similar to ALU6_HUMAN A  | 2.6 |
|    | 434898 | AW500458  | Hs.29956  | KIAA0460 protein                          | 2.6 |
| 75 | 438118 | AW753311  | Hs.346690 | ESTs                                      | 2.6 |
|    | 431786 | AW452784  | Hs.220718 | ESTs                                      | 2.6 |
|    | 421689 | N87820    | Hs.106826 | KIAA1696 protein                          | 2.6 |
|    | 429597 | NM_003816 | Hs.2442   | a disintegrin and metalloproteinase doma  | 2.6 |
| 80 | 424684 | AW752714  | Hs.5174   | ribosomal protein S17                     | 2.6 |
|    | 439823 | AW665287  | Hs.124514 | ESTs                                      | 2.6 |
|    | 411962 | AA099050  |           | gb:zk85d12.r1 Soares_pregnant_uterus_Nbh  | 2.6 |
|    | 445774 | AI254165  | Hs.339968 | ESTs                                      | 2.6 |
|    | 400492 |           |           | C10001573:gil7302749[gb]AAF57827.1] (AE   | 2.6 |

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|----|--------|-----------|-----------|--|-----|
|    | 450625 | AW970107  |           | gb:EST382188 MAGE resequences, MAGK Homo | 2.6 |
|    | 426931 | NM_003416 | Hs.2076   | zinc finger protein 7 (KOX 4, clone HF.1 | 2.6 |
|    | 440131 | A1023425  | Hs.222225 | ESTs                                     | 2.6 |
|    | 438525 | AW368528  | Hs.100855 | ESTs                                     | 2.6 |
| 5  | 412247 | AF022375  | Hs.73793  | vascular endothelial growth factor       | 2.6 |
|    | 406662 | X62006    | Hs.172550 | polypyrimidine tract binding protein (he | 2.6 |
|    | 443725 | AW245680  | Hs.9701   | growth arrest and DNA-damage-inducible,  | 2.6 |
|    | 402260 |           |           | NM_001436*:Homo sapiens fibrinogen (FBL  | 2.6 |
|    | 429599 | AA806106  | Hs.123664 | ESTs                                     | 2.6 |
| 10 | 429562 | A1732767  | Hs.158101 | Homo sapiens cDNA FLJ14673 fis, clone NT | 2.6 |
|    | 432527 | AW975028  | Hs.102754 | ESTs                                     | 2.6 |
|    | 434420 | AA688278  | Hs.194864 | hypothetical protein FLJ22578            | 2.6 |
|    | 452732 | BE300078  | Hs.80449  | Homo sapiens, clone IMAGE:3535294, mRNA, | 2.6 |
|    | 424408 | A1754813  | Hs.146428 | collagen, type V, alpha 1                | 2.6 |
| 15 | 413151 | H47969    | Hs.141971 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 2.6 |
|    | 416244 | N39535    | Hs.32748  | ESTs                                     | 2.6 |
|    | 403104 |           |           | C8000064*gi10432393 emb CAC10283.1  (A   | 2.6 |
|    | 400780 |           |           | NM_007325*:Homo sapiens glutamate recept | 2.6 |
| 20 | 433009 | AA761668  |           | gb:nz24c08.s1 NCI_CGAP_GCB1 Homo sapiens | 2.6 |
|    | 424090 | X99699    | Hs.139262 | XIAP associated factor-1                 | 2.6 |
|    | 403212 |           |           | NM_019595:Homo sapiens intersecin 2 (IT  | 2.6 |
|    | 407855 | R54126    | Hs.40500  | similar to S. cerevisiae RER1            | 2.6 |
|    | 406849 | AA454809  | Hs.172928 | collagen, type I, alpha 1                | 2.6 |
|    | 443462 | A1064690  | Hs.171176 | ESTs                                     | 2.6 |
| 25 | 439963 | AW247529  | Hs.6793   | platelet-activating factor acetylhydrola | 2.6 |
|    | 450089 | A1681883  | Hs.209546 | ESTs, Weakly similar to 2109260A B cell  | 2.6 |
|    | 419571 | AW674962  | Hs.91146  | protein kinase D2                        | 2.6 |
|    | 448140 | AF146761  | Hs.20450  | BCM-like membrane protein precursor      | 2.6 |
|    | 444881 | A1623288  | Hs.192805 | ESTs                                     | 2.6 |
| 30 | 420658 | AW965215  | Hs.130707 | ESTs                                     | 2.6 |
|    | 437634 | AW293046  | Hs.255158 | ESTs                                     | 2.6 |
|    | 426894 | A1204209  | Hs.143911 | ESTs                                     | 2.6 |
|    | 428467 | AK002121  | Hs.184465 | hypothetical protein FLJ11259            | 2.6 |
|    | 434171 | BE247688  | Hs.347349 | KIAA0948 protein                         | 2.6 |
| 35 | 410174 | AA306007  | Hs.59461  | DKFZP434C245 protein                     | 2.6 |
|    | 427245 | AA421022  | Hs.97739  | ESTs                                     | 2.5 |
|    | 437085 | AA743935  | Hs.202329 | ESTs                                     | 2.5 |
|    | 400362 | AF068294  | Hs.272414 | Homo sapiens HDCMB45P mRNA, partial cds  | 2.5 |
| 40 | 452221 | C21322    | Hs.288057 | hypothetical protein FLJ22242            | 2.5 |
|    | 439079 | AF085937  | Hs.38348  | ESTs                                     | 2.5 |
|    | 437287 | AA748180  | Hs.159346 | hypothetical protein FLJ21369            | 2.5 |
|    | 411852 | AA528140  | Hs.107515 | ESTs, Weakly similar to T00329 hypotheti | 2.5 |
|    | 427624 | AA406245  | Hs.24895  | ESTs                                     | 2.5 |
|    | 435177 | A1018174  | Hs.42936  | ESTs                                     | 2.5 |
| 45 | 449433 | A1672096  | Hs.9012   | ESTs, Weakly similar to S26650 DNA-bindi | 2.5 |
|    | 447853 | A1434204  | Hs.164285 | ESTs, Weakly similar to AFG1_YEAST AFG1  | 2.5 |
|    | 416704 | H77795    | Hs.39785  | ESTs                                     | 2.5 |
|    | 401696 |           |           | Target Exon                              | 2.5 |
|    | 445677 | H96577    | Hs.6838   | ras homolog gene family, member E        | 2.5 |
| 50 | 413840 | A1301558  | Hs.146381 | RNA binding motif protein, X chromosome  | 2.5 |
|    | 437916 | BE566249  | Hs.20999  | hypothetical protein FLJ23142            | 2.5 |
|    | 420289 | N55394    | Hs.96398  | 8-oxoguanine DNA glycosylase             | 2.5 |
|    | 421848 | X15880    | Hs.108885 | collagen, type VI, alpha 1               | 2.5 |
|    | 421234 | AA907153  | Hs.190060 | ESTs                                     | 2.5 |
| 55 | 414598 | A1094221  | Hs.135150 | lung type-I cell membrane-associated gly | 2.5 |
|    | 420162 | BE378432  | Hs.95577  | cyclin-dependent kinase 4                | 2.5 |
|    | 458199 | AW136417  |           | hypothetical protein FLJ14464            | 2.5 |
|    | 433523 | H29882    |           | ESTs                                     | 2.5 |
|    | 429125 | AA446854  | Hs.271004 | ESTs, Weakly similar to I38022 hypotheti | 2.5 |
| 60 | 418399 | AF131781  | Hs.84753  | hypothetical protein FLJ12442            | 2.5 |
|    | 404748 |           |           | ENSP00000238177*:Similar to kynurenine 3 | 2.5 |
|    | 413507 | BE145360  | Hs.190064 | ESTs, Weakly similar to I38022 hypotheti | 2.5 |
|    | 418886 | AA993982  | Hs.130858 | ESTs                                     | 2.5 |
|    | 429359 | W00482    | Hs.2399   | matrix metalloproteinase 14 (membrane-in | 2.5 |
| 65 | 452367 | U71207    | Hs.29279  | eyes absent (Drosophila) homolog 2       | 2.5 |
|    | 436258 | AW867491  | Hs.107125 | plasmalemma vesicle associated protein   | 2.5 |
|    | 459527 | AW977556  | Hs.291735 | ESTs, Weakly similar to I78885 serine/th | 2.5 |
|    | 450543 | A1394037  | Hs.170296 | Homo sapiens cDNA: FLJ22090 fis, clone H | 2.5 |
|    | 434818 | AA650097  | Hs.5996   | ESTs                                     | 2.5 |
| 70 | 444534 | AW271626  | Hs.42294  | ESTs                                     | 2.5 |
|    | 452113 | A1859393  |           | gb:wm11a02.x1 NCI_CGAP_U14 Homo sapiens  | 2.5 |
|    | 429115 | AA446728  | Hs.289020 | Homo sapiens cDNA FLJ14098 fis, clone MA | 2.5 |
|    | 434012 | AA621425  | Hs.186256 | ESTs                                     | 2.5 |
|    | 447143 | AW292408  | Hs.152290 | ESTs, Highly similar to JC2463 vasoactiv | 2.5 |
| 75 | 449505 | A1653006  | Hs.195374 | ESTs                                     | 2.5 |
|    | 419817 | AA743434  | Hs.193778 | ESTs                                     | 2.5 |
|    | 457986 | AA781745  | Hs.126920 | Homo sapiens, clone IMAGE:4299555, mRNA, | 2.5 |
|    | 431454 | AW975980  | Hs.292918 | ESTs                                     | 2.5 |
|    | 425018 | BE245277  | Hs.154196 | E4F transcription factor 1               | 2.5 |
| 80 | 427513 | A1476318  | Hs.192480 | ESTs                                     | 2.5 |
|    | 441318 | A1078234  | Hs.176130 | ESTs                                     | 2.5 |
|    | 424830 | AW270580  | Hs.189311 | ESTs, Weakly similar to putative p150 [H | 2.5 |
|    | 414271 | AK000275  | Hs.75871  | protein kinase C binding protein 1       | 2.5 |



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|    | 446089 | AI860021  | Hs.345028 | ESTs, Moderately similar to A47582 B-cel   | 2.5 |
|    | 415983 | AI436798  | Hs.117078 | Homo sapiens cDNA: FLJ23028 fis, clone L   | 2.5 |
|    | 408292 | AW178363  |           | gb:RC3-HT0105-010999-002-H06 HT0105 Homo   | 2.5 |
| 5  | 446862 | AV660697  | Hs.282700 | ESTs                                       | 2.5 |
|    | 448970 | AW138582  |           | gb:U1-H-B1-1-acw-a-06-0-U1.s1 NCL_CGAP_Su  | 2.5 |
|    | 459200 | Y09306    | Hs.30148  | homeodomain-interacting protein kinase 3   | 2.5 |
|    | 422627 | BE336857  | Hs.118787 | transforming growth factor, beta-induced   | 2.5 |
|    | 433388 | AI432672  | Hs.288539 | hypothetical protein FLJ22191              | 2.5 |
| 10 | 436222 | AI208737  | Hs.122810 | Homo sapiens cDNA FLJ11489 fis, clone HE   | 2.5 |
|    | 441255 | R06350    | Hs.171635 | ESTs                                       | 2.5 |
|    | 441627 | AA947552  | Hs.58086  | branched chain aminotransferase 1, cytos   | 2.5 |
|    | 438714 | AA814859  | Hs.294112 | ESTs                                       | 2.5 |
|    | 441020 | W79283    | Hs.35962  | ESTs                                       | 2.5 |
| 15 | 418291 | BE300369  | Hs.289038 | hypothetical protein MCC4126               | 2.5 |
|    | 434267 | AI206589  | Hs.116243 | ESTs                                       | 2.5 |
|    | 446821 | W03766    |           | tropomodulin 3 (ubiquitous)                | 2.5 |
|    | 406265 |           |           | C1003844*gi6912550 ref NP_036483.1  of     | 2.5 |
|    | 416845 | H95279    | Hs.293788 | gb:yu20h02.s1 Soares fetal liver spleen    | 2.5 |
| 20 | 408253 | AW807476  | Hs.21051  | Homo sapiens mRNA for FLJ00012 protein,    | 2.5 |
|    | 444884 | AI201094  | Hs.148540 | ESTs                                       | 2.5 |
|    | 440826 | AW383618  | Hs.346256 | ESTs, Moderately similar to ALU2_HUMAN A   | 2.5 |
|    | 431374 | BE258532  | Hs.251871 | CTP synthase                               | 2.5 |
|    | 458093 | AI207788  | Hs.343628 | sialyltransferase 4B (beta-galactosidase   | 2.5 |
| 25 | 422484 | AA568770  | Hs.123158 | Homo sapiens cDNA FLJ12830 fis, clone NT   | 2.5 |
|    | 442804 | AW300118  | Hs.131257 | ESTs                                       | 2.5 |
|    | 420949 | AA934063  | Hs.13836  | ESTs, Weakly similar to I38022 hypothei    | 2.5 |
|    | 451350 | AI791447  |           | gb:ni13a05.y5 NCL_CGAP_Co4 Homo sapiens    | 2.5 |
|    | 410855 | X97795    | Hs.66718  | RAD54 (S.cerevisiae)-like                  | 2.5 |
| 30 | 430426 | AA478807  | Hs.125173 | ESTs                                       | 2.5 |
|    | 418526 | BE019020  | Hs.85838  | solute carrier family 16 (monocarboxylic   | 2.5 |
|    | 406290 |           |           | Target Exon                                | 2.5 |
|    | 442085 | AA975688  | Hs.159955 | ESTs                                       | 2.5 |
|    | 448148 | NM_016578 | Hs.20509  | HBV pX associated protein-8                | 2.5 |
| 35 | 432888 | T86823    |           | gb:yd81a08.s1 Soares fetal liver spleen    | 2.5 |
|    | 424126 | AA335635  | Hs.96917  | ESTs                                       | 2.5 |
|    | 459727 | AI906494  |           | gb:RC-BT113-060499-024 BT113 Homo sapien   | 2.5 |
|    | 407989 | AW135208  | Hs.256092 | ESTs                                       | 2.5 |
|    | 404571 |           |           | NM_015902*:Homo sapiens progesterin induce | 2.5 |
| 40 | 429139 | F09092    | Hs.66087  | ESTs                                       | 2.5 |
|    | 435232 | NM_001262 | Hs.4854   | cyclin-dependent kinase inhibitor 2C (p1   | 2.5 |
|    | 420608 | BE548277  | Hs.103104 | ESTs                                       | 2.5 |
|    | 432668 | AA558601  | Hs.43296  | ESTs                                       | 2.5 |
|    | 406871 | AA933857  | Hs.180842 | ribosomal protein L13                      | 2.5 |
| 45 | 443516 | AA305821  | Hs.9527   | apoptosis related protein APR-3            | 2.5 |
|    | 445985 | BE521800  | Hs.29444  | putative small membrane protein NID67      | 2.5 |
|    | 424614 | X54486    | Hs.151242 | serine (or cysteine) proteinase inhibito   | 2.5 |
|    | 437267 | AW511443  | Hs.258110 | ESTs                                       | 2.5 |
|    | 458251 | AL040927  | Hs.210422 | ESTs                                       | 2.5 |
| 50 | 431198 | AL047634  | Hs.231913 | ESTs                                       | 2.5 |
|    | 413944 | AW001579  | Hs.9645   | Homo sapiens mRNA for KIAA1741 protein,    | 2.5 |
|    | 420796 | L34355    | Hs.99931  | sarcoglycan, alpha (50kD dystrophin-asso   | 2.5 |
|    | 428032 | AW997704  | Hs.11493  | Homo sapiens cDNA FLJ13536 fis, clone PL   | 2.5 |
|    | 422017 | NM_003877 | Hs.110775 | STAT induced STAT inhibitor-2              | 2.5 |
| 55 | 424662 | NM_002870 | Hs.151536 | RAB13, member RAS oncogene family          | 2.5 |
|    | 423779 | AW071837  | Hs.57971  | ESTs                                       | 2.5 |
|    | 405863 |           |           | Target Exon                                | 2.5 |
|    | 458421 | AI279978  | Hs.22547  | ESTs                                       | 2.5 |
|    | 439019 | AF085902  | Hs.271737 | ESTs                                       | 2.5 |
| 60 | 412577 | Z22968    | Hs.74076  | CD163 antigen                              | 2.5 |
|    | 404891 |           |           | Target Exon                                | 2.5 |
|    | 419043 | T19167    | Hs.89566  | ets variant gene 1                         | 2.5 |
|    | 448482 | AW294078  | Hs.171092 | ESTs                                       | 2.5 |
|    | 426030 | BE243933  | Hs.108642 | zinc finger protein 22 (KOX 15)            | 2.5 |
| 65 | 429109 | AL008637  | Hs.196352 | neutrophil cytosolic factor 4 (40kD)       | 2.5 |
|    | 450597 | AI701635  | Hs.207077 | ESTs                                       | 2.5 |
|    | 414386 | X00442    | Hs.75990  | haptoglobin                                | 2.5 |
|    | 440473 | BE562314  | Hs.98711  | Homo sapiens, clone IMAGE:3677165, mRNA,   | 2.5 |
|    | 406851 | AA609784  |           | major histocompatibility complex, class    | 2.5 |
| 70 | 414821 | M63835    | Hs.77424  | Fc fragment of IgG, high affinity Ia, re   | 2.5 |
|    | 417663 | R07483    | Hs.180461 | ESTs                                       | 2.5 |
|    | 429341 | X73874    | Hs.2393   | phosphorylase kinase, alpha 1 (muscle)     | 2.5 |
|    | 450663 | H43540    | Hs.25292  | ribonuclease H1, large subunit             | 2.5 |
|    | 407198 | H91679    |           | gb:yv04a07.s1 Soares fetal liver spleen    | 2.5 |
| 75 | 411742 | AW247593  | Hs.71819  | eukaryotic translation initiation factor   | 2.5 |
|    | 409449 | H11341    | Hs.13366  | Homo sapiens cDNA: FLJ23567 fis, clone L   | 2.5 |

## TABLE 14B:

Pkey: Unique Eos probeset identifier number  
CAT number: Gene cluster number  
Accession: Genbank accession numbers

Pkey CAT Number Accession  
408292 1050507\_1 AW178363 AW846011 AW845964 AW845988 AW845977 AW846002

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|    |        |           |   |
|----|--------|-----------|---|
|    | 409157 | 110363_1  | AA064631 AA722000 AA064793  |
|    | 409189 | 110687_1  | AA125984 AA127189 AA065075 AA070377 AA100017 AA079891 AA113255 AA075168 AA082764 AA083380 N84829 AA084752 AA076512 AA085119<br>AA085208 AA085045  |
| 5  | 410886 | 1225822_1 | AW809324 BE144977 BE144956  |
|    | 411537 | 1248899_1 | BE073250 BE073378 BE073379 AW850533 AW850529  |
|    | 411543 | 1249127_1 | AW851248 AW851425 AW850805 AW851021 AW850905  |
|    | 411565 | 1249756_1 | AW851728 AW851607 AW851621 AW851702 AW851647 AW851727 AW851658 AW851617 AW851628  |
|    | 411671 | 125369_1  | BE049094 AA700765 H86770 AA094646 R02483 C03868 N56170  |
| 10 | 411688 | 1254076_1 | AW953440 T08189 AW857085  |
|    | 411962 | 126744_1  | AA099050 AA099526 T47733  |
|    | 412021 | 1272156_1 | AW885592 AW885594 AW885579 AW885651   |
|    | 412135 | 1279148_1 | AW895309 AW895290 AW895307 AW895397 AW895378 AW895402 AW895403 AW895311 AW895298 AW895390 AW895488 AW895468 AW895481<br>AW895288  |
| 15 | 412799 | 132817_1  | AI267606 AA121045 AA126521  |
|    | 412811 | 132943_1  | H06382 AW957730 AA352014 R13591 AA121201 D60420 BE263253 BE047862 Z41952 AI424991 AI693507 AI863108 AA599060 AI091148 AA598689<br>R39887 AA813482 AW016452 H06383 R41807 AI364268 AA620528 AI241940 AW089149 AW090733 AW088875 Z38240 AA121202 R17734<br>Z43567 H24159 AA134240   |
|    | 413986 | 140720_1  | AA143654 AW753140 AA213770 AW970865 AA569075 AA492132   |
|    | 414372 | 143909_1  | C17535 D59244 D58878 D79090   |
| 20 | 414988 | 1511316_1 | D61119 D81508 D81734  |
|    | 415131 | 1523680_1 | H60457 H68709 H73528 H54335 R87154  |
|    | 416422 | 1593811_1 | H64891 R93444 R93458 R05590   |
|    | 416569 | 1601567_1 | H98716 N90792 N24283  |
|    | 416871 | 1626761_1 | AW934714 BE161007 BE162500 AW749902 AW749864 BE162498 BE161005 AA190449 AW513465 BE161006 BE162499  |
| 25 | 416913 | 163001_1  | Z99362 Z99363   |
|    | 419896 | 1888662_1 | BE258835 AW968316 AA258918 AW843305 R14744 AI580388 BE071923 R36280   |
|    | 420352 | 192979_1  | AW973577 AA553621 AA279187  |
|    | 420670 | 195442_1  | AA805453 AA281379   |
|    | 420886 | 197344_1  | AW967284 AA312192 AA312203  |
| 30 | 422551 | 217767_1  | AW754182 AW754198 AA329983  |
|    | 423713 | 231290_1  | F11690 AW965370 AA333586 D30830   |
|    | 424009 | 234177_1  | AA337221 AA336756 AW966196  |
|    | 424200 | 236595_1  | AA345504 AA345251 AW963243  |
|    | 424686 | 242486_1  | R77952 AA348809 AW959960 AW959962 AI565552 AW070702 AA973910 R85973   |
| 35 | 424947 | 245247_1  | AW954627 AW954629 AA351258 R25935   |
|    | 425146 | 247244_1  | AW962128 AA355353 AA427363  |
|    | 425331 | 250199_1  | AA380153 AA380233 AW963529  |
|    | 426503 | 268283_1  | AA884766 AW974271 AA592975 AA447312   |
|    | 429163 | 300543_1  | W25215 AA461079 AA461391  |
| 40 | 429940 | 310884_1  | AW968485 AW968670 AA480922 BE350425   |
|    | 430535 | 319643_1  | AW972830 AA527647 AA489820 AA570362   |
|    | 430968 | 326269_1  | AW972727 AA524829 AW972733  |
|    | 432044 | 340773_1  | AA534489 AW970240 AW970323  |
|    | 432363 | 345469_1  | T86823 AI821425 AI732232 AA569589 AA570737  |
| 45 | 432888 | 355780_1  | AA761668 AA573621 R92814 R09670   |
|    | 433009 | 357371_1  | H29882 AW665533 AW149901 AI572917 AA598500 AI686466 AI336390 AW864390 AW864320  |
|    | 433523 | 368873_1  | AI806185 AA610063 AI693089 AI693075   |
|    | 433835 | 374758_1  | AF147363 T47219 T47218  |
|    | 434589 | 38929_1   | BE064391 BE064395 AA663613 N99644   |
| 50 | 435065 | 399329_1  | AA687376 H74234 AW975503  |
|    | 435542 | 407744_1  | AA628980 AI126603 BE504035  |
|    | 436608 | 42361_3   | AA742643 AA808575 AW976668  |
|    | 437034 | 431713_1  | AA226869 AA296516 AW959753 AA186390 AL359619 AA356195 AA148427 R22748 AI033624 BE548853 H95327 AW579751 BE561649 AA397533   |
|    | 437437 | 43709_1   | BE617136 AA236444 T89946 AA247450 N55777 W38725 AI743846 AI808406 AA922229 AI051464 W04713 R11251 W19656 AI042319 AA489276<br>AI224533 H  |
| 55 | 437945 | 44580_1   | T78519 H59898 U72516  |
|    | 438458 | 457837_1  | AW975186 AA807807 D29548  |
|    | 439518 | 47334_1   | W76326 AF086341 W72300  |
| 60 | 439533 | 47349_1   | W76021 AF088052 W72465  |
|    | 439566 | 47387_1   | AF086387 W77884 W72711  |
|    | 439710 | 47550_1   | AF086543 W96291 W96225  |
|    | 441128 | 51021_2   | AA570256 AW014761 AA573721 AI473237 AI022165 AA554071 AA127551 N90525 AW973623 AA447991 AA243852 BE328850 AI148171 AI359627<br>AI005068 AI356567 AA232991 AW016855 AA906902 AA233101 AA127550 BE512923<br>AF069475 AF069477 AF069476<br>AA448154 AV647571<br>AW379879 AI126285 H12014<br>W03766 AI357775 AV660500 AV660731<br>AW138582 AI638298 AI631640 AI963868 AI611082<br>NM_014253 AF100772 BE088769 AL022718 BE161779 AW863569 BE161640 AL039060 BE168542 AW296554 AA323193 AA235370 AW779760<br>N48674 AI375997 R45432 D59344 AI203107 F07491 R35360 R25094 AI913631 AI498402 T61382 AI016320 N45526 T61415 AA331486<br>AA429504 R41904 AA279467 H09648 AA007236<br>AA009647 AA131254 AA374293 AW954405 H04410 AW606284 AA151166 BE157467 BE157601 H04384 W46291 AW663674 H04021 H01532<br>AA190993 H03231 H59605 H01642 AA852876 AA113758 AA626915 AA746952 AI161014 AA099554 R69067<br>NM_004460 U09278 U76833 AW630055 AW471133 C02434 W45237 AW793518 BE070112 AI587479 AI624429 AW190535 AI446661 AI478772<br>AW022667 AA528235 AA599775 AW613820 AI435793 AW594230 AI051768 AI200109 AI680296 AA436611 AW609728 W42634 AI682584 AA405569<br>AI685653 AW0<br>AW970107 AA513951 AA010406<br>BE072881 BE072946 AI762181<br>AI791447 AI791327 AW886809<br>AI859393 BE177742<br>X57522 AW295947 AI346197 AI304693 L21205 L21206 L21207 L21208 L21204 NM_000593 F06770 F12630 X57521 R18264 T74462 AA346259<br>AW602508 AA904076 F08426 H23432 AA313737 AA393782 M78052 AA847441 AA487637 AA135770 AA353161 AI819778 AA054458 AI346733<br>AW361447 AI4 |
| 65 | 442476 | 543547_1  |   |
|    | 444016 | 58899_1   |   |
|    | 444168 | 593829_1  |   |
|    | 446821 | 69435_1   |   |
|    | 448970 | 791254_1  |   |
|    | 449625 | 8113_1    |   |
| 70 | 450166 | 82677_1   |   |
|    | 450375 | 83327_1   |   |
|    | 450506 | 836_1     |   |
| 75 | 450625 | 84032_1   |   |
|    | 451129 | 859870_1  |   |
|    | 451350 | 866945_1  |   |
|    | 452113 | 899664_1  |   |
| 80 | 452203 | 903_2     |   |

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|    |        |           |   |
|----|--------|-----------|---|
| 5  | 453331 | 96214_1   | A1240665 T53681 N77468 H51833 AA147247 R75732 C18450 R73999 A1095755 T49904 H03868 AA411580 R33395 AA410586 T48869 D63292 R31981 H12498 H02668 AA035018 R75957 A1803329 R27528 R36203 A1809932 A1808765 R78948 AA411449 AA976929 A1378760 A1378620 T48870 R7390 |
| 10 | 453682 | 977454_1  | T79703 T96307 AL079725  |
| 10 | 454177 | 1049351_1 | AW807321 AW807262 AW177104 AW807319 AW807115 AW807344 AW807324 AW178116 BE141575 AW845849 AW807105 AW845868 BE140942 AW807178 AW807167 AW807398 AW807320 AW807306 AW845866  |
| 10 | 454354 | 1129859_1 | AW389896 AW389898 AW389906 AW609203 AW389873  |
| 10 | 454457 | 1207274_1 | AW753456 AW753036 AW854868 AW854862   |
| 10 | 454581 | 1225710_1 | AW809189 AW809219 AW813574  |
| 10 | 454765 | 1233905_1 | AW819629 AW854320   |
| 10 | 454860 | 1237732_1 | AW835767 AW835537 BE160187  |
| 10 | 454968 | 1247029_1 | AW849046 AW847956 AW849039 AW847957 AW848279 AW848698 AW849034 AW849033   |
| 10 | 455104 | 1253737_1 | BE064863 BE153698 AW856751 BE153820 BE064737 BE153674 BE064730 BE065062 BE153536 AW856622 BE155079 BE064651 BE153665  |
| 15 | 455409 | 1288355_1 | BE064650 BE064691   |
| 15 | 455481 | 1293182_1 | AW936832 AW936609 AW936657 AW936611 AW936739 AW936734 AW936779 AW936688 AW936659 AW936738 AW936827 AW936737 AW936736  |
| 20 | 455646 | 1348557_1 | AW936740 AW936833 AW936777 AW936830 AW936834 AW936829 AW936772 AW936638 AW936658 AW936636 AW936774 AW936778 AW936766  |
| 20 | 455778 | 1364506_1 | AW936776 AW936831 AW9   |
| 20 | 455899 | 1381547_1 | AW948317 AW948322 AW948329 AW948316 AW948298 AW948330 AW948325 AW948324   |
| 20 | 456304 | 176820_1  | BE064420 BE064435 BE064429 BE064414 BE064400 BE064517   |
| 25 | 457364 | 328154_1  | BE088746 BE088802 BE088755 BE088876 BE088947 BE088881 BE088952  |
| 25 | 457876 | 42814_2   | BE155112 BE155154 BE155087 BE155247 BE155499 BE155367 BE155452  |
| 25 | 458199 | 504866_1  | A1820973 A1734077 A1820984 AA225796 AA225060 AA225101   |
|    |        |           | AW971037 AA508019 AA492345  |
|    |        |           | A1821940 N67106 A1744264 AA808846 AA643417 AA643416 Z70715  |
|    |        |           | AW136417 A1141026 A1340960 A1091670 A1523802 AW572908 A1458860 A1924374 A1830572 A1400702 A1337539 A1968111 A1521308 A1492336   |
|    |        |           | A1540779 A1672594 AW665077 AA971810 AA909139 AW082128 A1335251 A1807192 AW511744 A1023232 A1536899 AW207791 A1670910 A1002047   |
|    |        |           | AW4   |

TABLE 14C:

|    |              |   |
|----|--------------|---|
| 30 | Pkey:        | Unique number corresponding to an Eos probeset  |
| 30 | Ref:         | Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <u>Nature</u> 402:489-495. |
| 35 | Strand:      | Indicates DNA strand from which exons were predicted.   |
| 35 | NI_position: | Indicates nucleotide positions of predicted exons.  |

| Pkey   | Ref     | Strand | NI_position                                     |
|--------|---------|--------|---|
| 400492 | 9213749 | Minus  | 123881-124090                                   |
| 400533 | 6981826 | Minus  | 277132-277595                                   |
| 400645 | 8117693 | Minus  | 58471-58716                                     |
| 400658 | 8118459 | Minus  | 73525-73644                                     |
| 400780 | 8131663 | Minus  | 118372-118619                                   |
| 400850 | 1927150 | Minus  | 4506-4691                                       |
| 400924 | 7107613 | Minus  | 30309-30498                                     |
| 401272 | 9797373 | Minus  | 98374-98509                                     |
| 401454 | 9186923 | Minus  | 114659-114832                                   |
| 401696 | 3417290 | Minus  | 46209-46401                                     |
| 401702 | 1871197 | Minus  | 68182-68325                                     |
| 401841 | 7684597 | Plus   | 89868-90006,91920-92085                         |
| 402032 | 7656761 | Plus   | 62293-62475                                     |
| 402082 | 8117478 | Minus  | 190046-190183                                   |
| 402229 | 9965022 | Minus  | 15739-15951,16166-16779                         |
| 402239 | 7690131 | Plus   | 38175-38304,42133-42266                         |
| 402260 | 3399665 | Minus  | 113765-113910,115653-115765,116808-116940       |
| 402274 | 2935596 | Plus   | 5604-6527                                       |
| 402604 | 9909420 | Plus   | 20393-20767                                     |
| 402615 | 9926801 | Plus   | 131390-132157                                   |
| 402799 | 3355547 | Plus   | 35718-35899                                     |
| 402855 | 9662953 | Minus  | 59763-59909                                     |
| 402936 | 8894303 | Plus   | 51655-51771                                     |
| 403011 | 6693597 | Minus  | 3468-3623                                       |
| 403104 | 7331404 | Minus  | 41800-41973                                     |
| 403108 | 8980955 | Plus   | 93253-93667                                     |
| 403212 | 7630897 | Minus  | 156037-156210                                   |
| 403267 | 7887182 | Plus   | 116078-121885                                   |
| 403288 | 8081479 | Plus   | 133763-133899,135813-135958                     |
| 403290 | 8083176 | Plus   | 19288-20076                                     |
| 403291 | 7230870 | Plus   | 95177-95435                                     |
| 403349 | 8569773 | Minus  | 167815-168374                                   |
| 403361 | 8570313 | Minus  | 112496-112687                                   |
| 403431 | 7139839 | Plus   | 56509-56860                                     |
| 403481 | 9965004 | Plus   | 93496-93633                                     |
| 403696 | 3135242 | Minus  | 143467-143634                                   |
| 403790 | 8084957 | Minus  | 87826-87947,89835-90002                         |
| 403849 | 7708855 | Plus   | 95043-96519                                     |
| 403942 | 7711825 | Minus  | 99606-99757                                     |
| 403961 | 7596976 | Minus  | 110393-110603                                   |
| 403969 | 8569909 | Plus   | 31237-31375,32405-32506                         |
| 404053 | 3548785 | Plus   | 61797-64205                                     |
| 404120 | 7342152 | Plus   | 135775-136000                                   |
| 404150 | 7534008 | Plus   | 165811-165943                                   |
| 404170 | 9930793 | Plus   | 168836-169248                                   |
| 404209 | 5006246 | Minus  | 11247-11514                                     |
| 404272 | 9885189 | Plus   | 83207-83355,84358-84496,90519-90720,91371-91447 |

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|    |        |         |       |                             |
|----|--------|---------|-------|-----------------------------|
| 5  | 404407 | 7329316 | Minus | 48154-48499                 |
|    | 404571 | 7249169 | Minus | 112450-112648               |
|    | 404584 | 9857511 | Plus  | 138651-139153               |
|    | 404592 | 9943965 | Minus | 39067-39225                 |
|    | 404632 | 9796668 | Plus  | 45096-45229                 |
|    | 404748 | 7263437 | Plus  | 11446-11591                 |
|    | 404891 | 7329392 | Plus  | 84974-85125                 |
|    | 405046 | 7596829 | Minus | 4373-4528                   |
| 10 | 405141 | 8980911 | Plus  | 99861-100054                |
|    | 405183 | 7209940 | Plus  | 12335-12653                 |
|    | 405238 | 7249119 | Minus | 51728-51836                 |
|    | 405348 | 2914717 | Minus | 43310-43462                 |
|    | 405516 | 9454624 | Plus  | 112707-112876,113676-113854 |
|    | 405558 | 1621110 | Plus  | 4502-4644,5983-6083         |
| 15 | 405605 | 5836195 | Minus | 117070-117270               |
|    | 405717 | 9588573 | Plus  | 11275-11973                 |
|    | 405760 | 6066938 | Minus | 37424-38045                 |
|    | 405863 | 7657810 | Plus  | 49410-49620                 |
|    | 405941 | 6758796 | Plus  | 2798-3444                   |
| 20 | 406060 | 6899623 | Minus | 20339-20746                 |
|    | 406290 | 5686274 | Plus  | 8711-9358                   |
|    | 406395 | 9256242 | Minus | 20805-20960                 |
|    | 406478 | 9857502 | Plus  | 68314-68523,68853-68950     |
| 25 | 406481 | 9864741 | Minus | 91439-91579                 |

TABLE 15A: ABOUT 1033 GENES UP-REGULATED IN GLIOBLASTOMA COMPARED TO NORMAL ADULT TISSUES

Table 15A lists about 1033 genes up-regulated in glioblastoma compared to normal normal adult tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" glioblastoma to "average" normal tissues was greater than or equal to 3.0. The "average" glioblastoma level was set to the 85<sup>th</sup> percentile amongst various brain tumors. The "average" normal tissue level was set to the 85<sup>th</sup> percentile amongst various non-malignant adult tissues. In order to remove gene-specific background levels of non-specific hybridization, the 10<sup>th</sup> percentile value amongst the various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 R1: Ratio of GLIOBLASTOMA to NORMAL ADULT TISSUES

|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
| 40 | Pkey   | ExAccn    | UnigenelD | Unigene Title                            | R1   |
|    | 427343 | AI880044  | Hs.176977 | protein kinase C binding protein 2       | 60.5 |
|    | 431917 | D16181    | Hs.2868   | peripheral myelin protein 2              | 54.9 |
|    | 418375 | NM_003081 | Hs.84389  | synaptosomal-associated protein, 25kD    | 53.1 |
|    | 428321 | AI699994  | Hs.2868   | peripheral myelin protein 2              | 49.6 |
| 45 | 409389 | AB007979  | Hs.301281 | Homo sapiens mRNA, chromosome 1 specific | 45.4 |
|    | 435147 | AL133731  | Hs.4774   | Homo sapiens mRNA; cDNA DKFZp761C1712 (f | 43.9 |
|    | 413472 | BE242870  | Hs.75379  | solute carrier family 1 (glial high affi | 42.7 |
|    | 415817 | U88967    | Hs.78867  | protein tyrosine phosphatase, receptor-t | 42.3 |
|    | 456759 | BE259150  | Hs.127792 | delta (Drosophila)-like 3                | 39.1 |
|    | 430838 | N46664    | Hs.169395 | hypothetical protein FLJ12015            | 37.9 |
| 50 | 417183 | R52089    | Hs.172717 | ESTs                                     | 37.6 |
|    | 426325 | D28114    | Hs.169309 | myelin-associated oligodendrocyte basic  | 36.5 |
|    | 425088 | AA663372  | Hs.169395 | hypothetical protein FLJ12015            | 34.3 |
|    | 429007 | D80642    |           | gb:HUM092E09B Human fetal brain (TFujiwa | 33.9 |
|    | 449494 | AW237014  | Hs.315369 | Homo sapiens cDNA: FLJ23075 fis, clone L | 33.9 |
| 55 | 423849 | AL157425  | Hs.133315 | Homo sapiens mRNA; cDNA DKFZp761J1324 (f | 32.7 |
|    | 429276 | AF056085  | Hs.198612 | G protein-coupled receptor 51            | 32.3 |
|    | 413333 | M74028    | Hs.75297  | fibroblast growth factor 1 (acidic)      | 29.0 |
|    | 450133 | AW969769  | Hs.105201 | ESTs                                     | 27.9 |
|    | 412733 | AA984472  | Hs.74554  | KIAA0080 protein                         | 27.6 |
| 60 | 425842 | AI587490  | Hs.159623 | NK-2 (Drosophila) homolog B              | 27.3 |
|    | 416829 | AB013805  | Hs.80220  | catenin (cadherin-associated protein), d | 27.1 |
|    | 424140 | Z48051    | Hs.141308 | myelin oligodendrocyte glycoprotein      | 25.2 |
|    | 402604 |           |           | Target Exon                              | 24.3 |
|    | 437204 | AL110216  | Hs.22826  | ESTs, Weakly similar to I55214 salivary  | 24.3 |
| 65 | 422656 | AI870435  | Hs.1569   | LIM homeobox protein 2                   | 23.6 |
|    | 447359 | NM_012093 | Hs.18268  | adenylate kinase 5                       | 23.3 |
|    | 436878 | BE465204  | Hs.47448  | ESTs                                     | 22.9 |
|    | 435708 | AI362949  | Hs.75169  | ESTs                                     | 22.9 |
|    | 429903 | AL134197  | Hs.93597  | cyclin-dependent kinase 5, regulatory su | 22.7 |
| 70 | 439239 | AI031540  | Hs.235331 | ESTs                                     | 22.4 |
|    | 409395 | U46745    | Hs.336678 | dystrobrevin, alpha                      | 22.2 |
|    | 425799 | T08133    | Hs.182906 | Homo sapiens mRNA for KIAA1872 protein,  | 21.9 |
|    | 425057 | AA826434  | Hs.1619   | achaete-scute complex (Drosophila) homol | 21.3 |
|    | 444378 | R41339    | Hs.47860  | neurotrophic tyrosine kinase, receptor,  | 21.2 |
| 75 | 444513 | AL120214  | Hs.7117   | glutamate receptor, ionotropic, AMPA 1   | 21.0 |
|    | 419078 | MS3119    | Hs.89584  | insulinoma-associated 1                  | 21.0 |
|    | 425048 | H05468    | Hs.164502 | ESTs                                     | 20.9 |
|    | 453392 | U23752    | Hs.32964  | SRY (sex determining region Y)-box 11    | 19.3 |
|    | 423853 | AB011537  | Hs.133466 | slit (Drosophila) homolog 1              | 19.3 |
| 80 | 418110 | R43523    | Hs.217754 | hypothetical protein FLJ22202            | 19.2 |
|    | 447004 | AW296968  | Hs.157539 | ESTs                                     | 18.6 |
|    | 439415 | F05538    | Hs.4273   | ESTs                                     | 18.6 |
|    | 441497 | R51064    | Hs.23172  | ESTs                                     | 18.5 |

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|    | 425523 | AB007948  | Hs.158244 | KIAA0479 protein                         | 18.3 |
|    | 413597 | AW302885  | Hs.117183 | ESTs                                     | 18.2 |
|    | 433551 | AI985544  | Hs.12450  | protocadherin 9                          | 17.7 |
| 5  | 428392 | H10233    | Hs.2265   | secretory granule, neuroendocrine protei | 17.3 |
|    | 453642 | AI370936  | Hs.34074  | dipeptidylpeptidase VI                   | 17.3 |
|    | 418338 | NM_002522 | Hs.84154  | neuronal pentraxin I                     | 17.1 |
|    | 437268 | AI754847  | Hs.227571 | regulator of G-protein signalling 4      | 16.8 |
|    | 408604 | DS1408    | Hs.21925  | ESTs                                     | 16.6 |
| 10 | 424581 | M62062    | Hs.150917 | catenin (cadherin-associated protein), a | 16.6 |
|    | 422980 | N46569    | Hs.76722  | CCAAT/enhancer binding protein (C/EBP),  | 16.5 |
|    | 448302 | AI480208  | Hs.182906 | Homo sapiens mRNA for KIAA1872 protein,  | 16.4 |
|    | 429466 | M85835    | Hs.12827  | ESTs                                     | 16.3 |
|    | 441350 | AB020690  | Hs.7782   | paraneoplastic antigen MA2               | 15.9 |
| 15 | 448672 | AI955511  | Hs.225106 | ESTs                                     | 15.8 |
|    | 448743 | AB032962  | Hs.21896  | KIAA1136 protein                         | 15.7 |
|    | 415910 | U20350    | Hs.78913  | chemokine (C-X3-C) receptor 1            | 15.3 |
|    | 441285 | NM_002374 | Hs.167    | microtubule-associated protein 2         | 15.2 |
|    | 431019 | NM_005249 | Hs.2714   | forkhead box G1B                         | 14.8 |
| 20 | 431941 | AK000106  | Hs.272227 | Homo sapiens cDNA FLJ20099 fis, clone CO | 14.3 |
|    | 433800 | AI034361  | Hs.135150 | lung type-I cell membrane-associated gly | 14.3 |
|    | 416370 | N90470    | Hs.203697 | ESTs, Weakly similar to I38022 hypotheti | 14.1 |
|    | 439979 | AW600291  | Hs.6823   | hypothetical protein FLJ10430            | 14.0 |
|    | 444471 | AB020684  | Hs.11217  | KIAA0877 protein                         | 13.9 |
| 25 | 444783 | AK001468  | Hs.62180  | anillin (Drosophila Scraps homolog), act | 13.8 |
|    | 448595 | AB014544  | Hs.21572  | KIAA0644 gene product                    | 13.6 |
|    | 441440 | AI807981  | Hs.30495  | ESTs                                     | 13.6 |
|    | 428982 | NM_005097 | Hs.194704 | leucine-rich, glioma inactivated 1       | 13.5 |
|    | 424790 | AL119344  | Hs.13326  | ESTs, Weakly similar to 2004399A chromos | 13.3 |
| 30 | 459516 | AI049662  | Hs.246858 | EST                                      | 13.2 |
|    | 421264 | AL039123  | Hs.103042 | microtubule-associated protein 1B        | 13.2 |
|    | 428342 | AI739168  |           | Homo sapiens cDNA FLJ13458 fis, clone PL | 13.1 |
|    | 408562 | AI436323  | Hs.31141  | Homo sapiens mRNA for KIAA1568 protein,  | 12.9 |
|    | 412959 | D87458    | Hs.75090  | KIAA0282 protein                         | 12.9 |
| 35 | 439199 | R40373    | Hs.26299  | ESTs                                     | 12.8 |
|    | 423419 | R55336    | Hs.23539  | ESTs                                     | 12.5 |
|    | 445495 | BE622641  | Hs.38489  | ESTs, Weakly similar to I38022 hypotheti | 12.4 |
|    | 415849 | R20529    | Hs.6806   | ESTs                                     | 12.4 |
|    | 452372 | AI885742  | Hs.228474 | ESTs                                     | 12.4 |
| 40 | 452744 | AI267652  | Hs.246107 | Homo sapiens mRNA; cDNA DKFZp434E082 (fr | 12.3 |
|    | 426344 | H41821    | Hs.322469 | transcriptional activator of the c-fos p | 12.2 |
|    | 415734 | NM_014747 | Hs.78748  | KIAA0237 gene product                    | 12.1 |
|    | 426269 | H15302    | Hs.168950 | Homo sapiens mRNA; cDNA DKFZp566A1046 (f | 12.1 |
|    | 444119 | R41231    | Hs.184261 | ESTs, Weakly similar to T26686 hypotheti | 12.0 |
| 45 | 409049 | AI423132  | Hs.146343 | ESTs                                     | 11.9 |
|    | 434277 | X77748    | Hs.3786   | glutamate receptor, metabotropic 3       | 11.9 |
|    | 427897 | NM_017413 | Hs.303084 | apelin; peptide ligand for APJ receptor  | 11.8 |
|    | 453941 | U39817    | Hs.36820  | Bloom syndrome                           | 11.8 |
|    | 424120 | T80579    | Hs.290270 | ESTs                                     | 11.7 |
| 50 | 418738 | AW388633  | Hs.6682   | solute carrier family 7, (cationic amino | 11.7 |
|    | 411305 | BE241596  | Hs.69547  | myelin basic protein                     | 11.7 |
|    | 424945 | AI221919  |           | hypothetical protein FLJ10582            | 11.6 |
|    | 449539 | W80363    | Hs.58446  | ESTs                                     | 11.5 |
|    | 409638 | AW450420  | Hs.21335  | ESTs                                     | 11.5 |
| 55 | 441016 | AW138653  | Hs.25845  | ESTs                                     | 11.4 |
|    | 429037 | X81895    | Hs.194765 | H.sapiens GENX-5624 mRNA, 3' UTR         | 11.3 |
|    | 407034 | U84540    |           | gb:Human dystrobrevin isoform DTN-3 (DTN | 11.2 |
|    | 446372 | AB020644  | Hs.14945  | long fatty acyl-CoA synthetase 2 gene    | 11.2 |
|    | 425984 | AW836277  | Hs.165636 | hypothetical protein DKFZp761C07121      | 11.2 |
| 60 | 424432 | AB037821  | Hs.146858 | protocadherin 10                         | 11.1 |
|    | 424893 | AW295112  | Hs.153648 | Homo sapiens cDNA FLJ13303 fis, clone OV | 11.1 |
|    | 425649 | U30930    | Hs.158540 | UDP glycosyltransferase 8 (UDP-galactose | 11.1 |
|    | 438380 | T06430    | Hs.6194   | chondroitin sulfate proteoglycan BEHAB/b | 11.1 |
|    | 423678 | AW963357  | Hs.7847   | ESTs                                     | 10.7 |
| 65 | 446692 | Z44514    |           | Homo sapiens mRNA for KIAA1763 protein,  | 10.7 |
|    | 430691 | C14187    | Hs.103538 | ESTs                                     | 10.7 |
|    | 428728 | NM_016625 | Hs.191381 | hypothetical protein                     | 10.6 |
|    | 427701 | AA411101  | Hs.243886 | nuclear autoantigenic sperm protein (his | 10.6 |
|    | 431988 | AC002302  | Hs.77202  | protein kinase C, beta 1                 | 10.5 |
| 70 | 433896 | AW294729  | Hs.274461 | ESTs                                     | 10.5 |
|    | 431467 | N71831    | Hs.256398 | Homo sapiens mRNA; cDNA DKFZp434E0528 (f | 10.4 |
|    | 419249 | X14767    | Hs.89768  | gamma-aminobutyric acid (GABA) A recepto | 10.3 |
|    | 445041 | T64183    | Hs.282982 | solute carrier                           | 10.3 |
|    | 446782 | AI653048  | Hs.144006 | ESTs                                     | 10.2 |
| 75 | 451952 | AL120173  | Hs.301663 | ESTs                                     | 10.2 |
|    | 446711 | AF169692  | Hs.12450  | protocadherin 9                          | 10.1 |
|    | 438054 | AA776626  | Hs.169309 | ESTs                                     | 10.1 |
|    | 443785 | AW449952  | Hs.190125 | basic-helix-loop-helix-PAS protein       | 10.1 |
|    | 451099 | R52795    | Hs.25954  | interleukin 13 receptor, alpha 2         | 10.0 |
| 80 | 419663 | AW952691  | Hs.93485  | Homo sapiens mRNA; cDNA DKFZp761D191 (fr | 10.0 |
|    | 416857 | AA188775  | Hs.292453 | ESTs                                     | 10.0 |
|    | 435191 | R15912    | Hs.4817   | Homo sapiens clone 24461 mRNA sequence   | 10.0 |
|    | 419271 | N34901    | Hs.238532 | ESTs                                     | 9.9  |
|    | 429927 | NM_001115 | Hs.2522   | adenylate cyclase 8 (brain)              | 9.9  |

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|    | 415293 | R49462    | Hs.106541 | ESTs                                     | 9.9 |
|    | 440184 | AB002297  | Hs.7022   | dedicator of cyto-kinesis 3              | 9.8 |
|    | 452526 | W38537    | Hs.280740 | hypothetical protein MGC3040             | 9.8 |
|    | 427304 | AA761526  | Hs.163853 | ESTs                                     | 9.7 |
| 5  | 420547 | AF155140  | Hs.98738  | gonadotropin-regulated testicular RNA he | 9.6 |
|    | 421659 | NM_014459 | Hs.106511 | protocadherin 17                         | 9.6 |
|    | 426847 | S78723    | Hs.298623 | 5-hydroxytryptamine (serotonin) receptor | 9.6 |
|    | 429656 | X05608    | Hs.211584 | neurofilament, light polypeptide (68kD)  | 9.5 |
|    | 447101 | N72185    | Hs.44189  | ESTs                                     | 9.5 |
| 10 | 442613 | AI004002  | Hs.130522 | Kv channel-interacting protein 1         | 9.5 |
|    | 454027 | R40192    | Hs.21527  | Human DNA sequence from clone GS1-115M3  | 9.5 |
|    | 445102 | AW204610  | Hs.22270  | ESTs                                     | 9.5 |
|    | 435793 | AB037734  | Hs.4993   | KIAA1313 protein                         | 9.5 |
|    | 437948 | AA772920  | Hs.303527 | ESTs                                     | 9.5 |
| 15 | 438209 | AL120659  | Hs.6111   | aryl-hydrocarbon receptor nuclear transl | 9.4 |
|    | 415170 | R44386    | Hs.164578 | ESTs                                     | 9.3 |
|    | 415486 | H12214    | Hs.13284  | ESTs, Weakly similar to 2109260A B cell  | 9.2 |
|    | 435501 | AW051819  | Hs.129908 | KIAA0591 protein                         | 9.2 |
|    | 416072 | AL110370  | Hs.79000  | growth associated protein 43             | 9.2 |
| 20 | 442910 | AI365130  | Hs.11307  | ESTs, Weakly similar to T19326 hypotheti | 9.1 |
|    | 438080 | AA777381  | Hs.291530 | ESTs, Weakly similar to ALUC_HUMAN !!!!  | 9.1 |
|    | 425187 | AW014486  | Hs.22509  | ESTs                                     | 9.1 |
|    | 424028 | AF055084  | Hs.153692 | Homo sapiens cDNA FLJ14354 fis, clone Y7 | 9.0 |
| 25 | 430091 | AB032958  | Hs.233023 | KIAA1132 protein                         | 9.0 |
|    | 427540 | R12014    | Hs.20976  | ESTs                                     | 9.0 |
|    | 447198 | D61523    | Hs.283435 | ESTs                                     | 9.0 |
|    | 449611 | AI970394  | Hs.197075 | ESTs                                     | 8.9 |
|    | 444124 | R43097    | Hs.6818   | ESTs                                     | 8.9 |
| 30 | 451996 | AW514021  | Hs.245510 | ESTs                                     | 8.8 |
|    | 454048 | H05626    | Hs.6921   | ESTs                                     | 8.8 |
|    | 412266 | N59006    | Hs.26133  | ESTs                                     | 8.8 |
|    | 433597 | AA708205  | Hs.100343 | ESTs                                     | 8.7 |
|    | 447342 | AI199268  | Hs.19322  | Homo sapiens, Similar to RIKEN cDNA 2010 | 8.6 |
| 35 | 450154 | R15891    | Hs.281587 | Human (clone CTG-A4) mRNA sequence       | 8.6 |
|    | 410102 | AW248508  | Hs.279727 | ESTs; homologue of PEM-3 [Ciona savignyi | 8.5 |
|    | 423135 | N67655    | Hs.26411  | ESTs                                     | 8.5 |
|    | 418097 | R45137    | Hs.21868  | ESTs                                     | 8.4 |
|    | 420602 | AF060877  | Hs.99236  | regulator of G-protein signalling 20     | 8.4 |
| 40 | 419721 | NM_001650 | Hs.288650 | aquaporin 4                              | 8.4 |
|    | 449300 | AI656959  | Hs.346514 | ESTs                                     | 8.4 |
|    | 436954 | AA740151  | Hs.130425 | ESTs                                     | 8.3 |
|    | 425354 | U62027    | Hs.155935 | complement component 3a receptor 1       | 8.3 |
|    | 424997 | AL138167  | Hs.96920  | ESTs                                     | 8.3 |
| 45 | 442710 | AI015631  | Hs.23210  | ESTs                                     | 8.2 |
|    | 449625 | NM_014253 |           | odz (odd Oz/ten-m, Drosophila) homolog 1 | 8.2 |
|    | 451625 | R56793    | Hs.106576 | alanine-glyoxylate aminotransferase 2-li | 8.2 |
|    | 413063 | AL035737  | Hs.75184  | chitinase 3-like 1 (cartilage glycoprote | 8.0 |
|    | 449605 | AW138581  | Hs.198416 | ESTs                                     | 8.0 |
| 50 | 407886 | AW969688  | Hs.100826 | ESTs                                     | 8.0 |
|    | 414175 | AI308876  | Hs.103849 | hypothetical protein DKFZp761D112        | 7.9 |
|    | 429946 | R49390    | Hs.254129 | KIAA1678                                 | 7.9 |
|    | 400293 | N51002    | Hs.306480 | Homo sapiens mRNA; cDNA DKFZp761E2112 (f | 7.9 |
|    | 455601 | AI368680  | Hs.816    | SRY (sex determining region Y)-box 2     | 7.9 |
| 55 | 408799 | D11928    | Hs.76845  | phosphoserine phosphatase-like           | 7.8 |
|    | 415279 | F04237    | Hs.1447   | glial fibrillary acidic protein          | 7.8 |
|    | 429918 | AW873986  | Hs.119383 | ESTs                                     | 7.8 |
|    | 449433 | AI672096  | Hs.9012   | ESTs, Weakly similar to S26650 DNA-bindi | 7.8 |
|    | 422411 | AW749443  | Hs.22511  | ESTs                                     | 7.7 |
| 60 | 448902 | Z45998    | Hs.22543  | Homo sapiens mRNA; cDNA DKFZp761I1912 (f | 7.7 |
|    | 452355 | N54926    | Hs.29202  | G protein-coupled receptor 34            | 7.7 |
|    | 447414 | D82343    | Hs.74376  | neuroblastoma (nerve tissue) protein     | 7.7 |
|    | 407168 | R45175    | Hs.117183 | ESTs                                     | 7.6 |
|    | 448555 | AI536697  | Hs.159863 | ESTs                                     | 7.6 |
| 65 | 428536 | AI143139  | Hs.2288   | visinin-like 1                           | 7.6 |
|    | 408947 | AL080093  | Hs.49117  | Homo sapiens mRNA; cDNA DKFZp564N1662 (f | 7.6 |
|    | 420362 | U79734    | Hs.97206  | huntingtin interacting protein 1         | 7.6 |
|    | 435624 | AF218942  | Hs.24889  | formin 2                                 | 7.6 |
|    | 440105 | AA694010  | Hs.6932   | Homo sapiens clone 23809 mRNA sequence   | 7.6 |
| 70 | 412068 | S72043    | Hs.73133  | metallothionein 3 (growth inhibitory fac | 7.6 |
|    | 445568 | H00918    | Hs.268744 | KIAA1796 protein                         | 7.5 |
|    | 417160 | N76497    | Hs.1787   | proteolipid protein 1 (Pelizaeus-Merzbac | 7.5 |
|    | 423361 | AW170055  | Hs.47628  | ESTs                                     | 7.5 |
|    | 456965 | AW131888  | Hs.172792 | ESTs, Weakly similar to hypothetical pro | 7.5 |
| 75 | 458332 | AI000341  | Hs.220491 | ESTs                                     | 7.4 |
|    | 409902 | AI337658  | Hs.156351 | ESTs                                     | 7.3 |
|    | 448321 | NM_005883 | Hs.20912  | adenomatous polyposis coli like          | 7.3 |
|    | 420345 | AW295230  | Hs.25231  | ESTs                                     | 7.3 |
|    | 402855 |           |           | NM_001839* Homo sapiens calponin 3, acid | 7.2 |
| 80 | 424481 | R19453    | Hs.1787   | proteolipid protein 1 (Pelizaeus-Merzbac | 7.2 |
|    | 425741 | AF052152  | Hs.159412 | Homo sapiens clone 24628 mRNA sequence   | 7.2 |
|    | 448986 | H42169    | Hs.347310 | hypothetical protein FLJ14627            | 7.2 |
|    | 415651 | AI207162  | Hs.3815   | stathmin-like-protein RB3                | 7.2 |
|    | 412709 | AL022327  | Hs.74518  | KIAA0027 protein                         | 7.1 |

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|    | 451621 | AI879148  | Hs.26770  | fatty acid binding protein 7, brain       | 7.1 |
|    | 445745 | AB007924  | Hs.13245  | KIAA0455 gene product                     | 7.1 |
|    | 439451 | AF086270  | Hs.278554 | heterochromatin-like protein 1            | 7.1 |
|    | 418030 | BE207573  | Hs.83321  | neuromedin B                              | 7.1 |
| 5  | 400292 | AA250737  | Hs.72472  | BMP-R1B                                   | 7.1 |
|    | 407748 | AL079409  | Hs.38176  | KIAA0606 protein; SCN Circadian Oscillat  | 7.0 |
|    | 440435 | AL042201  | Hs.21273  | transcription factor NYD-sp10             | 7.0 |
|    | 414696 | AF002020  | Hs.76918  | Niemann-Pick disease, type C1             | 7.0 |
|    | 417417 | F05745    | Hs.89512  | ATPase, Ca transporting, plasma membrane  | 7.0 |
| 10 | 440152 | AB002376  | Hs.7006   | KIAA0378 protein                          | 7.0 |
|    | 422960 | AW890487  | Hs.63984  | cadherin 13, H-cadherin (heart)           | 7.0 |
|    | 454293 | H49739    | Hs.134013 | ESTs, Moderately similar to HK61_HUMAN H  | 7.0 |
|    | 447197 | R36075    |           | gb:yh88b01.s1 Soares placenta Nb2HP Homo  | 7.0 |
|    | 426814 | AF036943  | Hs.172619 | myelin transcription factor 1-like        | 6.9 |
| 15 | 416836 | D54745    | Hs.80247  | cholecystokinin                           | 6.9 |
|    | 447350 | AI375572  | Hs.172634 | ESTs                                      | 6.9 |
|    | 440074 | AA863045  | Hs.10669  | ESTs, Weakly similar to T00050 hypotheri  | 6.9 |
|    | 436039 | AW023323  | Hs.121070 | ESTs                                      | 6.9 |
|    | 444396 | T65213    | Hs.4257   | ESTs                                      | 6.9 |
| 20 | 425234 | AW152225  | Hs.165909 | ESTs, Weakly similar to I38022 hypotheri  | 6.9 |
|    | 438330 | AW450572  | Hs.257316 | ESTs                                      | 6.8 |
|    | 410305 | AF030409  | Hs.62185  | solute carrier family 9 (sodium/hydrogen  | 6.8 |
|    | 421141 | AW117261  | Hs.125914 | ESTs                                      | 6.7 |
|    | 412788 | AA120960  | Hs.198416 | ESTs                                      | 6.7 |
| 25 | 411078 | AI222020  | Hs.182364 | CocoaCrisp                                | 6.7 |
|    | 443455 | AB001025  | Hs.9349   | ryanodine receptor 3                      | 6.7 |
|    | 448769 | N65037    | Hs.38173  | ESTs                                      | 6.7 |
|    | 441523 | AW514263  | Hs.301771 | ESTs, Weakly similar to ALUF_HUMAN !!!    | 6.7 |
|    | 414214 | D49958    | Hs.75819  | glycoprotein M6A                          | 6.6 |
| 30 | 439845 | AL355743  | Hs.56663  | Homo sapiens EST from clone 41214, full   | 6.6 |
|    | 437036 | AI571514  | Hs.133022 | ESTs                                      | 6.6 |
|    | 429239 | AA448419  | Hs.45209  | ESTs                                      | 6.6 |
|    | 434164 | AW207019  | Hs.148139 | serine/threonine kinase 33                | 6.6 |
|    | 412155 | R38167    | Hs.12449  | Homo sapiens transmembrane protein HTMP1  | 6.5 |
| 35 | 452834 | AI638627  | Hs.105685 | KIAA1688 protein                          | 6.5 |
|    | 441916 | AA993571  | Hs.129075 | ESTs                                      | 6.5 |
|    | 451516 | AI800515  | Hs.12024  | ESTs                                      | 6.5 |
|    | 434808 | AF155108  | Hs.256150 | Homo sapiens, Similar to RIKEN cDNA 2810  | 6.5 |
|    | 452461 | N78223    | Hs.108106 | transcription factor                      | 6.5 |
| 40 | 450375 | AA009647  |           | a disintegrin and metalloproteinase doma  | 6.4 |
|    | 434811 | AW971205  | Hs.114280 | ESTs                                      | 6.4 |
|    | 424624 | AB032947  | Hs.151301 | Ca2+-dependent activator protein for secr | 6.4 |
|    | 429250 | H56595    | Hs.198308 | tryptophan rich basic protein             | 6.3 |
|    | 414245 | BE148072  | Hs.75850  | WAS protein family, member 1              | 6.3 |
| 45 | 433447 | U29195    | Hs.3281   | neuronal pentraxin II                     | 6.3 |
|    | 424922 | BE386547  | Hs.217112 | hypothetical protein MGC10825             | 6.3 |
|    | 426919 | AL041228  |           | ELAV (embryonic lethal, abnormal vision,  | 6.3 |
|    | 411411 | AA345241  | Hs.55950  | ESTs, Weakly similar to KIAA1330 protein  | 6.3 |
|    | 415669 | NM_005025 | Hs.78589  | serine (or cysteine) proteinase inhibito  | 6.2 |
| 50 | 449048 | Z45051    | Hs.22920  | similar to S68401 (cattle) glucose induc  | 6.2 |
|    | 433929 | AI375499  | Hs.27379  | ESTs                                      | 6.2 |
|    | 423346 | AI267677  | Hs.127416 | synaptotagmin 1                           | 6.2 |
|    | 448148 | NM_016578 | Hs.20509  | HBV pX associated protein-8               | 6.2 |
|    | 412140 | AA219691  | Hs.73625  | RAB6 interacting, kinesin-like (rabkines  | 6.2 |
| 55 | 409731 | AA125985  | Hs.56145  | thymosin, beta, identified in neuroblast  | 6.2 |
|    | 420608 | BE548277  | Hs.103104 | ESTs                                      | 6.2 |
|    | 424085 | NM_002914 | Hs.139226 | replication factor C (activator 1) 2 (40  | 6.2 |
|    | 422175 | N79885    | Hs.6382   | ESTs, Highly similar to T00391 hypotheri  | 6.1 |
|    | 428845 | AL157579  | Hs.153610 | KIAA0751 gene product                     | 6.1 |
| 60 | 439274 | AF086092  | Hs.48372  | ESTs                                      | 6.1 |
|    | 447499 | AW262580  | Hs.147674 | protocadherin beta 16                     | 6.1 |
|    | 425977 | R15138    | Hs.165570 | Homo sapiens clone 25052 mRNA sequence    | 6.1 |
|    | 453924 | R49295    | Hs.24886  | ESTs                                      | 6.1 |
|    | 449340 | AW235786  | Hs.195359 | hypothetical protein MGC10954             | 6.1 |
| 65 | 420077 | AW512260  | Hs.87767  | ESTs                                      | 6.1 |
|    | 431721 | AB032996  | Hs.268044 | KIAA1170 protein                          | 6.1 |
|    | 433701 | AW445023  | Hs.15155  | ESTs                                      | 6.1 |
|    | 430968 | AW972830  |           | gb:EST384925 MAGE resequences, MAGL Homo  | 6.1 |
|    | 429469 | M64590    | Hs.27     | glycine dehydrogenase (decarboxylating;   | 6.1 |
| 70 | 456723 | Z43902    | Hs.4748   | adenylate cyclase activating polypeptide  | 6.0 |
|    | 448681 | AL109781  | Hs.21754  | Homo sapiens mRNA full length insert cDN  | 6.0 |
|    | 429900 | AA460421  | Hs.30875  | ESTs                                      | 6.0 |
|    | 410909 | AW898161  | Hs.53112  | ESTs, Moderately similar to ALU8_HUMAN A  | 6.0 |
|    | 432281 | AK001239  | Hs.274263 | hypothetical protein FLJ10377             | 6.0 |
| 75 | 448243 | AW369771  | Hs.52620  | integrin, beta 8                          | 6.0 |
|    | 416427 | BE244050  | Hs.79307  | Rac/Cdc42 guanine exchange factor (GEF)   | 6.0 |
|    | 419704 | AA429104  | Hs.45057  | ESTs                                      | 6.0 |
|    | 436936 | AL134451  | Hs.197478 | ESTs                                      | 6.0 |
|    | 428409 | AW117207  | Hs.98523  | ESTs                                      | 6.0 |
| 80 | 433244 | AB040943  | Hs.271285 | KIAA1510 protein                          | 6.0 |
|    | 439772 | AL365406  | Hs.10268  | Homo sapiens mRNA full length insert cDN  | 6.0 |
|    | 408096 | BE250162  | Hs.83765  | dihydrofolate reductase                   | 6.0 |
|    | 419929 | U90268    | Hs.93810  | cerebral cavernous malformations 1        | 6.0 |

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| 5  | 422544 | AB018259  | Hs.118140 | KIAA0716 gene product                     | 6.0 |
|    | 413627 | BE182082  | Hs.246973 | ESTs                                      | 6.0 |
|    | 419985 | H66373    | Hs.5856   | ESTs, Highly similar to bA393J16.3 [H.s.a | 6.0 |
|    | 410366 | AI267589  | Hs.302689 | hypothetical protein                      | 6.0 |
|    | 429183 | AB014604  | Hs.197955 | KIAA0704 protein                          | 5.9 |
| 10 | 430188 | AL049242  | Hs.234794 | Homo sapiens mRNA; cDNA DKFZp564B083 (fr  | 5.9 |
|    | 441102 | AA973905  |           | intermediate filament protein syncoilin   | 5.9 |
|    | 448533 | AL119710  | Hs.21365  | nucleosome assembly protein 1-like 3      | 5.9 |
|    | 407182 | AA312551  | Hs.230157 | ESTs                                      | 5.9 |
|    | 437372 | AA323968  | Hs.283631 | hypothetical protein DKFZp547G183         | 5.9 |
| 15 | 433523 | H29882    |           | ESTs                                      | 5.9 |
|    | 444165 | AL137443  | Hs.10441  | hypothetical protein FLJ11236             | 5.9 |
|    | 424343 | AW956360  | Hs.4748   | adenylate cyclase activating polypeptide  | 5.9 |
|    | 420156 | AW449258  | Hs.6187   | ESTs                                      | 5.9 |
|    | 422864 | AA318323  | Hs.12827  | gb:EST20390 Retina II Homo sapiens cDNA   | 5.8 |
| 20 | 446727 | AB011095  | Hs.16032  | KIAA0523 protein                          | 5.8 |
|    | 448543 | AW897741  | Hs.21380  | Homo sapiens mRNA; cDNA DKFZp586P1124 (f  | 5.8 |
|    | 430132 | AA204686  | Hs.234149 | hypothetical protein FLJ20647             | 5.8 |
|    | 425782 | U66468    | Hs.159525 | cell growth regulatory with EF-hand doma  | 5.8 |
|    | 419629 | AB020695  | Hs.91662  | KIAA0888 protein                          | 5.8 |
| 25 | 452279 | AA286844  | Hs.61260  | hypothetical protein FLJ13164             | 5.8 |
|    | 407808 | AA663559  | Hs.279789 | histone deacetylase 3                     | 5.8 |
|    | 414737 | AI160386  | Hs.125087 | ESTs                                      | 5.8 |
|    | 432154 | AI701523  | Hs.112577 | ESTs                                      | 5.8 |
|    | 410099 | AA081630  |           | KIAA0036 gene product                     | 5.8 |
| 30 | 411379 | AI816344  | Hs.12554  | ESTs, Weakly similar to NPL4_HUMAN NUCLE  | 5.8 |
|    | 440492 | R39127    | Hs.21433  | hypothetical protein DKFZp547J036         | 5.7 |
|    | 424560 | AA158727  | Hs.150555 | protein predicted by clone 23733          | 5.7 |
|    | 419498 | AL036591  | Hs.20887  | hypothetical protein FLJ10392             | 5.7 |
|    | 436643 | AA757626  | Hs.10941  | ESTs, Weakly similar to IPP1_HUMAN PROTE  | 5.7 |
| 35 | 416111 | AA033813  | Hs.79018  | chromatin assembly factor 1, subunit A (  | 5.7 |
|    | 419088 | AI538323  | Hs.52620  | integrin, beta 8                          | 5.7 |
|    | 436109 | AA922153  | Hs.132760 | hypothetical protein MGC15729             | 5.7 |
|    | 428588 | F12101    | Hs.185701 | Homo sapiens mRNA full length insert cDN  | 5.7 |
|    | 451752 | AB032997  | Hs.26966  | KIAA1171 protein                          | 5.7 |
| 40 | 413492 | D87470    | Hs.75400  | KIAA0280 protein                          | 5.7 |
|    | 414683 | S78296    | Hs.76888  | hypothetical protein MGC12702             | 5.6 |
|    | 418079 | R40058    | Hs.6911   | ESTs                                      | 5.6 |
|    | 445873 | AA250970  | Hs.251946 | poly(A)-binding protein, cytoplasmic 1-I  | 5.6 |
|    | 437034 | AA742643  |           | gb:ny91c01.s1 NC1_CGAP_GCB1 Homo sapiens  | 5.6 |
| 45 | 419544 | AI909154  |           | gb:QV-BT200-010499-007 BT200 Homo sapien  | 5.6 |
|    | 452785 | AL359942  | Hs.296434 | erythroid differentiation and denucleati  | 5.6 |
|    | 408081 | AW451597  | Hs.167409 | ESTs                                      | 5.6 |
|    | 436887 | AW953157  | Hs.193235 | hypothetical protein DKFZp547D155         | 5.6 |
|    | 413589 | AW452631  | Hs.313803 | ESTs, Highly similar to AF157833 1 noncl  | 5.6 |
| 50 | 418506 | AA084248  | Hs.85339  | G protein-coupled receptor 39             | 5.6 |
|    | 433556 | W56321    | Hs.111460 | calcium/calmodulin-dependent protein kin  | 5.5 |
|    | 448299 | AA497044  | Hs.20887  | hypothetical protein FLJ10392             | 5.5 |
|    | 425154 | NM_001851 | Hs.154850 | collagen, type IX, alpha 1                | 5.5 |
|    | 447773 | AI423930  | Hs.36790  | ESTs, Weakly similar to putative p150 [H  | 5.5 |
| 55 | 422421 | AA325138  | Hs.235873 | hypothetical protein FLJ22672             | 5.5 |
|    | 453128 | AW026516  | Hs.31791  | acylphosphatase 2, muscle type            | 5.5 |
|    | 453220 | AB033089  | Hs.32452  | Homo sapiens mRNA for KIAA1263 protein,   | 5.5 |
|    | 440866 | AI703103  | Hs.271360 | hypothetical protein MGC16275             | 5.4 |
|    | 428976 | AL037824  | Hs.194695 | ras homolog gene family, member I         | 5.4 |
| 60 | 419723 | AL120193  | Hs.339810 | longevity assurance (LAG1, S. cerevisiae  | 5.4 |
|    | 452799 | AI948829  | Hs.213786 | ESTs                                      | 5.4 |
|    | 429038 | AL023513  | Hs.194766 | seizure related gene 6 (mouse)-like       | 5.4 |
|    | 445255 | NM_014841 | Hs.12477  | synaptosomal-associated protein, 91 kDa   | 5.4 |
|    | 424332 | AA338919  | Hs.101615 | ESTs                                      | 5.4 |
| 65 | 440210 | AW674562  | Hs.125296 | ESTs                                      | 5.4 |
|    | 414825 | X06370    | Hs.77432  | epidermal growth factor receptor (avian   | 5.4 |
|    | 448935 | AL078596  | Hs.22591  | nuclear receptor subfamily 2, group E, m  | 5.4 |
|    | 452786 | R61362    | Hs.106642 | ESTs, Weakly similar to T09052 hypotheti  | 5.4 |
|    | 408790 | AW580227  | Hs.47860  | neurotrophic tyrosine kinase, receptor,   | 5.4 |
| 70 | 423476 | AL035633  |           | Human DNA sequence from clone RPS-1046G1  | 5.4 |
|    | 448507 | AL133109  | Hs.21333  | Homo sapiens mRNA; cDNA DKFZp566N1047 (f  | 5.4 |
|    | 419683 | AA248897  | Hs.48784  | ESTs                                      | 5.4 |
|    | 407728 | AW071502  | Hs.175931 | ESTs                                      | 5.4 |
|    | 453313 | BE005771  | Hs.153746 | hypothetical protein FLJ22490             | 5.4 |
| 75 | 422094 | AF129535  | Hs.272027 | F-box only protein 5                      | 5.4 |
|    | 452856 | AF034799  | Hs.30881  | protein tyrosine phosphatase, receptor I  | 5.4 |
|    | 434792 | AA649253  | Hs.132458 | ESTs                                      | 5.4 |
|    | 412190 | R16180    | Hs.274461 | ESTs                                      | 5.3 |
|    | 425588 | F07396    | Hs.46627  | ESTs                                      | 5.3 |
| 80 | 444190 | AI878918  | Hs.10526  | cysteine and glycine-rich protein 2       | 5.3 |
|    | 429698 | AI685086  | Hs.26339  | ESTs, Weakly similar to S21348 probable   | 5.3 |
|    | 424458 | M29273    | Hs.1780   | myelin associated glycoprotein            | 5.3 |
|    | 446997 | AA383439  | Hs.16758  | Spir-1 protein                            | 5.3 |
|    | 427302 | AA400540  | Hs.135282 | Homo sapiens cDNA FLJ11554 fis, clone HE  | 5.3 |
|    | 439607 | BE540565  | Hs.159460 | ESTs                                      | 5.3 |
|    | 448499 | BE613280  | Hs.77550  | hypothetical protein MGC1780              | 5.3 |
|    | 410037 | AB020725  | Hs.58009  | KIAA0918 protein                          | 5.3 |



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|    | 451407 | AA131376  | Hs.343809 | fibroblast growth factor 12B             | 5.3 |
|    | 430287 | AW182459  | Hs.125759 | ESTs, Weakly similar to LEU5_HUMAN LEUKE | 5.3 |
|    | 428784 | Y12851    | Hs.193470 | purinergic receptor P2X, ligand-gated io | 5.3 |
|    | 418512 | AW498974  |           | diacylglycerol kinase, zeta (104kD)      | 5.3 |
| 5  | 435538 | AB011540  | Hs.4930   | low density lipoprotein receptor-related | 5.3 |
|    | 420285 | AA258124  | Hs.293878 | ESTs, Moderately similar to ZN91_HUMAN Z | 5.2 |
|    | 407896 | D76435    | Hs.41154  | Zic family member 1 (odd-paired Drosophi | 5.2 |
|    | 404819 |           |           | NM_002688*:Homo sapiens peanut (Drosophi | 5.2 |
|    | 426503 | AA380153  |           | gb:EST93093 Skin tumor I Homo sapiens cD | 5.2 |
| 10 | 405348 |           |           | C7001664.gi 12698061 dbj BAB21849.1  (AB | 5.2 |
|    | 431552 | AI815863  | Hs.259873 | axonal transport of synaptic vesicles    | 5.2 |
|    | 418677 | S83308    | Hs.87224  | SRY (sex determining region Y)-box 5     | 5.2 |
|    | 427250 | R35941    | Hs.25418  | ESTs                                     | 5.2 |
|    | 428037 | N47474    | Hs.89230  | potassium intermediate/small conductance | 5.2 |
| 15 | 445740 | T78281    | Hs.13226  | Homo sapiens clone 25181 mRNA sequence   | 5.2 |
|    | 430130 | AL137311  | Hs.234074 | Homo sapiens mRNA; cDNA DKFZp761G02121 ( | 5.2 |
|    | 423869 | BE409301  | Hs.134012 | C1q-related factor                       | 5.2 |
|    | 416220 | N49776    | Hs.170994 | hypothetical protein MGC10946            | 5.2 |
|    | 457005 | AJ007421  | Hs.172597 | sal (Drosophila)-like 3                  | 5.1 |
| 20 | 447072 | D61594    | Hs.17279  | tyrosylprotein sulfotransferase 1        | 5.1 |
|    | 414372 | AA143654  |           | gb:zo65a02.r1 Stratagene pancreas (93720 | 5.1 |
|    | 410631 | AA086469  | Hs.47171  | ESTs                                     | 5.1 |
|    | 414821 | M63835    | Hs.77424  | Fc fragment of IgG, high affinity Ia, re | 5.1 |
|    | 420133 | AA426117  | Hs.155543 | ESTs                                     | 5.1 |
| 25 | 453884 | AA355925  | Hs.36232  | KIAA0186 gene product                    | 5.1 |
|    | 414922 | D00723    | Hs.77631  | glycine cleavage system protein H (amino | 5.1 |
|    | 414727 | BE466904  | Hs.190162 | gb:h28f03.x1 NCI_CGAP_GC6 Homo sapiens   | 5.1 |
|    | 441869 | NM_003947 | Hs.8004   | huntingtin-associated protein interactin | 5.1 |
|    | 437387 | AI198874  | Hs.28847  | AD026 protein                            | 5.0 |
| 30 | 400533 |           |           | ENSP00000209376*:FRED65 protein (Fragmen | 5.0 |
|    | 430979 | AI479755  | Hs.129010 | ESTs                                     | 5.0 |
|    | 448944 | AB014605  | Hs.22599  | atrophin-1 interacting protein 1; activi | 5.0 |
|    | 444600 | R41398    | Hs.6996   | ESTs                                     | 5.0 |
|    | 453785 | AI368236  | Hs.283732 | ESTs, Moderately similar to ALU1_HUMAN A | 5.0 |
| 35 | 428878 | AA436884  | Hs.48526  | ESTs                                     | 5.0 |
|    | 444670 | H58373    | Hs.332938 | hypothetical protein MGC5370             | 5.0 |
|    | 440471 | AA886146  | Hs.307944 | ESTs                                     | 5.0 |
|    | 410434 | AF051152  | Hs.63668  | toll-like receptor 2                     | 5.0 |
|    | 441390 | AI692560  | Hs.131175 | ESTs                                     | 4.9 |
| 40 | 448765 | R15337    | Hs.21958  | Homo sapiens mRNA; cDNA DKFZp547D086 (fr | 4.9 |
|    | 422263 | AA307639  | Hs.129908 | KIAA0591 protein                         | 4.9 |
|    | 431117 | AF003522  | Hs.250500 | delta (Drosophila)-like 1                | 4.9 |
|    | 407235 | D20569    | Hs.169407 | SAC2 (suppressor of actin mutations 2, y | 4.9 |
|    | 417404 | NM_007350 | Hs.82101  | pleckstrin homology-like domain, family  | 4.9 |
| 45 | 448548 | R13209    | Hs.21413  | solute carrier family 12, (potassium-chl | 4.9 |
|    | 420092 | AA814043  | Hs.88045  | ESTs                                     | 4.9 |
|    | 449571 | AW016812  | Hs.200266 | ESTs                                     | 4.9 |
|    | 412811 | H06382    |           | ESTs                                     | 4.9 |
| 50 | 409100 | H98216    | Hs.42245  | ESTs, Moderately similar to I38022 hypot | 4.9 |
|    | 403142 |           |           | NM_002706*:Homo sapiens protein phosphat | 4.9 |
|    | 414300 | AI304870  | Hs.188680 | ESTs                                     | 4.9 |
|    | 436607 | AW661783  | Hs.211061 | ESTs                                     | 4.9 |
|    | 431553 | X78075    | Hs.2799   | cartilage linking protein 1              | 4.9 |
| 55 | 449328 | AI962493  | Hs.345303 | ESTs                                     | 4.9 |
|    | 420805 | L10333    | Hs.99947  | reticulin 1                              | 4.9 |
|    | 421688 | AK000307  | Hs.106825 | hypothetical protein FLJ20300            | 4.9 |
|    | 452898 | AA814497  | Hs.78792  | ESTs                                     | 4.9 |
|    | 427958 | AA418000  | Hs.98280  | potassium intermediate/small conductance | 4.9 |
| 60 | 432328 | AI572739  | Hs.195471 | 6-phosphofructo-2-kinase/fructose-2,6-bi | 4.9 |
|    | 408453 | AI369838  | Hs.45127  | chondroitin sulfate proteoglycan 5 (neur | 4.8 |
|    | 428841 | AI418430  | Hs.104935 | ESTs                                     | 4.8 |
|    | 416439 | AA180363  | Hs.118769 | ESTs                                     | 4.8 |
|    | 447458 | AI741082  | Hs.158961 | ESTs                                     | 4.8 |
|    | 429433 | AA452899  | Hs.213586 | ESTs, Weakly similar to KIAA1353 protein | 4.8 |
| 65 | 409746 | NM_004794 | Hs.56294  | RAB33A, member RAS oncogene family       | 4.8 |
|    | 436511 | AA721252  | Hs.291502 | ESTs                                     | 4.8 |
|    | 443392 | AI055821  | Hs.293420 | ESTs                                     | 4.8 |
|    | 423600 | AI633559  | Hs.310359 | ESTs                                     | 4.8 |
| 70 | 425905 | AB032959  | Hs.318584 | novel C3HC4 type Zinc finger (ring finge | 4.8 |
|    | 414706 | AW340125  | Hs.76989  | KIAA0097 gene product                    | 4.8 |
|    | 407385 | AA610150  | Hs.272072 | ESTs, Weakly similar to I38022 hypotheti | 4.8 |
|    | 439340 | AB032436  | Hs.6535   | brain-specific Na-dependent inorganic ph | 4.7 |
|    | 427624 | AA406245  | Hs.24895  | ESTs                                     | 4.7 |
| 75 | 413248 | T64858    | Hs.21433  | hypothetical protein DKFZp547J036        | 4.7 |
|    | 408670 | AF160967  | Hs.46784  | potassium large conductance calcium-acti | 4.7 |
|    | 440491 | R35252    | Hs.130558 | ESTs, Weakly similar to 2109260A B cell  | 4.7 |
|    | 411555 | AF113537  | Hs.70669  | HMP19 protein                            | 4.7 |
|    | 430471 | AF064845  | Hs.241523 | hypothetical protein FLJ10142            | 4.7 |
| 80 | 413530 | AA130158  | Hs.19977  | ESTs, Moderately similar to ALU8_HUMAN A | 4.7 |
|    | 445900 | AF070526  | Hs.125036 | Homo sapiens clone 24787 mRNA sequence   | 4.7 |
|    | 426457 | AW894667  | Hs.169965 | chimerin (chimaerin) 1                   | 4.7 |
|    | 459527 | AW977556  | Hs.291735 | ESTs, Weakly similar to I78885 serine/th | 4.7 |
|    | 453096 | AW294631  | Hs.11325  | ESTs                                     | 4.7 |

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|    | 409125 | R17268    | Hs.343567 | axonal transport of synaptic vesicles     | 4.7 |
|    | 428001 | H97428    | Hs.219907 | ESTs, Moderately similar to Transforming  | 4.7 |
|    | 410276 | A1554545  | Hs.68301  | angiotensin-2                             | 4.7 |
| 5  | 421637 | AF035290  | Hs.106300 | Homo sapiens clone 23556 mRNA sequence    | 4.7 |
|    | 421633 | AF121860  | Hs.106260 | sorting nexin 10                          | 4.7 |
|    | 440052 | A1633744  | Hs.195648 | ESTs, Weakly similar to I38022 hypotheti  | 4.7 |
|    | 439566 | AF086387  |           | gb:Homo sapiens full length insert cDNA   | 4.7 |
|    | 432890 | NM_014442 | Hs.279751 | sialic acid binding Ig-like lectin B      | 4.6 |
|    | 402145 |           |           | Target Exon                               | 4.6 |
| 10 | 409892 | AW956113  | Hs.7149   | gb:EST368183 MAGE resequences, MAGD Homo  | 4.6 |
|    | 458760 | A1498631  | Hs.111334 | ferritin, light polypeptide               | 4.6 |
|    | 453362 | H14988    | Hs.107375 | ESTs                                      | 4.6 |
|    | 436734 | A1937612  | Hs.273758 | hypothetical protein FLJ23112             | 4.6 |
|    | 426925 | NM_001196 | Hs.315689 | Homo sapiens cDNA: FLJ22373 fis, clone H  | 4.6 |
| 15 | 409041 | AB033025  | Hs.50081  | Hypothetical protein, XP_051860 (KIAA119  | 4.6 |
|    | 428832 | AA578229  | Hs.324239 | ESTs, Moderately similar to ZN91_HUMAN Z  | 4.6 |
|    | 423770 | AW976766  | Hs.132776 | Homo sapiens cDNA FLJ10077 fis, clone HE  | 4.6 |
|    | 410264 | AK001853  | Hs.61508  | Homo sapiens cDNA FLJ10991 fis, clone PL  | 4.6 |
|    | 429149 | AW193360  | Hs.197962 | ESTs, Weakly similar to I38022 hypotheti  | 4.6 |
| 20 | 437762 | T78028    | Hs.154679 | synaptotagmin I                           | 4.6 |
|    | 439249 | AF086060  | Hs.170053 | G-protein coupled receptor 88             | 4.6 |
|    | 416426 | AA180256  | Hs.210473 | Homo sapiens cDNA FLJ14872 fis, clone PL  | 4.6 |
|    | 425256 | BE297611  | Hs.155392 | collapsin response mediator protein 1     | 4.6 |
|    | 415257 | F03016    | Hs.27513  | ESTs                                      | 4.6 |
| 25 | 428186 | AW504300  | Hs.295605 | mannosidase, alpha, class 2A, member 2    | 4.6 |
|    | 458814 | A1498957  | Hs.170861 | ESTs, Weakly similar to Z195_HUMAN ZINC   | 4.6 |
|    | 451320 | AW118072  |           | diacylglycerol kinase, zeta (104kD)       | 4.5 |
|    | 424998 | U58515    | Hs.154138 | chitinase 3-like 2                        | 4.5 |
|    | 422709 | AA315331  | Hs.153485 | ESTs                                      | 4.5 |
| 30 | 420578 | AA813546  | Hs.99034  | GTP-binding protein Rho7                  | 4.5 |
|    | 421977 | W94197    | Hs.110165 | ribosomal protein L26 homolog             | 4.5 |
|    | 457465 | AW301344  | Hs.122908 | DNA replication factor                    | 4.5 |
|    | 427712 | A1368024  | Hs.283696 | ESTs                                      | 4.5 |
|    | 444656 | A1277924  | Hs.145199 | ESTs                                      | 4.5 |
| 35 | 413409 | A1638418  | Hs.1440   | DEAD/H (Asp-Glu-Ala-Asp/His) box polypep  | 4.5 |
|    | 429399 | AA452244  | Hs.16727  | ESTs                                      | 4.5 |
|    | 450639 | A1703186  | Hs.277174 | ESTs                                      | 4.5 |
|    | 452106 | A141031   | Hs.21342  | ESTs                                      | 4.5 |
| 40 | 424240 | AB023185  | Hs.143535 | calcium/calmodulin-dependent protein kin  | 4.5 |
|    | 433009 | AA761668  |           | gb:nz24c08.s1 NCI_CGAP_GCB1 Homo sapiens  | 4.5 |
|    | 446657 | A1335191  | Hs.260702 | ESTs, Weakly similar to 2109260A B cell   | 4.5 |
|    | 428189 | AA424030  | Hs.46627  | ESTs                                      | 4.5 |
|    | 423178 | A1033140  | Hs.124983 | Homo sapiens mRNA: cDNA DKFZp564C142 (fr  | 4.5 |
|    | 445133 | AW157646  | Hs.198689 | ESTs                                      | 4.5 |
| 45 | 418771 | AA807881  | Hs.25329  | ESTs                                      | 4.4 |
|    | 438456 | AA913381  | Hs.20594  | ESTs                                      | 4.4 |
|    | 410386 | W26187    | Hs.3327   | Homo sapiens cDNA: FLJ22219 fis, clone H  | 4.4 |
|    | 413834 | BE296896  | Hs.224179 | ESTs, Weakly similar to I38022 hypotheti  | 4.4 |
|    | 419103 | Z40229    | Hs.96423  | hypothetical protein FLJ23033             | 4.4 |
| 50 | 420560 | AW207748  | Hs.59115  | ESTs                                      | 4.4 |
|    | 439662 | H97552    | Hs.269060 | ESTs                                      | 4.4 |
|    | 408577 | H50572    | Hs.19515  | ESTs, Highly similar to NRG3_HUMAN PRO-N  | 4.4 |
|    | 445034 | AW293376  | Hs.143659 | ESTs                                      | 4.4 |
|    | 402605 |           |           | Target Exon                               | 4.4 |
| 55 | 426271 | AF026547  | Hs.169047 | chondroitin sulfate proteoglycan 3 (neur  | 4.4 |
|    | 457561 | AA331517  | Hs.286055 | chimerin (chimaerin) 2                    | 4.4 |
|    | 430676 | AF084866  |           | gb:Homo sapiens envelope protein RIC-3 (  | 4.4 |
|    | 439570 | T79925    | Hs.269165 | ESTs, Weakly similar to ALU1_HUMAN ALU S  | 4.4 |
|    | 452752 | AW044058  | Hs.33578  | KIAA0820 protein                          | 4.4 |
| 60 | 439108 | AW163034  | Hs.6467   | synaptogyrin 3                            | 4.4 |
|    | 405819 |           |           | NM_002578:Homo sapiens p21 (CDKN1A)-acti  | 4.4 |
|    | 446544 | A1631932  | Hs.7047   | ESTs, Weakly similar to Unknown [H.sapie  | 4.4 |
|    | 412530 | AA766268  | Hs.266273 | hypothetical protein FLJ13346             | 4.4 |
|    | 420871 | AA702972  | Hs.65300  | ESTs                                      | 4.4 |
| 65 | 408622 | AA056060  | Hs.202577 | Homo sapiens cDNA FLJ12166 fis, clone MA  | 4.4 |
|    | 429269 | AA449013  | Hs.99203  | ESTs                                      | 4.3 |
|    | 427463 | AA442224  | Hs.97900  | ESTs                                      | 4.3 |
|    | 425402 | A1215881  | Hs.24970  | ESTs, Weakly similar to B34323 GTP-bindi  | 4.3 |
|    | 412046 | Y07847    | Hs.73088  | RAS-related on chromosome 22              | 4.3 |
| 70 | 427194 | AA399018  | Hs.250835 | ESTs                                      | 4.3 |
|    | 437834 | AA769294  | Hs.283854 | gb:nz36g03.s1 NCI_CGAP_GCB1 Homo sapiens  | 4.3 |
|    | 409172 | Z99399    | Hs.122593 | ESTs                                      | 4.3 |
|    | 409953 | AA332277  | Hs.57691  | cadherin 18, type 2                       | 4.3 |
|    | 426968 | U07616    | Hs.173034 | amphiphysin (Stiff-Mann syndrome with br  | 4.3 |
| 75 | 452092 | BE245374  | Hs.27842  | hypothetical protein FLJ11210             | 4.3 |
|    | 438458 | AW975186  |           | gb:EST387294 MAGE resequences, MAGN Homo  | 4.3 |
|    | 446936 | H10207    | Hs.47314  | ESTs                                      | 4.3 |
|    | 433932 | AW954599  | Hs.169330 | neuronal protein                          | 4.3 |
|    | 424800 | AL035588  | Hs.153203 | MyoD family inhibitor                     | 4.3 |
| 80 | 421988 | AW450481  | Hs.161333 | ESTs                                      | 4.3 |
|    | 442832 | AW206560  | Hs.253569 | ESTs                                      | 4.3 |
|    | 416586 | D44643    | Hs.14144  | secreted modular calcium-binding protein  | 4.2 |
|    | 408369 | R38438    | Hs.182575 | solute carrier family 15 (H???) transport | 4.2 |

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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
|    | 450530 | NM_006668 | Hs.25121  | cytochrome P450, subfamily 46 (cholester             | 4.2 |
|    | 449318 | AW236021  | Hs.78531  | Homo sapiens, Similar to RIKEN cDNA 5730             | 4.2 |
|    | 438624 | AA889055  | Hs.123468 | ESTs   | 4.2 |
|    | 421027 | AA761198  | Hs.55254  | ESTs   | 4.2 |
| 5  | 417632 | R20855    | Hs.5422   | glycoprotein M6B                                     | 4.2 |
|    | 419412 | AW161058  | Hs.90297  | synuclein, beta                                      | 4.2 |
|    | 430228 | AW950939  | Hs.6382   | ESTs, Highly similar to T00391 hypotheti             | 4.2 |
|    | 450813 | AI739625  | Hs.203376 | ESTs   | 4.2 |
|    | 412505 | AA974491  | Hs.21734  | ESTs   | 4.2 |
| 10 | 440168 | AA868507  | Hs.126141 | ESTs   | 4.2 |
|    | 441707 | R42637    | Hs.21963  | hypothetical protein DKFZp761B0514                   | 4.2 |
|    | 438703 | AI803373  | Hs.31599  | ESTs   | 4.2 |
|    | 444127 | N63620    | Hs.13281  | ESTs   | 4.2 |
|    | 447397 | BE247676  | Hs.18442  | E-1 enzyme   | 4.2 |
| 15 | 445523 | Z30118    | Hs.293788 | ESTs, Moderately similar to unnamed prot             | 4.2 |
|    | 415079 | R43179    | Hs.22895  | hypothetical protein FLJ23548                        | 4.2 |
|    | 416871 | H98716    |           | gb:yx13d08.s1 Soares melanocyte 2NbHM Ho             | 4.2 |
|    | 408838 | AI669535  | Hs.40369  | ESTs   | 4.2 |
|    | 425287 | R88249    | Hs.155524 | peanut (Drosophila)-like 2                           | 4.2 |
| 20 | 404584 |           |           | Target Exon  | 4.2 |
|    | 436035 | AA703679  | Hs.106999 | ESTs, Weakly similar to SYT5_HUMAN SYNAP             | 4.2 |
|    | 409091 | AW970386  | Hs.269423 | ESTs   | 4.2 |
|    | 437117 | AL049256  | Hs.122593 | ESTs   | 4.2 |
| 25 | 429643 | AA455889  | Hs.167279 | FYVE-finger-containing Rab5 effector pro             | 4.2 |
|    | 439231 | AW581935  | Hs.141480 | Homo sapiens mRNA; cDNA DKFZp434N079 (fr             | 4.2 |
|    | 408177 | AI241733  | Hs.43871  | ESTs   | 4.2 |
|    | 438875 | AA827640  | Hs.189059 | ESTs   | 4.2 |
|    | 447877 | AI435184  | Hs.164252 | ESTs   | 4.2 |
| 30 | 415402 | AA164687  | Hs.177576 | mannosyl (alpha-1,3-)-glycoprotein beta-             | 4.2 |
|    | 434859 | BE255080  | Hs.299315 | collapsin response mediator protein-5: C             | 4.2 |
|    | 449714 | AB033015  | Hs.23941  | KIAA1189 protein                                     | 4.2 |
|    | 427315 | AA179949  | Hs.175563 | Homo sapiens mRNA; cDNA DKFZp564N0763 (f             | 4.2 |
|    | 404541 |           |           | NM_030795:Homo sapiens stathmin-like 4 (             | 4.1 |
| 35 | 449969 | AW295142  | Hs.180187 | Homo sapiens cDNA FLJ14337 fis, clone PL             | 4.1 |
|    | 422374 | AW732869  | Hs.1519   | protein kinase, cAMP-dependent, regulato             | 4.1 |
|    | 422253 | W81526    | Hs.118329 | ESTs, Moderately similar to GAD_HUMAN GA             | 4.1 |
|    | 440483 | AI200836  | Hs.150386 | ESTs   | 4.1 |
|    | 429421 | AL031658  |           | Human DNA sequence from clone RP1-310O13             | 4.1 |
| 40 | 432882 | NM_013257 | Hs.279696 | serum/glucocorticoid regulated kinase-li             | 4.1 |
|    | 424001 | W67883    | Hs.137476 | paternally expressed 10                              | 4.1 |
|    | 422170 | AI791949  | Hs.112432 | anti-Mullerian hormone                               | 4.1 |
|    | 445292 | AV653264  | Hs.13982  | Homo sapiens cDNA FLJ14666 fis, clone NT             | 4.1 |
|    | 450407 | NM_000810 | Hs.24969  | gamma-aminobutyric acid (GABA) A recepto             | 4.1 |
| 45 | 429401 | AW296102  | Hs.99272  | ESTs, Weakly similar to S32567 A4 protei             | 4.1 |
|    | 408950 | AA707814  | Hs.14945  | long fatty acyl-CoA synthetase 2 gene                | 4.1 |
|    | 415796 | R87548    | Hs.78854  | ATPase, Na <sup>+</sup> transporting, beta 2 polypep | 4.1 |
|    | 446619 | AU076643  | Hs.313    | secreted phosphoprotein 1 (osteopontin,              | 4.1 |
|    | 457211 | AW972565  | Hs.32399  | ESTs, Weakly similar to S51797 vasodilat             | 4.1 |
| 50 | 416547 | H62914    | Hs.268946 | ESTs, Weakly similar to PC4259 ferritin              | 4.1 |
|    | 412777 | AI335773  | Hs.270123 | ESTs   | 4.1 |
|    | 445225 | AI216555  | Hs.202398 | ESTs   | 4.1 |
|    | 408926 | AF217525  | Hs.49002  | Down syndrome cell adhesion molecule                 | 4.1 |
|    | 417873 | BE266659  | Hs.293659 | Homo sapiens, Similar to RIKEN cDNA A430             | 4.1 |
| 55 | 443301 | AI733614  | Hs.220587 | ESTs, Moderately similar to ALU5_HUMAN A             | 4.1 |
|    | 429281 | AA830856  | Hs.29808  | Homo sapiens cDNA: FLJ21122 fis, clone C             | 4.1 |
|    | 448966 | AW372914  | Hs.86149  | phosphoinositol 3-phosphate-binding prot             | 4.1 |
|    | 453857 | AL080235  | Hs.35861  | DKFZP586E1621 protein                                | 4.1 |
|    | 417355 | D13168    | Hs.82002  | endothelin receptor type B                           | 4.1 |
| 60 | 410359 | R38624    | Hs.106313 | ESTs   | 4.1 |
|    | 426529 | AF090100  | Hs.170241 | Homo sapiens clone IMAGE 23915                       | 4.1 |
|    | 433323 | AA805132  | Hs.159142 | ESTs   | 4.1 |
|    | 434933 | R91095    | Hs.4276   | KIAA1701 protein                                     | 4.1 |
|    | 453331 | AI240665  |           | ESTs   | 4.1 |
| 65 | 422661 | NM_014700 | Hs.119004 | KIAA0665 gene product                                | 4.1 |
|    | 424726 | AK001007  | Hs.138760 | Homo sapiens cDNA FLJ10145 fis, clone HE             | 4.0 |
|    | 416805 | F13271    | Hs.79981  | Human clone 23560 mRNA sequence                      | 4.0 |
|    | 441797 | AI936933  | Hs.214635 | ESTs   | 4.0 |
|    | 424282 | R76421    | Hs.135694 | ESTs   | 4.0 |
| 70 | 407792 | AI077715  | Hs.39384  | putative secreted ligand homologous to f             | 4.0 |
|    | 425390 | AI092634  | Hs.156114 | protein tyrosine phosphatase, non-recept             | 4.0 |
|    | 435312 | AJ243396  | Hs.4865   | voltage-gated sodium channel beta-3 subu             | 4.0 |
|    | 424635 | AA420687  | Hs.115455 | Homo sapiens cDNA FLJ14259 fis, clone PL             | 4.0 |
|    | 423279 | AW959861  | Hs.290943 | ESTs   | 4.0 |
| 75 | 444001 | AI095087  | Hs.152299 | ESTs, Moderately similar to S65657 alpha             | 4.0 |
|    | 410768 | AF038185  | Hs.66187  | Homo sapiens clone 23700 mRNA sequence               | 4.0 |
|    | 426413 | AA377823  |           | gb:EST90805 Synovial sarcoma Homo sapien             | 4.0 |
|    | 450581 | AF081513  | Hs.25195  | TGF-beta 4   | 4.0 |
|    | 435854 | AJ278120  | Hs.4996   | putative ankyrin-repeat containing prote             | 4.0 |
| 80 | 433615 | AA732982  | Hs.269607 | ESTs, Weakly similar to ALU1_HUMAN ALU S             | 4.0 |
|    | 432058 | AW665996  | Hs.130729 | ESTs, Weakly similar to ALU1_HUMAN ALU S             | 4.0 |
|    | 439774 | AL360257  | Hs.213493 | Homo sapiens mRNA full length insert cDN             | 4.0 |
|    | 445666 | R59960    | Hs.282386 | ESTs   | 4.0 |
|    | 450582 | AI339732  |           | G-rich RNA sequence binding factor 1                 | 4.0 |

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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
| 5  | 437814 | AI088192  | Hs.135474 | ESTs, Weakly similar to DDX9_HUMAN ATP-D | 4.0 |
|    | 451468 | AW503398  | Hs.293663 | ESTs, Moderately similar to I38022 hypot | 4.0 |
|    | 449277 | AA001064  | Hs.43670  | ESTs                                     | 4.0 |
|    | 440553 | AA889416  | Hs.344043 | Homo sapiens cDNA FLJ14459 fis, clone HE | 4.0 |
|    | 445888 | AF070564  | Hs.13415  | Homo sapiens clone 24571 mRNA sequence   | 4.0 |
| 10 | 420111 | AA255652  |           | gb:zs21h11.r1 NCI_CGAP_GCB1 Homo sapiens | 4.0 |
|    | 407198 | H91679    |           | gb:yv04a07.s1 Soares fetal liver spleen  | 4.0 |
|    | 422564 | AI148006  | Hs.222120 | ESTs                                     | 4.0 |
|    | 443992 | AW022228  | Hs.322922 | ESTs                                     | 4.0 |
|    | 435542 | AA687376  |           | ESTs                                     | 4.0 |
| 15 | 444153 | AK001610  | Hs.10414  | hypothetical protein FLJ10748            | 4.0 |
|    | 437748 | AF234882  | Hs.5814   | suppression of tumorigenicity 7          | 4.0 |
|    | 439285 | AL133916  |           | hypothetical protein FLJ20093            | 4.0 |
|    | 449655 | AI021987  | Hs.59970  | ESTs                                     | 4.0 |
|    | 458435 | AI418718  | Hs.144121 | ESTs, Weakly similar to T46916 hypotheti | 4.0 |
| 20 | 412659 | AW753865  | Hs.74376  | olfactomedin related ER localized protei | 4.0 |
|    | 423905 | AW579960  | Hs.135150 | lung type-I cell membrane-associated gly | 4.0 |
|    | 432683 | AW995441  | Hs.10475  | ESTs                                     | 4.0 |
|    | 410765 | AI694972  | Hs.66180  | nucleosome assembly protein 1-like 2     | 4.0 |
|    | 420649 | AI866964  | Hs.124704 | ESTs, Moderately similar to S65657 alpha | 4.0 |
| 25 | 450927 | AI807804  | Hs.134342 | TASP for testis-specific adriamycin sens | 4.0 |
|    | 448985 | AA324885  | Hs.22777  | carbonic anhydrase XI                    | 4.0 |
|    | 416406 | D86961    | Hs.79299  | lipoma HMGIC fusion partner-like 2       | 4.0 |
|    | 412754 | AW160375  | Hs.74565  | amyloid beta (A4) precursor-like protein | 3.9 |
|    | 416340 | N31772    | Hs.79226  | fasciculation and elongation protein zel | 3.9 |
| 30 | 428862 | NM_000346 | Hs.2316   | SRY (sex determining region Y)-box 9 (ca | 3.9 |
|    | 413554 | AA319146  | Hs.75426  | secretogranin II (chromogranin C)        | 3.9 |
|    | 419687 | AI638859  | Hs.227699 | ESTs, Weakly similar to T2D3_HUMAN TRANS | 3.9 |
|    | 453438 | AI469935  | Hs.22792  | ESTs                                     | 3.9 |
|    | 410082 | AA081594  | Hs.158311 | Musashi (Drosophila) homolog 1           | 3.9 |
| 35 | 424736 | AF230877  | Hs.152701 | microtubule-interacting protein that ass | 3.9 |
|    | 412326 | R07566    | Hs.73817  | small inducible cytokine A3 (homologous  | 3.9 |
|    | 411666 | AF106564  | Hs.71346  | neurofilament 3 (150kD medium)           | 3.9 |
|    | 439635 | S75105    | Hs.8358   | glutamate receptor, ionotropic, kainate  | 3.9 |
|    | 459278 | AW294659  | Hs.34054  | Homo sapiens cDNA: FLJ22488 fis, clone H | 3.9 |
| 40 | 432809 | AA565509  | Hs.131703 | ESTs                                     | 3.9 |
|    | 450568 | AL050078  | Hs.25159  | Homo sapiens cDNA FLJ10784 fis, clone NT | 3.9 |
|    | 413951 | AW051200  | Hs.75640  | natriuretic peptide precursor A          | 3.9 |
|    | 435743 | T66861    | Hs.12962  | ESTs                                     | 3.9 |
|    | 447937 | AL109716  | Hs.20034  | Homo sapiens mRNA full length insert cDN | 3.9 |
| 45 | 417576 | AA339449  | Hs.82285  | phosphoribosylglycinamide formyltransfer | 3.9 |
|    | 448526 | AB028946  | Hs.21361  | KIAA1023 protein                         | 3.9 |
|    | 445890 | AF055019  | Hs.21906  | Homo sapiens clone 24670 mRNA sequence   | 3.9 |
|    | 425241 | AA324624  | Hs.155247 | aldolase C, fructose-bisphosphate        | 3.8 |
|    | 417333 | AL157545  | Hs.173179 | bromodomain and PHD finger containing, 3 | 3.8 |
| 50 | 435832 | AA425688  | Hs.41641  | Bruno (Drosophila) -like 4, RNA binding  | 3.8 |
|    | 410592 | R94088    | Hs.43569  | ESTs                                     | 3.8 |
|    | 443361 | AI792628  | Hs.133273 | ESTs                                     | 3.8 |
|    | 403696 |           |           | C4001100*:gij5852342[gb]AAD54015.1] (AF0 | 3.8 |
|    | 437756 | AA767537  | Hs.197096 | ESTs                                     | 3.8 |
| 55 | 433675 | AW977653  | Hs.75319  | ribonucleotide reductase M2 polypeptide  | 3.8 |
|    | 414998 | NM_002543 | Hs.77729  | oxidised low density lipoprotein (lectin | 3.8 |
|    | 425652 | AB021742  | Hs.322431 | neurogenic differentiation 2             | 3.8 |
|    | 437449 | AL390153  | Hs.208339 | Homo sapiens mRNA; cDNA DKFZp762G113 (fr | 3.8 |
|    | 421040 | AA715026  | Hs.135280 | ESTs                                     | 3.8 |
| 60 | 454171 | AW854832  |           | gb:QV2-CT0261-201099-011-405 CT0261 Homo | 3.8 |
|    | 443740 | R56434    | Hs.21062  | ESTs                                     | 3.8 |
|    | 441668 | AI611973  | Hs.136313 | ESTs                                     | 3.8 |
|    | 423175 | W27595    | Hs.347310 | hypothetical protein FLJ14627            | 3.8 |
|    | 457183 | H91882    | Hs.118569 | Dvl-binding protein IDAX (inhibition of  | 3.8 |
| 65 | 438142 | T90309    | Hs.269651 | ESTs                                     | 3.8 |
|    | 408875 | NM_015434 | Hs.48604  | DKFZP434B168 protein                     | 3.8 |
|    | 436899 | AA764852  | Hs.291567 | ESTs                                     | 3.8 |
|    | 456497 | AW967956  | Hs.123648 | ESTs, Weakly similar to AF108460 1 ubinu | 3.8 |
|    | 416892 | L24498    | Hs.80409  | growth arrest and DNA-damage-inducible,  | 3.8 |
| 70 | 413199 | M62843    | Hs.75236  | ELAV (embryonic lethal, abnormal vision, | 3.8 |
|    | 410711 | AB002316  | Hs.65746  | KIAA0318 protein                         | 3.8 |
|    | 454117 | BE410100  | Hs.40368  | adaptor-related protein complex 1, sigma | 3.8 |
|    | 438944 | AA302517  | Hs.92732  | KIAA1444 protein                         | 3.8 |
|    | 445078 | AI869975  | Hs.4775   | junctional protein 3                     | 3.8 |
| 75 | 424330 | AW073953  | Hs.333396 | Homo sapiens cDNA FLJ13596 fis, clone PL | 3.8 |
|    | 439099 | AB037800  | Hs.6462   | protein kinase C and casein kinase subst | 3.8 |
|    | 449444 | AW818436  | Hs.23590  | solute carrier family 16 (monocarboxylic | 3.8 |
|    | 411252 | AB018549  | Hs.69328  | MD-2 protein                             | 3.7 |
|    | 448275 | BE514434  | Hs.20830  | kinesin-like 2                           | 3.7 |
| 80 | 434269 | AK001991  | Hs.3781   | similar to murine leucine-rich repeat pr | 3.7 |
|    | 400777 |           |           | NM_007325*:Homo sapiens glutamate recept | 3.7 |
|    | 419586 | AI088485  | Hs.144759 | ESTs, Weakly similar to I38022 hypotheti | 3.7 |
|    | 458072 | AI890347  | Hs.271923 | Homo sapiens cDNA: FLJ22785 fis, clone K | 3.7 |
|    | 445908 | R13580    | Hs.13436  | Homo sapiens clone 24425 mRNA sequence   | 3.7 |
|    | 448451 | AW015994  | Hs.345433 | gb:U1-H-B10p-abh-g-09-0-U1.s1 NCI_CGAP_S | 3.7 |
|    | 430183 | BE010038  |           | gb:PM3-BN0176-100400-001-g04 BN0176 Homo | 3.7 |
|    | 430147 | R60704    | Hs.234434 | hair/enhancer-of-split related with YRP  | 3.7 |

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|    |        |           |           |   |     |
|----|--------|-----------|-----------|---|-----|
|    | 458912 | AI911066  |           | ESTs                                      | 3.7 |
|    | 428110 | AI312485  | Hs.138294 | ESTs, Moderately similar to Z195_HUMAN Z  | 3.7 |
|    | 448048 | BE281291  | Hs.170408 | ESTs, Moderately similar to A47582 B-cell | 3.7 |
|    | 442326 | H92962    | Hs.124813 | hypothetical protein MGC14817             | 3.7 |
| 5  | 422798 | R92347    | Hs.34574  | ESTs, Weakly similar to ALU1_HUMAN ALU S  | 3.7 |
|    | 428873 | AI701609  | Hs.98908  | ESTs                                      | 3.7 |
|    | 438208 | AL041224  | Hs.65379  | ESTs                                      | 3.7 |
|    | 414040 | N58513    | Hs.32171  | ESTs                                      | 3.7 |
| 10 | 407846 | AA426202  | Hs.40403  | Cbp/p300-interacting transactivator, wit  | 3.7 |
|    | 408829 | NM_006042 | Hs.48384  | heparan sulfate (glucosamine) 3-O-sulfot  | 3.7 |
|    | 425010 | T16837    | Hs.4241   | ESTs                                      | 3.7 |
|    | 427209 | H06509    | Hs.92423  | KIAA1566 protein                          | 3.7 |
|    | 407603 | AW955705  | Hs.62604  | Homo sapiens, clone IMAGE:4299322, mRNA,  | 3.6 |
|    | 410126 | BE169274  |           | KIAA0036 gene product                     | 3.6 |
| 15 | 426646 | AA382787  | Hs.122713 | ESTs                                      | 3.6 |
|    | 418329 | AW247430  | Hs.84152  | cystathionine-beta-synthase               | 3.6 |
|    | 419390 | AI701162  | Hs.90207  | hypothetical protein MGC11138             | 3.6 |
|    | 441703 | AW390054  | Hs.192843 | leucine zipper protein FKSG14             | 3.6 |
|    | 431725 | X65724    | Hs.2839   | Norie disease (pseudoglioma)              | 3.6 |
| 20 | 448425 | AI500359  | Hs.346112 | ESTs                                      | 3.6 |
|    | 423611 | AB011163  | Hs.129908 | KIAA0591 protein                          | 3.6 |
|    | 438831 | BE263273  | Hs.6439   | synapsin II                               | 3.6 |
|    | 419235 | AW470411  | Hs.288433 | neurotrimin                               | 3.6 |
|    | 451027 | AW519204  | Hs.40808  | ESTs                                      | 3.6 |
| 25 | 428483 | AI908539  | Hs.184592 | KIAA0344 gene product                     | 3.6 |
|    | 424947 | R77952    |           | ESTs, Weakly similar to alternatively sp  | 3.6 |
|    | 404150 |           |           | Target Exon                               | 3.6 |
|    | 450297 | AW901347  | Hs.38592  | hypothetical protein FLJ23342             | 3.6 |
| 30 | 443715 | AI583187  | Hs.9700   | cyclin E1                                 | 3.6 |
|    | 435910 | AI084152  | Hs.21782  | ESTs, Weakly similar to ALU7_HUMAN ALU S  | 3.6 |
|    | 418064 | BE387287  | Hs.83384  | S100 calcium-binding protein, beta (neur  | 3.6 |
|    | 432488 | AA551010  | Hs.216640 | ESTs                                      | 3.6 |
|    | 431342 | AW971018  | Hs.21659  | ESTs                                      | 3.6 |
| 35 | 437916 | BE566249  | Hs.20999  | hypothetical protein FLJ23142             | 3.6 |
|    | 412043 | BE156622  | Hs.333371 | Homo sapiens clone TA40 untranslated mRN  | 3.6 |
|    | 448448 | NM_014954 | Hs.21239  | KIAA0985 protein                          | 3.6 |
|    | 447818 | W79940    | Hs.21906  | Homo sapiens clone 24670 mRNA sequence    | 3.6 |
|    | 445105 | AF238869  | Hs.283955 | Homo sapiens clone GLSH-2 similar to gli  | 3.6 |
| 40 | 409557 | BE182896  | Hs.211193 | ESTs                                      | 3.6 |
|    | 425202 | AW962282  | Hs.152049 | ESTs, Weakly similar to I38022 hypotheti  | 3.6 |
|    | 451734 | NM_006176 | Hs.26944  | neurogranin (protein kinase C substrate,  | 3.6 |
|    | 425331 | AW962128  |           | gb:EST374201 MAGE resequences, MAGG Homo  | 3.6 |
|    | 412799 | AI267606  |           | gb:aq91h03.x1 Stanley Frontal SB pool 1   | 3.6 |
| 45 | 435040 | AI932350  | Hs.152825 | ESTs                                      | 3.6 |
|    | 434149 | Z43829    | Hs.244624 | hypothetical protein MGC5469              | 3.6 |
|    | 415709 | AA649850  | Hs.278558 | ESTs                                      | 3.6 |
|    | 424051 | AL110203  | Hs.138411 | Homo sapiens mRNA; cDNA DKFZp586J1922 (f  | 3.6 |
|    | 437640 | AA764893  | Hs.272155 | ESTs, Weakly similar to I38022 hypotheti  | 3.6 |
| 50 | 445953 | AI612775  | Hs.145710 | ESTs                                      | 3.6 |
|    | 449256 | AA059050  | Hs.59847  | ESTs                                      | 3.6 |
|    | 424687 | J05070    | Hs.151738 | matrix metalloproteinase 9 (gelatinase B  | 3.6 |
|    | 409327 | L41162    | Hs.53563  | collagen, type IX, alpha 3                | 3.6 |
|    | 417675 | AI808607  | Hs.3781   | similar to murine leucine-rich repeat pr  | 3.6 |
| 55 | 423641 | AL137256  | Hs.130489 | ATPase, aminophospholipid transporter-li  | 3.6 |
|    | 443912 | R37257    | Hs.184780 | ESTs                                      | 3.6 |
|    | 424572 | M19650    |           | 2',3'-cyclic nucleotide 3' phosphodiester | 3.5 |
|    | 424899 | AL119387  | Hs.119062 | ESTs                                      | 3.5 |
|    | 439726 | AW449893  | Hs.293707 | ESTs, Weakly similar to I38598 zinc fing  | 3.5 |
| 60 | 416490 | AF090116  | Hs.79348  | regulator of G-protein signalling 7       | 3.5 |
|    | 458809 | AW972512  | Hs.20985  | sin3-associated polypeptide, 30kD         | 3.5 |
|    | 429084 | AJ001443  | Hs.195614 | splicing factor 3b, subunit 3, 130kD      | 3.5 |
|    | 407624 | AW157431  | Hs.248941 | ESTs                                      | 3.5 |
|    | 419038 | AW134924  | Hs.190325 | ESTs                                      | 3.5 |
| 65 | 451489 | NM_005503 | Hs.26468  | amyloid beta (A4) precursor protein-bind  | 3.5 |
|    | 428242 | H55709    | Hs.2250   | leukemia inhibitory factor (cholinergic   | 3.5 |
|    | 411048 | AK001742  | Hs.67991  | hypothetical protein DKFZp434G0522        | 3.5 |
|    | 435575 | AF213457  | Hs.44234  | triggering receptor expressed on myeloid  | 3.5 |
|    | 424340 | AA339036  | Hs.7033   | ESTs                                      | 3.5 |
| 70 | 425790 | AW136286  | Hs.288446 | ESTs                                      | 3.5 |
|    | 432188 | AI362952  | Hs.2928   | solute carrier family 7 (cationic amino   | 3.5 |
|    | 453896 | AW293483  | Hs.255205 | KIAA1853 protein                          | 3.5 |
|    | 434784 | AA649051  | Hs.164007 | ESTs                                      | 3.5 |
|    | 452449 | AW068658  | Hs.20943  | ESTs                                      | 3.5 |
| 75 | 425212 | AW962253  | Hs.171618 | ESTs                                      | 3.5 |
|    | 407253 | AA411175  | Hs.141939 | ESTs, Moderately similar to S65657 alpha  | 3.5 |
|    | 418049 | AA211467  | Hs.190488 | Homo sapiens, Similar to nuclear localiz  | 3.5 |
|    | 421247 | BE391727  | Hs.102910 | general transcription factor IIH, polype  | 3.5 |
|    | 459311 | R40192    | Hs.21527  | Human DNA sequence from clone GS1-115M3   | 3.5 |
| 80 | 439450 | R51613    | Hs.125304 | ESTs                                      | 3.5 |
|    | 435545 | AA687415  | Hs.28107  | ESTs                                      | 3.5 |
|    | 445729 | H21066    | Hs.13223  | Homo sapiens mRNA full length insert cDN  | 3.5 |
|    | 448999 | AF179274  | Hs.22791  | transmembrane protein with EGF-like and   | 3.5 |
|    | 412590 | AL134388  | Hs.135033 | ESTs, Weakly similar to I38022 hypotheti  | 3.5 |

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|----|--------|-----------|-----------|--|-----|
|    | 438527 | AI969251  | Hs.115325 | RAB7, member RAS oncogene family-like 1  | 3.5 |
|    | 441111 | AI806867  | Hs.126594 | ESTs                                     | 3.5 |
|    | 418630 | AI351311  | Hs.251946 | poly(A)-binding protein, cytoplasmic 1-  | 3.5 |
|    | 439920 | H05430    | Hs.288433 | neurotrimin                              | 3.5 |
| 5  | 421268 | AI126821  | Hs.30514  | ESTs                                     | 3.5 |
|    | 432022 | AL162042  | Hs.272348 | Homo sapiens mRNA; cDNA DKFZp761L1212 (f | 3.5 |
|    | 412719 | AW016610  | Hs.816    | ESTs                                     | 3.5 |
|    | 435092 | AL137310  | Hs.4749   | Homo sapiens mRNA; cDNA DKFZp761E13121 ( | 3.5 |
| 10 | 414178 | AW957372  | Hs.46791  | ESTs, Weakly similar to I38022 hypotheti | 3.5 |
|    | 437252 | AI433833  | Hs.164159 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 3.5 |
|    | 452108 | AW135982  | Hs.203013 | hypothetical protein FLJ12748            | 3.4 |
|    | 421183 | AL135740  | Hs.102447 | TSC-22-like                              | 3.4 |
|    | 441834 | AL138034  | Hs.7979   | KIAA0736 gene product                    | 3.4 |
|    | 413812 | AW188687  | Hs.44748  | ESTs                                     | 3.4 |
| 15 | 449932 | AI675444  | Hs.263024 | ESTs                                     | 3.4 |
|    | 447067 | R42098    | Hs.21964  | ESTs                                     | 3.4 |
|    | 408296 | AL117452  | Hs.44155  | DKFZP586G1517 protein                    | 3.4 |
|    | 447028 | AI973128  | Hs.167257 | brain link protein-1                     | 3.4 |
| 20 | 432715 | AA247152  | Hs.200483 | ESTs, Weakly similar to KIAA1074 protein | 3.4 |
|    | 418358 | L02840    | Hs.84244  | potassium voltage-gated channel, Shab-re | 3.4 |
|    | 417084 | H08370    | Hs.33067  | ESTs                                     | 3.4 |
|    | 444534 | AW271626  | Hs.42294  | ESTs                                     | 3.4 |
|    | 440700 | AW952281  | Hs.296184 | guanine nucleotide binding protein (G pr | 3.4 |
| 25 | 436637 | AI783629  | Hs.26766  | ESTs                                     | 3.4 |
|    | 412820 | BE001236  |           | gb:CM3-BN0075-240200-101-d11 BN0075 Homo | 3.4 |
|    | 426138 | AA773842  | Hs.293799 | ESTs                                     | 3.4 |
|    | 453033 | AA325869  | Hs.31463  | KIAA0281 gene product                    | 3.4 |
|    | 453305 | R39224    | Hs.267997 | EHM2 gene                                | 3.4 |
|    | 459660 | M79082    |           | ESTs                                     | 3.4 |
| 30 | 418821 | AA436002  | Hs.183161 | ESTs                                     | 3.4 |
|    | 439518 | W76326    |           | gb:zd60d04.r1 Soares_fetal_heart_NbHH19W | 3.4 |
|    | 400379 | NM_018432 |           | Homo sapiens ovarian cancer related prot | 3.4 |
|    | 437085 | AA743935  | Hs.202329 | ESTs                                     | 3.4 |
| 35 | 419852 | AW503756  | Hs.286184 | hypothetical protein dJ551D2.5           | 3.4 |
|    | 430694 | AA810624  | Hs.30936  | ESTs, Weakly similar to H2BH_HUMAN HISTO | 3.4 |
|    | 441287 | AW293132  | Hs.131373 | ESTs                                     | 3.4 |
|    | 425870 | R13406    | Hs.56782  | ESTs                                     | 3.4 |
|    | 443672 | AA323362  | Hs.9567   | butyrobetaine (gamma), 2-oxoglutarate di | 3.4 |
| 40 | 448044 | AI458682  |           | gb:tk13e01.x1 NCI_CGAP_Lu24 Homo sapiens | 3.4 |
|    | 405238 |           |           | Target Exon                              | 3.4 |
|    | 440404 | AI015881  | Hs.324527 | mitochondrial ribosomal protein S5       | 3.4 |
|    | 453590 | AF150278  | Hs.33578  | KIAA0820 protein                         | 3.4 |
|    | 450756 | AI733488  | Hs.144062 | ESTs                                     | 3.4 |
|    | 404283 |           |           | ENSP00000244751*:Copine-like protein KIA | 3.4 |
| 45 | 423257 | AW161039  | Hs.125878 | synapsin III                             | 3.4 |
|    | 432149 | AW614326  | Hs.133483 | ESTs, Weakly similar to T34549 probable  | 3.4 |
|    | 412986 | X81120    | Hs.75110  | cannabinoid receptor 1 (brain)           | 3.4 |
|    | 422809 | AK001379  | Hs.121028 | hypothetical protein FLJ10549            | 3.4 |
| 50 | 420050 | AL118615  | Hs.94653  | neurochondrin                            | 3.4 |
|    | 431789 | H19500    | Hs.269222 | mitogen-activated protein kinase 4       | 3.4 |
|    | 408601 | U47928    | Hs.86122  | protein A                                | 3.4 |
|    | 453740 | AL120295  | Hs.311809 | ESTs, Moderately similar to PC4259 ferri | 3.4 |
|    | 449919 | AI674685  | Hs.200141 | ESTs                                     | 3.4 |
|    | 426380 | AI291267  | Hs.149990 | ESTs                                     | 3.4 |
| 55 | 408554 | AA836381  | Hs.315111 | nuclear receptor co-repressor/HDAC3 comp | 3.3 |
|    | 443257 | AI334040  | Hs.11614  | HSPC065 protein                          | 3.3 |
|    | 432731 | R31178    | Hs.287820 | fibronectin 1                            | 3.3 |
|    | 421679 | AI475110  | Hs.203933 | ESTs                                     | 3.3 |
| 60 | 453169 | AB037815  | Hs.32156  | KIAA1394 protein                         | 3.3 |
|    | 437397 | AA349847  | Hs.4221   | hypothetical protein DKFZp761H039        | 3.3 |
|    | 443310 | BE552018  | Hs.133152 | ESTs                                     | 3.3 |
|    | 423169 | BE047009  | Hs.21837  | ESTs, Weakly similar to KIAA0927 protein | 3.3 |
|    | 433657 | AI244368  | Hs.8124   | PH domain containing protein in retina 1 | 3.3 |
| 65 | 408449 | NM_004408 | Hs.166161 | dynamin 1                                | 3.3 |
|    | 417402 | BE503227  | Hs.134759 | ESTs                                     | 3.3 |
|    | 416677 | T83470    | Hs.334840 | ESTs, Moderately similar to I78885 serin | 3.3 |
|    | 439753 | BE262233  | Hs.7423   | hypothetical protein from EURO/MACE 2168 | 3.3 |
|    | 455646 | BE064420  |           | gb:RC4-BT0311-241199-012-c08 BT0311 Homo | 3.3 |
| 70 | 450337 | AI693256  | Hs.202427 | ESTs                                     | 3.3 |
|    | 423420 | AI571364  | Hs.128382 | Homo sapiens mRNA; cDNA DKFZp761H1224 (f | 3.3 |
|    | 433236 | NM_004296 | Hs.3221   | regulator of G-protein signalling 6      | 3.3 |
|    | 417868 | AI078534  | Hs.122592 | ESTs                                     | 3.3 |
|    | 436207 | AA334774  | Hs.12845  | hypothetical protein MGC13159            | 3.3 |
| 75 | 441607 | NM_005010 | Hs.7912   | neuronal cell adhesion molecule          | 3.3 |
|    | 449249 | T52285    | Hs.193115 | Homo sapiens mRNA for KIAA1764 protein,  | 3.3 |
|    | 418216 | AA662240  | Hs.283099 | AF15q14 protein                          | 3.3 |
|    | 456060 | C14904    | Hs.45184  | Homo sapiens cDNA FLJ12284 fis, clone MA | 3.3 |
|    | 449145 | AI632122  | Hs.198408 | ESTs                                     | 3.3 |
| 80 | 415101 | R45531    | Hs.144534 | ESTs                                     | 3.3 |
|    | 401272 |           |           | C9000559*:gi 12314195 emb CAB99338.1 (A  | 3.3 |
|    | 420297 | AI628272  | Hs.88323  | ESTs, Weakly similar to ALU1_HUMAN ALU S | 3.3 |
|    | 419991 | AJ000098  | Hs.94210  | eyes absent (Drosophila) homolog 1       | 3.3 |
|    | 443761 | AI525743  | Hs.345187 | ESTs                                     | 3.3 |

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|    | 427317 | AB028955  | Hs.175780 | KIAA1032 protein                         | 3.3 |
|    | 426920 | AA393351  | Hs.132121 | ESTs                                     | 3.3 |
|    | 433894 | AI907682  | Hs.243293 | ESTs                                     | 3.3 |
| 5  | 454253 | AV660717  | Hs.47144  | DKFZP586N0819 protein                    | 3.3 |
|    | 419647 | AA348947  | Hs.91816  | hypothetical protein                     | 3.3 |
|    | 439978 | BE139460  | Hs.124673 | Homo sapiens cDNA FLJ11477 fis, clone HE | 3.3 |
|    | 407881 | AW072003  | Hs.40968  | heparan sulfate (glucosamine) 3-O-sulfot | 3.3 |
|    | 428670 | AA431682  | Hs.134832 | ESTs                                     | 3.3 |
| 10 | 435375 | AI733610  | Hs.187832 | ESTs                                     | 3.3 |
|    | 419043 | T19167    | Hs.89566  | ets variant gene 1                       | 3.3 |
|    | 403341 |           |           | Target Exon                              | 3.3 |
|    | 436282 | R91913    | Hs.272104 | ESTs, Moderately similar to ALU1_HUMAN A | 3.3 |
|    | 439627 | BE621702  | Hs.29076  | hypothetical protein FLJ21841            | 3.3 |
|    | 456209 | W60633    | Hs.297792 | ESTs                                     | 3.3 |
| 15 | 438810 | AW897846  | Hs.6421   | hypothetical protein DKFZp761N09121      | 3.3 |
|    | 411565 | AW851728  |           | gb:MR2-CT0222-011199-007-d06 CT0222 Homo | 3.3 |
|    | 418203 | X54942    | Hs.83758  | CDC28 protein kinase 2                   | 3.3 |
|    | 451254 | AI571016  | Hs.172967 | ESTs                                     | 3.3 |
| 20 | 435056 | AW023337  | Hs.5422   | glycoprotein M6B                         | 3.3 |
|    | 433842 | AI652156  | Hs.26346  | ESTs                                     | 3.3 |
|    | 433325 | AW206986  | Hs.143905 | ESTs                                     | 3.3 |
|    | 451066 | AI758660  | Hs.206132 | ESTs                                     | 3.3 |
|    | 436114 | AA778232  | Hs.19515  | ESTs, Highly similar to NRG3_HUMAN PRO-N | 3.3 |
| 25 | 421686 | AB011156  | Hs.106794 | KIAA0584 protein                         | 3.3 |
|    | 429228 | AI553633  | Hs.326447 | ESTs                                     | 3.3 |
|    | 450325 | AI935962  | Hs.26289  | ESTs                                     | 3.3 |
|    | 412350 | AI659306  | Hs.73826  | protein tyrosine phosphatase, non-recept | 3.3 |
|    | 451778 | AI826131  | Hs.62954  | ESTs, Weakly similar to zinc finger prot | 3.3 |
| 30 | 435977 | AL138079  | Hs.5012   | brain-specific membrane-anchored protein | 3.2 |
|    | 450475 | AW805634  | Hs.205015 | ESTs                                     | 3.2 |
|    | 418661 | NM_001949 | Hs.1189   | E2F transcription factor 3               | 3.2 |
|    | 436480 | AJ271643  | Hs.87469  | putative acid-sensing ion channel        | 3.2 |
|    | 407332 | AI801565  | Hs.200113 | Homo sapiens cDNA FLJ11379 fis, clone HE | 3.2 |
| 35 | 415131 | D61119    |           | gb:HUM158C11B Clontech human fetal brain | 3.2 |
|    | 409248 | AB033035  | Hs.51965  | KIAA1209 protein                         | 3.2 |
|    | 431462 | AW583672  | Hs.256311 | granin-like neuroendocrine peptide precu | 3.2 |
|    | 434834 | AF156774  | Hs.324020 | 1-acylglycerol-3-phosphate O-acyltransfe | 3.2 |
|    | 450358 | AB010098  | Hs.24907  | coronin, actin-binding protein, 2B       | 3.2 |
| 40 | 438461 | AW075485  | Hs.286049 | phosphoserine aminotransferase           | 3.2 |
|    | 405239 | U89281    |           | oxidative 3 alpha hydroxysteroid dehydro | 3.2 |
|    | 407304 | AA565832  | Hs.271649 | gb:nj32b03.s1 NCL_CGAP_AA1 Homo sapiens  | 3.2 |
|    | 451697 | AW449774  | Hs.296380 | POM (POM121 rat homolog) and ZP3 fusion  | 3.2 |
|    | 435071 | D60683    | Hs.35495  | ESTs                                     | 3.2 |
| 45 | 420352 | BE258835  |           | gb:601117374F1 NIH_MGC_16 Homo sapiens c | 3.2 |
|    | 412193 | AI684467  | Hs.144057 | ESTs                                     | 3.2 |
|    | 442320 | AI287817  | Hs.129636 | ESTs                                     | 3.2 |
|    | 407378 | AA299264  | Hs.57776  | ESTs, Moderately similar to I38022 hypot | 3.2 |
|    | 414528 | AA148950  | Hs.188836 | ESTs                                     | 3.2 |
| 50 | 439764 | T26535    | Hs.22744  | hypothetical protein MGC13105            | 3.2 |
|    | 410425 | BE278367  | Hs.63510  | KIAA0141 gene product                    | 3.2 |
|    | 429876 | AB028977  | Hs.225974 | KIAA1054 protein                         | 3.2 |
|    | 427627 | R87582    | Hs.179915 | guanine nucleotide binding protein (G pr | 3.2 |
|    | 439039 | AI656707  | Hs.48713  | ESTs                                     | 3.2 |
| 55 | 447925 | AW292271  | Hs.250718 | ESTs                                     | 3.2 |
|    | 447714 | AW296313  | Hs.255537 | ESTs                                     | 3.2 |
|    | 434574 | AI424458  | Hs.33470  | ESTs                                     | 3.2 |
|    | 437269 | AA334384  | Hs.149420 | ESTs                                     | 3.2 |
|    | 416845 | H95279    | Hs.293788 | gb:yu20h02.s1 Soares fetal liver spleen  | 3.2 |
| 60 | 452234 | AW084176  | Hs.223296 | ESTs, Weakly similar to I38022 hypotheti | 3.2 |
|    | 440274 | R24595    | Hs.7122   | scrapie responsive protein 1             | 3.2 |
|    | 437698 | R61837    | Hs.7990   | ESTs, Moderately similar to I84505 calci | 3.2 |
|    | 414761 | AU077228  | Hs.77256  | enhancer of zeste (Drosophila) homolog 2 | 3.2 |
|    | 445828 | F05802    | Hs.81907  | ESTs                                     | 3.2 |
| 65 | 423779 | AW071837  | Hs.57971  | ESTs                                     | 3.2 |
|    | 403790 |           |           | NM_001334*:Homo sapiens cathepsin O (CTS | 3.2 |
|    | 453792 | AL134539  | Hs.254129 | KIAA1678                                 | 3.2 |
|    | 428167 | AA770021  | Hs.16332  | ESTs                                     | 3.2 |
|    | 445413 | AA151342  | Hs.12677  | CGI-147 protein                          | 3.2 |
| 70 | 415314 | N88802    | Hs.5422   | glycoprotein M6B                         | 3.2 |
|    | 425115 | R44664    | Hs.123956 | ESTs                                     | 3.2 |
|    | 432625 | AI243596  | Hs.94830  | ESTs, Moderately similar to T03094 A-kin | 3.2 |
|    | 412420 | AL035668  | Hs.73853  | bone morphogenetic protein 2             | 3.1 |
|    | 422772 | AL119585  | Hs.120228 | KIAA0749 protein                         | 3.1 |
| 75 | 437414 | AW894071  | Hs.48448  | hypothetical protein DKFZp547C176        | 3.1 |
|    | 427961 | AW293165  | Hs.143134 | ESTs                                     | 3.1 |
|    | 435256 | AF193766  | Hs.13872  | cytokine-like protein C17                | 3.1 |
|    | 428966 | AF059214  | Hs.194687 | cholesterol 25-hydroxylase               | 3.1 |
|    | 413995 | BE048146  | Hs.75671  | syntaxin 1A (brain)                      | 3.1 |
| 80 | 443431 | AI056847  | Hs.20654  | ESTs                                     | 3.1 |
|    | 414217 | AI309298  | Hs.279898 | Homo sapiens cDNA: FLJ23165 fis, clone L | 3.1 |
|    | 419617 | AL008583  | Hs.91622  | neuronal pentraxin receptor              | 3.1 |
|    | 444326 | AI939357  | Hs.270710 | ESTs                                     | 3.1 |
|    | 436315 | BE390513  | Hs.27935  | hypothetical protein MGC4837             | 3.1 |

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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
| 5  | 446131 | NM_000929 | Hs.290    | phospholipase A2, group V                | 3.1 |
|    | 423858 | AL137326  | Hs.133483 | Homo sapiens mRNA; cDNA DKFZp434B0650 (f | 3.1 |
|    | 448475 | BE613134  | Hs.247474 | hypothetical protein FLJ21032            | 3.1 |
|    | 432682 | AI376400  | Hs.159588 | ESTs                                     | 3.1 |
|    | 450661 | AW952160  | Hs.83849  | ESTs                                     | 3.1 |
|    | 417636 | R08916    | Hs.191212 | ESTs                                     | 3.1 |
|    | 417918 | AA209205  | Hs.163754 | hypothetical protein FLJ12606            | 3.1 |
|    | 454032 | W31790    | Hs.194293 | ESTs, Weakly similar to I54374 gene NF2  | 3.1 |
| 10 | 443150 | AI034467  | Hs.34650  | ESTs                                     | 3.1 |
|    | 404632 |           |           | NM_022490:Homo sapiens hypothetical prot | 3.1 |
|    | 425537 | AB007913  | Hs.158291 | KIAA0444 protein                         | 3.1 |
|    | 437162 | AW005505  | Hs.5464   | thyroid hormone receptor coactivating pr | 3.1 |
|    | 400090 |           |           | Eos Control                              | 3.1 |
| 15 | 445424 | AB028945  | Hs.12696  | cortactin SH3 domain-binding protein     | 3.1 |
|    | 422949 | AA319435  |           | gb:EST21657 Adrenal gland tumor Homo sap | 3.1 |
|    | 448750 | U95020    | Hs.21903  | calcium channel, voltage-dependent, beta | 3.1 |
|    | 433560 | AI925195  | Hs.130891 | hypothetical protein MGC4400             | 3.1 |
|    | 433042 | AW193534  | Hs.281895 | Homo sapiens cDNA FLJ11660 fis, clone HE | 3.1 |
|    | 449722 | BE280074  | Hs.23960  | cyclin B1                                | 3.1 |
| 20 | 425480 | AB023198  | Hs.158135 | KIAA0981 protein                         | 3.1 |
|    | 449670 | F07693    | Hs.85603  | Homo sapiens mRNA; cDNA DKFZp434K2172 (f | 3.1 |
|    | 452619 | AW298597  | Hs.61884  | Homo sapiens, clone IMAGE:4298026, mRNA, | 3.1 |
|    | 428722 | U76456    | Hs.190787 | tissue inhibitor of metalloproteinase 4  | 3.1 |
| 25 | 405505 |           |           | C2001342:gil127814[splP26434]NAH4_RAT SO | 3.1 |
|    | 417565 | AI203405  | Hs.47831  | ESTs                                     | 3.1 |
|    | 439538 | AA837323  | Hs.56407  | ESTs                                     | 3.1 |
|    | 414117 | W88559    | Hs.1787   | proteolipid protein 1 (Pelizaeus-Merzbac | 3.1 |
|    | 430818 | AI311928  | Hs.348156 | gb:qo89h04.x1 NCI_CGAP_Kid5 Homo sapiens | 3.1 |
| 30 | 408508 | AI806109  | Hs.135736 | KIAA1580 protein                         | 3.1 |
|    | 414884 | R54418    | Hs.183745 | hypothetical protein FLJ13456            | 3.1 |
|    | 439963 | AW247529  | Hs.6793   | platelet-activating factor acetylhydrola | 3.1 |
|    | 446636 | AC002563  | Hs.15767  | citron (rho-interacting, serine/threonin | 3.1 |
|    | 417169 | R13550    | Hs.246773 | ESTs                                     | 3.1 |
| 35 | 450202 | AW969756  | Hs.34145  | ESTs, Weakly similar to B49647 GTP-bind  | 3.1 |
|    | 428060 | AA420616  | Hs.249483 | ESTs                                     | 3.1 |
|    | 430526 | AF181862  | Hs.242407 | G protein-coupled receptor, family C, gr | 3.1 |
|    | 421458 | NM_003654 | Hs.104576 | carbohydrate (keratan sulfate Gal-6) sul | 3.1 |
|    | 429163 | AA884766  |           | gb:am20a10.s1 Soares_NFL_T_GBC_S1 Homo s | 3.0 |
| 40 | 428180 | AI129767  | Hs.182874 | guanine nucleotide binding protein (G pr | 3.0 |
|    | 422631 | BE218919  | Hs.118793 | hypothetical protein FLJ10688            | 3.0 |
|    | 433290 | R20077    | Hs.302185 | Homo sapiens clone 23618 mRNA sequence   | 3.0 |
|    | 412507 | L36645    | Hs.73964  | EphA4                                    | 3.0 |
|    | 415827 | H17462    | Hs.23079  | ESTs                                     | 3.0 |
| 45 | 429609 | AF002246  | Hs.210863 | cell adhesion molecule with homology to  | 3.0 |
|    | 457358 | AI479755  | Hs.129010 | ESTs                                     | 3.0 |
|    | 441732 | AW298818  | Hs.127341 | ESTs                                     | 3.0 |
|    | 459318 | NM_000038 |           | gb:Homo sapiens adenomatosis polyposis c | 3.0 |
| 50 | 426384 | AI472078  | Hs.303662 | hypothetical protein FLJ13189 (FLJ13189) | 3.0 |
|    | 436267 | AW450938  | Hs.180115 | ESTs                                     | 3.0 |
|    | 450650 | T65617    | Hs.101257 | hypothetical protein MGC3295             | 3.0 |
|    | 414865 | AA157155  | Hs.274414 | hypothetical protein FLJ14457            | 3.0 |
|    | 459080 | AW192083  | Hs.290855 | ESTs                                     | 3.0 |
|    | 412783 | BE276738  | Hs.74578  | DEAD/H (Asp-Glu-Ala-Asp/His) box polypep | 3.0 |
| 55 | 432593 | AW301003  | Hs.51483  | ESTs, Weakly similar to hypothetical pro | 3.0 |
|    | 443753 | AW367578  | Hs.134749 | ESTs                                     | 3.0 |
|    | 445921 | AW015211  | Hs.146181 | ESTs                                     | 3.0 |
|    | 427695 | R88483    | Hs.172862 | ESTs                                     | 3.0 |
|    | 438283 | AI458931  | Hs.37282  | ESTs                                     | 3.0 |
| 60 | 453324 | W26592    | Hs.232089 | ESTs                                     | 3.0 |
|    | 421094 | AW978202  | Hs.289064 | hypothetical protein FLJ22251            | 3.0 |
|    | 433434 | AA588429  |           | gb:no22b03.s1 NCI_CGAP_Pr22 Homo sapiens | 3.0 |
| 65 | 452850 | H23230    | Hs.22481  | ESTs, Moderately similar to A46010 X-lin | 3.0 |
|    | 416658 | U03272    | Hs.79432  | fibrillin 2 (congenital contractural ara | 3.0 |
|    | 429569 | AA454993  | Hs.138343 | ESTs, Weakly similar to I78885 serine/th | 3.0 |
|    | 428600 | AW863261  | Hs.242413 | hypothetical protein DKFZp434K1421       | 3.0 |
|    | 443633 | AL031290  | Hs.9654   | similar to pregnancy-associated plasma p | 3.0 |
|    | 433229 | AB040925  | Hs.91625  | KIAA1492 protein                         | 3.0 |
|    | 429046 | X57436    | Hs.194772 | oligodendrocyte myelin glycoprotein      | 3.0 |
| 70 | 431431 | AL096711  | Hs.252953 | Human DNA sequence from clone RP3-403A15 | 3.0 |
|    | 414430 | AI346201  | Hs.76118  | ubiquitin carboxyl-terminal esterase L1  | 3.0 |
|    | 423165 | AI937547  | Hs.124915 | hypothetical protein MGC2601             | 3.0 |
|    | 440261 | M81886    | Hs.7117   | glutamate receptor, ionotropic, AMPA 1   | 3.0 |
|    | 441364 | AW450466  | Hs.126830 | ESTs, Weakly similar to YD38_YEAST HYPOT | 3.0 |
| 75 | 437056 | AI147061  |           | gb:ok33a11.s1 Soares_NSF_F8_9W_OT_PA_P_S | 3.0 |
|    | 429168 | AA984682  | Hs.146589 | ESTs, Weakly similar to JC5238 galactosy | 3.0 |
|    | 453739 | AL120266  |           | ESTs                                     | 3.0 |

TABLE 15B:

Pkey: Unique Eos probeset identifier number  
CAT number: Gene cluster number  
Accession: Genbank accession numbers

| Pkey | CAT Number | Accession |
|------|------------|-----------|
|------|------------|-----------|



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|    |        |           |  |
|----|--------|-----------|--|
| 5  | 410099 | 117647_1  | AA081630 T08671 A1174254 D83874 AW959843 AA364503 AA693467 AW993370 BE327037 AA167714 N79906 AW901977 AW901980 W52882 T07735 AA484549 W60090 D52685 T23811 BE327043 AW901768 BE551237 AA917004 AA716027 A1439658 AA283724 A1805992 A1457096 AA084618 BE467735 A1092635 A1887863 A1697593 AA436618 A1167419 A1418634 T31586 AA436630 AA706191 A1041169 A1422304 T03534 AA211402 A1204699 A1366472 AW827081 AA788593 T32736 A1767935 AA167791 AA747914 AA663870 A1865504 BE189274 AW893230 AA210998 H24222 AA081774 BE000935 BE000834 AA334880   |
|    | 411565 | 1249755_1 | AW851728 AW851607 AW851621 AW851702 AW851647 AW851727 AW851658 AW851617 AW851628   |
|    | 412799 | 132817_1  | A1267606 AA121045 AA126521   |
|    | 412811 | 132943_1  | H06382 AW957730 AA352014 R13591 AA121201 D60420 BE263253 BE047862 Z14952 A1424991 A1693507 A1863108 AA599060 A1091148 AA598689 R39887 AA813482 AW016452 H06383 R41807 A1364268 AA620528 A1241940 AW089149 AW090733 AW088875 Z38240 AA121202 R17734   |
| 10 | 412820 | 1330039_1 | BE001236 BE001177 BE001180 BE001234  |
|    | 414372 | 143909_1  | AA143654 AW753140 AA213770 AW970865 AA569075 AA492132  |
|    | 415131 | 1523680_1 | D61119 D81508 D81734   |
|    | 416871 | 1626761_1 | H98716 N90792 N24283   |
|    | 418512 | 176394_1  | AW498974 T09332 R58460 AA350990 T33786 T30936 AA350905 T08592 T09274 AA224297 D54678 T08951 R15346 AW953188 AA350074 AW890649  |
| 15 | 419544 | 185760_2  | A1909154 AA526337 AA244193 A1909153  |
|    | 420111 | 190755_1  | AA255652 AA280911 AW967920 AA262684  |
|    | 420352 | 192979_1  | BE258835 AW968316 AA258918 AW843305 R14744 A1580388 BE071923 R36280  |
|    | 422949 | 223184_1  | AA319435 N56456 AA319377 AW961532 T48452 AA894424  |
| 20 | 423476 | 22861_1   | AL035633 F11794 F11783 H18042 T66089 H29379 R19493 AW134660 A1299437 AL133995 AA057405 N78357 AA917450 A1002692 T09262 T65008 H29290 A1200874 AA894415 A1732887 A1791768 A1733447 AA988785 N62128 T09261 AW956936  |
|    | 424572 | 24097_1   | M19650 R18810 R18721 AW896146 AW889520 AA192362 AA176814 F12085 BE255264 BE251393 T65248 AA380585 AA380465 BE408684 AA459037 AW498869 AA776107 BE274289 D45269 M61958 AA378818 AW663180 AW672958 H08611 M78164 BE393721 AA348660 R36303 AW498862 AA019090 AA001087 AA054302 AA019775 AA018808 AA019132 A1858240 R73218 H30477 H17776 AA659570 BE276750 AL118657 AA375861 AA352427 AW581695 A1141188 N63474 AA654162 H17659 AL120696 T28867 AW498868 A1355918 AA902349 AA568098 A1088231 A1042604 AA555133 A1183611 A1608822 A1275941 AW316805 AA349486 A1355233 R85117 AW613626 R49234 AA458846 N20669 H18693 AA977567 T15423 AW002084 A1824721 N36242 A1417281 A1018212 AA912337 F09722 AA749449 AW879172 AA885427 AA916639 A1872560 F00482 H45184 A1217251 AA775807 BE390071 AA303517 AA001050 BE515169 N44065 AL133684 A1807085 AA808009 AA915914 F00007 AA019749 AL121560 AW675544 AW090233 AW072071 A1810932 A1089733 AW026222 AA770155 A1089647 A1085733 AW516061 AL037636 AL037635 A1863947 H50420 R11203 AA019133 N94772 N71842 N29047 AA778138 AA554336 AA179865 N59453 T65212 AA054270 AW086630 AA533375 D13146 AA349487 AU077160 BE255671 BE276795 BE250823 A120301 BE311390 BE252483 |
| 25 | 424945 | 245223_1  | A1221919 Z19967 AA348780 AW964077 AW166028 BE540193 N94800 AA452368 N99604 A1341345 AW298800 AA724961 AA931158 A1741227 AL080660 A1982626 D81263 D53937 D52496 AA974487 AW043854 N50483 Z39997 A1492961 A1361526 F04002 AA452141 T23551 A1472655 A1913667 A1341984 N92658 T32870 R52664 N50428 AW089291 A1934175 A1423737 D06665   |
| 30 | 424947 | 245247_1  | R77952 AA348809 AW959960 AW959962 A1565552 AW070702 AA973910 R85973  |
| 35 | 425331 | 250199_1  | AW962128 AA355353 AA427363   |
|    | 426413 | 266650_1  | AA377823 AW954494 A1022688   |
|    | 426503 | 268283_1  | AA380153 AA380233 AW963529   |
| 40 | 426919 | 273507_1  | AL041228 D82004 D61361 A1203314 A1990307 AW900295 A1018308 AW087473 AW183530 AA393346 H50055 AA935601  |
|    | 428342 | 290035_2  | A1739168 AA426249 A1199636 AW505198 AW977291 AA824583 AA883419 AA724079 A1015524 A1377728 AW293682 A1928140 AA731438 A1092404 A1085530 AA731340  |
|    | 429007 | 298301_1  | D80642 AA443145 AL119015 AW904500  |
|    | 429163 | 300543_1  | AA884766 AW974271 AA592975 AA447312  |
| 45 | 429421 | 30431_1   | AL031658 A1693758 AL040619 AW977914 AA811957 A1352198 AW104364 AA648367 AA897604 AW341668 A1201382 AL040620  |
|    | 430183 | 31412_2   | BE010038 AA675833 A1311783 T86895 W68032 BE064393 BE064394 BE157228 BE183282 A1936370 AA552514 T67280 AA039909   |
|    | 430676 | 32168_1   | AF084866 AF084870 AF084864 AF084867 AF084869 AF084865 AF084868 AW818206 AW812038 BE144813 BE144812 AW812041 AW812040 AW812067 BE061583 BE061604 T05808 A1352469 AA580921 BE141783 BE141782 BE061601 AW814393 AW885029  |
|    | 430968 | 326269_1  | AW972830 AA527647 AA489820 AA570352  |
| 50 | 433009 | 357371_1  | AA761668 AA573621 R92814 R09670  |
|    | 433434 | 366095_1  | AA588429 A1972567 AW504832 A1299694  |
|    | 433523 | 368873_1  | H29882 AW665533 AW149901 A1572917 AA598500 A1686466 A1336390 AW864390 AW864320   |
|    | 435542 | 407744_1  | AA687376 H74234 AW975503   |
|    | 437034 | 431713_1  | AA742643 AA808575 AW976668   |
| 55 | 437056 | 432262_1  | A147061 AA743380 AA765223 AW976398 A1803927  |
|    | 438458 | 457837_1  | AW975186 AA807807 D29548   |
|    | 439285 | 47065_1   | AL133916 N79113 AF086101 N76721 AW950828 AA364013 AW955684 A1346341 A1867454 N54784 A1655270 A1421279 AW014882 AA775552 N62351 N59253 AA626243 A1341407 BE175639 AA456968 A1358918 AA457077  |
|    | 439518 | 47334_1   | W76326 AF086341 W72300   |
| 60 | 439566 | 47387_1   | AF085387 W77884 W72711   |
|    | 441102 | 509604_1  | AA973905 A1299888 AA917019 H63235 T90771   |
|    | 446692 | 689623_1  | Z44514 A1352097 A1803984 AW235923 AW196558 A1954637 A1336983   |
|    | 447197 | 711623_1  | R36075 A1365546 R36167   |
|    | 448044 | 747196_1  | A1458682 H24240 R14537 R18426 AW867082   |
| 65 | 449625 | 8113_1    | NM_014253 AF100772 BE088769 AL022718 BE161779 AW863569 BE161640 AL039060 BE168542 AW296554 AA323193 AA235370 AW779760 N48674 A1375997 R45432 D59344 A1203107 F07491 R35360 R25094 A1913631 A1498402 T61382 A1016320 N45526 T61415 AA331486   |
|    | 450375 | 83327_1   | AA009647 AA131254 AA374293 AW954405 H04410 AW606284 AA151166 BE157467 BE157601 H04384 W46291 AW663674 H04021 H01532 AA190993 H03231 H59605 H01642 AA852876 AA113758 AA626915 AA746952 A161014 AA099554 R69067  |
|    | 450582 | 83933_1   | A1339732 AA010300 AW515041 AA768334 N29860 AA425874 AA425118 AA855829 AW936878   |
| 70 | 451320 | 86576_1   | AW118072 A1631982 T15734 AA224195 A1701458 W20198 F26326 AA890570 N90552 AW071907 A1671352 A1375892 T03517 R88265 A1124088 AA224388 A1084316 A1354686 T33652 A1140719 A1720211 T03490 A1372637 T15415 AW205836 AA630384 T03515 T33230 AA017131 AA443303 T33623 A1222556 T33511 T33785 A1419606 D55612  |
|    | 453331 | 96214_1   | A1240665 T53681 N77468 H51833 AA147247 R75732 C18450 R73999 A1095755 T49904 H03868 AA411580 R33395 AA410586 T48869 D63292 R31981 H12498 H02668 AA035018 R75957 A1803329 R27528 R36203 A1809932 A1808765 R78948 AA411449 AA976929 A1378760 A1378620 T48870 R73906 R75632 H03612 AA909684 N50695 H02580 H12839 N58781 AA742532 A1360919 H03502 BE208298 R68588 A1350463 R31935 AW069127 AA411621 R25671 R36105 H12451 H03869 H51263 AA035486 R25109 R25110 AA147933  |
| 75 | 453739 | 979419_1  | AL120266 AW269469 AW890114   |
|    | 454171 | 1049240_1 | AW854832 AW854798 AW854857 AW854816 AW854834 AW854817  |
|    | 455646 | 1348557_1 | BE064420 BE064435 BE064429 BE064414 BE064400 BE064517  |
| 80 | 458912 | 823104_1  | A1911066 A1933734 A1680888 A1003599  |

TABLE 15C:

Pkey: Unique number corresponding to an Eos probelet

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Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.

Strand: Indicates DNA strand from which exons were predicted.

Nt\_position: Indicates nucleotide positions of predicted exons.

| Pkey   | Ref     | Strand | Nt_position   |
|--------|---------|--------|---|
| 400533 | 6981826 | Minus  | 277132-277595   |
| 400777 | 8131663 | Plus   | 70745-71121   |
| 401272 | 9797373 | Minus  | 98374-98509   |
| 402145 | 8018280 | Plus   | 113086-114800   |
| 402604 | 9909420 | Plus   | 20393-20767   |
| 402605 | 9909420 | Minus  | 47680-47973   |
| 402855 | 9662953 | Minus  | 59763-59909   |
| 403142 | 9444521 | Plus   | 89286-90131   |
| 403341 | 8569175 | Plus   | 30699-30910   |
| 403696 | 3135242 | Minus  | 143467-143634   |
| 403790 | 8084957 | Minus  | 87826-87947,89835-90002   |
| 404150 | 7534008 | Plus   | 165811-165943   |
| 404283 | 2276311 | Minus  | 99460-99564   |
| 404541 | 8318559 | Plus   | 103456-103664   |
| 404584 | 9857511 | Plus   | 138651-139153   |
| 404632 | 9796668 | Plus   | 45096-45229   |
| 404819 | 4678240 | Plus   | 16223-16319,16427-16513,16736-16859,16941-17075,17170-17287,17389-17529,18261-18357,18443-18578 |
| 405238 | 7249119 | Minus  | 51728-51836   |
| 405239 | 7249119 | Plus   | 144345-144464,144690-144836,151750-151883,152407-152484   |
| 405348 | 2914717 | Minus  | 43310-43462   |
| 405605 | 5836195 | Minus  | 117070-117270   |
| 405819 | 4007557 | Plus   | 2830-2967   |

TABLE 16A: ABOUT 859 GENES UP-REGULATED IN GLIOBLASTOMA MULTIFORMA COMPARED TO NORMAL CENTRAL NERVOUS SYSTEM

Table 16A lists about 859 genes up-regulated in glioblastoma multiforma (GBM) compared to normal central nervous system (CNS). These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" LGG to "average" CNS tissues was greater than or equal to 3.0. The "average" GBM level was set to the 85<sup>th</sup> percentile amongst various GBM tumors. The "average" normal CNS tissue level was set to the 85<sup>th</sup> percentile amongst various CNS tissues. In order to remove gene-specific background levels of non-specific hybridization, the 10<sup>th</sup> percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 R1: Ratio of GLIOBLASTOMA MULTIFORMA to CNS

| Pkey   | ExAccn    | UnigenelD | Unigene Title                            | R1   |
|--------|-----------|-----------|--|------|
| 414555 | N98569    | Hs.76422  | phospholipase A2, group IIA (platelets,  | 47.2 |
| 422737 | M26939    | Hs.119571 | collagen, type III, alpha 1 (Ehlers-Danl | 44.9 |
| 423961 | D13666    | Hs.136348 | periostin (OSF-2os)                      | 33.3 |
| 433001 | AF217513  | Hs.279905 | clone HQ0310 PRO0310p1                   | 25.9 |
| 449539 | W80363    | Hs.58446  | ESTs                                     | 25.8 |
| 417308 | H60720    | Hs.81892  | KIAA0101 gene product                    | 23.3 |
| 424800 | AL035588  | Hs.153203 | MyoD family inhibitor                    | 23.0 |
| 414825 | X06370    | Hs.77432  | epidermal growth factor receptor (avian  | 19.6 |
| 431941 | AK000106  | Hs.272227 | Homo sapiens cDNA FLJ20099 fis, clone CO | 18.7 |
| 453392 | U23752    | Hs.32964  | SRY (sex determining region Y)-box 11    | 17.8 |
| 444190 | AI878918  | Hs.10526  | cysteine and glycine-rich protein 2      | 17.8 |
| 428330 | L22524    | Hs.2256   | matrix metalloproteinase 7 (matrilysin,  | 17.7 |
| 417130 | AW276858  | Hs.81256  | S100 calcium-binding protein A4 (calcium | 17.5 |
| 414217 | AI309298  | Hs.279898 | Homo sapiens cDNA: FLJ23165 fis, clone L | 17.0 |
| 428242 | H55709    | Hs.2250   | leukemia inhibitory factor (cholinergic  | 15.9 |
| 425397 | J04088    | Hs.156346 | topoisomerase (DNA) II alpha (170kD)     | 15.6 |
| 424635 | AA420687  | Hs.115455 | Homo sapiens cDNA FLJ14259 fis, clone PL | 15.2 |
| 408243 | Y00787    | Hs.624    | interleukin 8                            | 14.7 |
| 422672 | X12784    | Hs.119129 | collagen, type IV, alpha 1               | 14.7 |
| 434078 | AW680709  | Hs.283683 | chromosome 8 open reading frame 4        | 14.6 |
| 409799 | D11928    | Hs.76845  | phosphoserine phosphatase-like           | 14.2 |
| 414761 | AJ077228  | Hs.77256  | enhancer of zeste (Drosophila) homolog 2 | 14.2 |
| 442432 | BE093589  | Hs.38178  | hypothetical protein FLJ23468            | 14.1 |
| 446584 | U53445    | Hs.15432  | downregulated in ovarian cancer 1        | 14.0 |
| 444969 | AI203334  | Hs.160628 | ESTs                                     | 13.5 |
| 430691 | C14187    | Hs.103538 | ESTs                                     | 12.9 |
| 426075 | AW513691  | Hs.270149 | ESTs, Weakly similar to 2109260A B cell  | 12.4 |
| 445101 | T75202    | Hs.12314  | Homo sapiens mRNA; cDNA DKFZp586C1019 (f | 12.1 |
| 441269 | AW015206  | Hs.178784 | ESTs                                     | 11.9 |
| 417426 | NM_002291 | Hs.82124  | laminin, beta 1                          | 11.9 |
| 430132 | AA204686  | Hs.234149 | hypothetical protein FLJ20647            | 11.8 |
| 422163 | AF027208  | Hs.112360 | prominin (mouse)-like 1                  | 11.3 |
| 411411 | AA345241  | Hs.55950  | ESTs, Weakly similar to KIAA1330 protein | 11.3 |
| 449722 | BE280074  | Hs.23960  | cyclin B1                                | 11.2 |
| 436291 | BE568452  | Hs.344037 | protein regulator of cytokinesis 1       | 11.0 |
| 435020 | AW505076  | Hs.301855 | DiGeorge syndrome critical region gene 8 | 10.9 |
| 412140 | AA219691  | Hs.73625  | RAB6 interacting, kinesin-like (rabkines | 10.9 |
| 419239 | AA468183  | Hs.184598 | Homo sapiens cDNA: FLJ23241 fis, clone C | 10.6 |
| 417043 | NM_004369 | Hs.80988  | collagen, type VI, alpha 3               | 10.6 |
| 413929 | BE501689  | Hs.75617  | collagen, type IV, alpha 2               | 10.6 |

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|----|--------|-----------|-----------|--|------|
|    | 420602 | AF060877  | Hs.99236  | regulator of G-protein signalling 20     | 10.6 |
|    | 409142 | AL136877  | Hs.50758  | SMC4 (structural maintenance of chromoso | 10.4 |
|    | 406972 | M32053    |           | gb:Human H19 RNA gene, complete cds.     | 10.4 |
| 5  | 412986 | X81120    | Hs.75110  | cannabinoid receptor 1 (brain)           | 10.3 |
|    | 419508 | AW997938  | Hs.90786  | ATP-binding cassette, sub-family C (CFTR | 10.3 |
|    | 449611 | AI970394  | Hs.197075 | ESTs                                     | 10.1 |
|    | 427581 | NM_014788 | Hs.179703 | KIAA0129 gene product                    | 10.1 |
| 10 | 431512 | BE270734  | Hs.2795   | lactate dehydrogenase A                  | 9.9  |
|    | 429183 | AB014604  | Hs.197955 | KIAA0704 protein                         | 9.8  |
|    | 433437 | U20536    | Hs.3280   | caspase 6, apoptosis-related cysteine pr | 9.7  |
|    | 424840 | D79987    | Hs.153479 | extra spindle poles, S. cerevisiae, homo | 9.7  |
|    | 433800 | AI034361  | Hs.135150 | lung type-I cell membrane-associated gly | 9.7  |
|    | 433647 | AA603367  | Hs.222294 | ESTs                                     | 9.7  |
| 15 | 414622 | AI752666  | Hs.76669  | nicotinamide N-methyltransferase         | 9.5  |
|    | 413719 | BE439580  | Hs.75498  | small inducible cytokine subfamily A (Cy | 9.3  |
|    | 409461 | AA382169  | Hs.54483  | N-myc (and STAT) interactor              | 9.3  |
|    | 409902 | AI337658  | Hs.156351 | ESTs                                     | 9.3  |
|    | 450375 | AA009647  |           | a disintegrin and metalloproteinase doma | 9.2  |
| 20 | 445873 | AA250970  | Hs.251946 | poly(A)-binding protein, cytoplasmic 1-I | 9.1  |
|    | 442802 | AL133035  | Hs.8728   | hypothetical protein DKFZp434G171        | 9.1  |
|    | 452461 | N78223    | Hs.108106 | transcription factor                     | 9.1  |
|    | 434846 | AW295389  | Hs.119768 | ESTs                                     | 9.1  |
|    | 422158 | L10343    | Hs.112341 | protease inhibitor 3, skin-derived (SKAL | 9.0  |
|    | 425187 | AW014486  | Hs.22509  | ESTs                                     | 9.0  |
| 25 | 443247 | BE614387  | Hs.333893 | c-Myc target JPO1                        | 8.7  |
|    | 459079 | AI795870  | Hs.54277  | DNA segment on chromosome X (unique) 992 | 8.7  |
|    | 410276 | AI554545  | Hs.68301  | angiotensin-2                            | 8.6  |
|    | 402855 |           |           | NM_001839*:Homo sapiens calponin 3, acid | 8.6  |
| 30 | 439710 | AF086543  |           | gb:Homo sapiens full length insert cDNA  | 8.6  |
|    | 411968 | AI207410  | Hs.69280  | Homo sapiens, clone IMAGE:3636299, mRNA, | 8.6  |
|    | 410102 | AW248508  | Hs.279727 | ESTs; homologue of PEM-3 (Ciona savignyi | 8.6  |
|    | 436895 | AF037335  | Hs.5338   | carbonic anhydrase XII                   | 8.6  |
|    | 418203 | X54942    | Hs.83758  | CDC28 protein kinase 2                   | 8.6  |
| 35 | 416892 | L24498    | Hs.80409  | growth arrest and DNA-damage-inducible,  | 8.5  |
|    | 425234 | AW152225  | Hs.165909 | ESTs, Weakly similar to I38022 hypotheti | 8.5  |
|    | 449961 | AW265634  | Hs.133100 | ESTs                                     | 8.5  |
|    | 449444 | AW818436  | Hs.23590  | solute carrier family 16 (monocarboxylic | 8.4  |
|    | 417061 | AI675944  | Hs.188691 | Homo sapiens cDNA FLJ12033 fis, clone HE | 8.3  |
| 40 | 453884 | AA355925  | Hs.36232  | KIAA0186 gene product                    | 8.3  |
|    | 424085 | NM_002914 | Hs.139226 | replication factor C (activator 1) 2 (40 | 8.2  |
|    | 419938 | AU076772  | Hs.1279   | complement component 1, r subcomponent   | 8.1  |
|    | 411078 | AI222020  | Hs.182364 | CocoaCrisp                               | 8.1  |
|    | 406850 | AI624300  | Hs.172928 | collagen, type I, alpha 1                | 8.0  |
| 45 | 447726 | AL137638  | Hs.19368  | matrilin 2                               | 8.0  |
|    | 439999 | AA115811  | Hs.6838   | ras homolog gene family, member E        | 8.0  |
|    | 416658 | U03272    | Hs.79432  | fibrillin 2 (congenital contractual ara  | 7.9  |
|    | 439451 | AF086270  | Hs.278554 | heterochromatin-like protein 1           | 7.9  |
|    | 458814 | AI498957  | Hs.170861 | ESTs, Weakly similar to Z195_HUMAN ZINC  | 7.9  |
| 50 | 447004 | AW296968  | Hs.157539 | ESTs                                     | 7.9  |
|    | 436140 | W87355    | Hs.269587 | ESTs                                     | 7.9  |
|    | 436607 | AW661783  | Hs.211061 | ESTs                                     | 7.8  |
|    | 422809 | AK001379  | Hs.121028 | hypothetical protein FLJ10549            | 7.7  |
|    | 440052 | AI633744  | Hs.195648 | ESTs, Weakly similar to I38022 hypotheti | 7.7  |
| 55 | 422106 | D84239    | Hs.111732 | Fc fragment of IgG binding protein       | 7.7  |
|    | 418113 | AI272141  | Hs.83484  | SRY (sex determining region Y)-box 4     | 7.7  |
|    | 410286 | AI739159  | Hs.61898  | DKFZP586N2124 protein                    | 7.7  |
|    | 424687 | J05070    | Hs.151738 | matrix metalloproteinase 9 (gelatinase B | 7.6  |
|    | 422048 | NM_012445 | Hs.288126 | spodin 2, extracellular matrix protein   | 7.6  |
| 60 | 421988 | AW450481  | Hs.161333 | ESTs                                     | 7.6  |
|    | 452620 | AA436504  | Hs.119286 | ESTs                                     | 7.6  |
|    | 453941 | U39817    | Hs.36820  | Bloom syndrome                           | 7.5  |
|    | 416737 | AF154335  | Hs.79691  | LIM domain protein                       | 7.5  |
|    | 425289 | AW139342  | Hs.155530 | interferon, gamma-inducible protein 16   | 7.5  |
| 65 | 418400 | BE243026  | Hs.301989 | KIAA0246 protein                         | 7.5  |
|    | 437036 | AI571514  | Hs.133022 | ESTs                                     | 7.5  |
|    | 421899 | AJ011895  | Hs.109281 | Nef-associated factor 1                  | 7.4  |
|    | 409731 | AA125985  | Hs.56145  | thymosin, beta, identified in neuroblast | 7.4  |
|    | 427528 | AU077143  | Hs.179565 | minichromosome maintenance deficient (S. | 7.4  |
| 70 | 427871 | AW992405  | Hs.59622  | Homo sapiens, clone IMAGE:3507281, mRNA, | 7.3  |
|    | 448935 | AL078596  | Hs.22591  | nuclear receptor subfamily 2, group E, m | 7.3  |
|    | 415079 | R43179    | Hs.22895  | hypothetical protein FLJ23548            | 7.3  |
|    | 449571 | AW016812  | Hs.200266 | ESTs                                     | 7.3  |
|    | 427899 | AA829286  | Hs.332053 | serum amyloid A1                         | 7.3  |
|    | 447458 | AI741082  | Hs.158961 | ESTs                                     | 7.3  |
| 75 | 430630 | AW269920  | Hs.2621   | cystatin A (stefin A)                    | 7.2  |
|    | 411252 | AB018549  | Hs.69328  | MD-2 protein                             | 7.2  |
|    | 432731 | R31178    | Hs.287820 | fibronectin 1                            | 7.2  |
|    | 454117 | BE410100  | Hs.40368  | adaptor-related protein complex 1, sigma | 7.2  |
| 80 | 407881 | AW072003  | Hs.40968  | heparan sulfate (glucosamine) 3-O-sulfot | 7.2  |
|    | 428728 | NM_016625 | Hs.191381 | hypothetical protein                     | 7.1  |
|    | 416111 | AA033813  | Hs.79018  | chromatin assembly factor 1, subunit A ( | 7.1  |
|    | 432281 | AK001239  | Hs.274263 | hypothetical protein FLJ10377            | 7.1  |
|    | 410434 | AF051152  | Hs.63668  | toll-like receptor 2                     | 7.1  |

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|    | 420018 | U56387    | Hs.94376  | proprotein convertase subtilisin/kexin t  | 7.1 |
|    | 418293 | AI224483  | Hs.16063  | hypothetical protein FLJ21877             | 7.1 |
|    | 424954 | NM_000546 | Hs.1846   | tumor protein p53 (Li-Fraumeni syndrome)  | 7.0 |
| 5  | 445900 | AF070526  | Hs.125036 | Homo sapiens clone 24787 mRNA sequence    | 7.0 |
|    | 419741 | NM_007019 | Hs.93002  | ubiquitin carrier protein E2-C            | 7.0 |
|    | 422283 | AW411307  | Hs.114311 | CDC45 (cell division cycle 45, S.cerevis  | 7.0 |
|    | 434808 | AF155108  | Hs.256150 | Homo sapiens, Similar to RIKEN cDNA 2810  | 6.9 |
|    | 416847 | L43821    | Hs.80261  | enhancer of filamentation 1 (cas-like do  | 6.9 |
| 10 | 424381 | AA285249  | Hs.146329 | protein kinase Chk2                       | 6.9 |
|    | 410064 | X53416    | Hs.195464 | filamin A, alpha (actin-binding protein-  | 6.9 |
|    | 415682 | AI347128  | Hs.191870 | ESTs                                      | 6.9 |
|    | 421977 | W94197    | Hs.110165 | ribosomal protein L26 homolog             | 6.8 |
|    | 429447 | AW812452  | Hs.83286  | ESTs, Weakly similar to S14747 sphingomy  | 6.8 |
|    | 423198 | M81933    | Hs.1634   | cell division cycle 25A                   | 6.8 |
| 15 | 413627 | BE182082  | Hs.246973 | ESTs                                      | 6.8 |
|    | 412777 | AI335773  | Hs.270123 | ESTs                                      | 6.8 |
|    | 409829 | M33552    | Hs.56729  | lymphocyte-specific protein 1             | 6.8 |
|    | 451129 | BE072881  |           | gb:RC2-BT0548-200300-012-e09 BT0548 Homo  | 6.8 |
| 20 | 444381 | BE387335  | Hs.283713 | ESTs, Weakly similar to S64054 hypotheti  | 6.7 |
|    | 446131 | NM_000929 | Hs.290    | phospholipase A2, group V                 | 6.7 |
|    | 441703 | AW390054  | Hs.192843 | leucine zipper protein FKSG14             | 6.7 |
|    | 420311 | AW445044  | Hs.38207  | Human DNA sequence from clone RP4-530115  | 6.7 |
|    | 425202 | AW962282  | Hs.152049 | ESTs, Weakly similar to I38022 hypotheti  | 6.7 |
| 25 | 408161 | AW952912  | Hs.300383 | hypothetical protein MGC3032              | 6.7 |
|    | 440704 | M69241    | Hs.162    | insulin-like growth factor binding prote  | 6.7 |
|    | 407182 | AA312551  | Hs.230157 | ESTs                                      | 6.7 |
|    | 445837 | AI261700  | Hs.145544 | ESTs                                      | 6.6 |
|    | 433376 | AI249361  | Hs.74122  | caspase 4, apoptosis-related cysteine pr  | 6.6 |
| 30 | 431211 | M86849    | Hs.323733 | gap junction protein, beta 2, 26kD (conn  | 6.6 |
|    | 447439 | AA313565  | Hs.145020 | ESTs, Weakly similar to KIAA1205 protein  | 6.5 |
|    | 407235 | D20569    | Hs.169407 | SAC2 (suppressor of actin mutations 2, y  | 6.5 |
|    | 450506 | NM_004460 |           | fibroblast activation protein, alpha      | 6.5 |
|    | 432593 | AW301003  | Hs.51483  | ESTs, Weakly similar to hypothetical pro  | 6.5 |
| 35 | 418054 | NM_002318 | Hs.83354  | lysyl oxidase-like 2                      | 6.5 |
|    | 452799 | AI948829  | Hs.213786 | ESTs                                      | 6.5 |
|    | 446657 | AI335191  | Hs.260702 | ESTs, Weakly similar to 2109260A B cell   | 6.4 |
|    | 424247 | X14008    | Hs.234734 | lysozyme (renal amyloidosis)              | 6.4 |
|    | 443884 | N20617    | Hs.194397 | leptin receptor                           | 6.4 |
| 40 | 420560 | AW207748  | Hs.59115  | ESTs                                      | 6.4 |
|    | 419485 | AA489023  | Hs.99807  | ESTs, Weakly similar to unnamed protein   | 6.3 |
|    | 420649 | AI866964  | Hs.124704 | ESTs, Moderately similar to S65657 alpha  | 6.3 |
|    | 457465 | AW301344  | Hs.122908 | DNA replication factor                    | 6.3 |
|    | 440332 | AI218517  | Hs.188051 | ESTs                                      | 6.3 |
| 45 | 449246 | AW411209  | Hs.23363  | hypothetical protein FLJ10983             | 6.3 |
|    | 413063 | AL035737  | Hs.75184  | chitinase 3-like 1 (cartilage glycoprote  | 6.2 |
|    | 448275 | BE514434  | Hs.20830  | kinesin-like 2                            | 6.2 |
|    | 440286 | U29589    | Hs.7138   | cholinergic receptor, muscarinic 3        | 6.2 |
|    | 439518 | W76326    |           | gb:zd50d04.r1 Soares_fetal_heart_NbHH19W  | 6.1 |
| 50 | 412567 | AI750979  | Hs.74034  | Homo sapiens clone 24651 mRNA sequence    | 6.1 |
|    | 426335 | NM_000088 | Hs.172928 | collagen, type I, alpha 1                 | 6.1 |
|    | 456977 | AK000252  | Hs.169758 | hypothetical protein FLJ20245             | 6.1 |
|    | 428450 | NM_014791 | Hs.184339 | KIAA0175 gene product                     | 6.0 |
|    | 412125 | Y17114    | Hs.73393  | eyes absent (Drosophila) homolog 4        | 6.0 |
| 55 | 413786 | AW613780  | Hs.13500  | ESTs                                      | 6.0 |
|    | 410555 | U92649    | Hs.64311  | a disintegrin and metalloproteinase doma  | 5.9 |
|    | 400419 | AF084545  |           | Target                                    | 5.9 |
|    | 408380 | AF123050  | Hs.44532  | diubiquitin                               | 5.9 |
| 60 | 426108 | AA622037  | Hs.166468 | programmed cell death 5                   | 5.9 |
|    | 414774 | X02419    | Hs.77274  | plasminogen activator, urokinase          | 5.9 |
|    | 437695 | AA769202  | Hs.192142 | ESTs                                      | 5.8 |
|    | 409463 | AI458165  | Hs.17296  | hypothetical protein MGC2376              | 5.8 |
|    | 411048 | AK001742  | Hs.67991  | hypothetical protein MKFZp434G0522        | 5.8 |
|    | 443731 | AI083928  | Hs.145418 | ESTs                                      | 5.8 |
| 65 | 405558 |           |           | Target Exon                               | 5.8 |
|    | 422094 | AF129535  | Hs.272027 | F-box only protein 5                      | 5.8 |
|    | 429113 | D28235    | Hs.196384 | prostaglandin-endoperoxide synthase 2 (p  | 5.8 |
|    | 425882 | U83115    | Hs.161002 | absent in melanoma 1                      | 5.8 |
|    | 412471 | M63193    | Hs.73946  | endothelial cell growth factor 1 (plate   | 5.8 |
| 70 | 429149 | AW193360  | Hs.197962 | ESTs, Weakly similar to I38022 hypotheti  | 5.8 |
|    | 436827 | H72187    | Hs.5322   | guanine nucleotide binding protein (G pr  | 5.7 |
|    | 425905 | AB032959  | Hs.318584 | novel C3HC4 type Zinc finger (ring fringe | 5.7 |
|    | 414053 | BE391635  | Hs.75725  | transgelin 2                              | 5.7 |
|    | 436805 | AA731533  | Hs.270751 | ESTs                                      | 5.7 |
| 75 | 442201 | AW516704  | Hs.208726 | ESTs                                      | 5.7 |
|    | 453361 | AA035197  | Hs.107375 | ESTs                                      | 5.6 |
|    | 429083 | Y09397    | Hs.227817 | BCL2-related protein A1                   | 5.6 |
|    | 426490 | NM_001621 | Hs.170087 | aryl hydrocarbon receptor                 | 5.6 |
|    | 423081 | AF262992  | Hs.123159 | sperm associated antigen 4                | 5.6 |
| 80 | 407013 | U35637    |           | gb:Human nebulin mRNA, partial cds        | 5.5 |
|    | 406478 |           |           | Target Exon                               | 5.5 |
|    | 435937 | AA830893  | Hs.119769 | ESTs                                      | 5.5 |
|    | 453362 | H14988    | Hs.107375 | ESTs                                      | 5.5 |
|    | 449699 | AW295142  | Hs.180187 | Homo sapiens cDNA FLJ14337 fis, clone PL  | 5.5 |

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| 5  | 442547 | AA306997  | Hs.217484 | ESTs, Weakly similar to ALU1_HUMAN ALU S  | 5.5 |
|    | 443883 | AA114212  | Hs.9930   | serine (or cysteine) proteinase inhibitor | 5.5 |
|    | 429643 | AA455889  | Hs.167279 | FYVE-finger-containing Rab5 effector pro  | 5.5 |
|    | 407862 | BE548267  | Hs.337986 | Homo sapiens cDNA FLJ10934 fis, clone OV  | 5.4 |
|    | 407624 | AW157431  | Hs.248941 | ESTs                                      | 5.4 |
| 10 | 448769 | N66037    | Hs.38173  | ESTs                                      | 5.4 |
|    | 417124 | BE122762  | Hs.25338  | ESTs                                      | 5.4 |
|    | 422493 | AW474183  | Hs.250173 | hypothetical protein FLJ13158             | 5.4 |
|    | 457292 | AI921270  | Hs.281462 | hypothetical protein FLJ14251             | 5.3 |
|    | 418596 | AW976721  | Hs.293327 | ESTs                                      | 5.3 |
| 15 | 410295 | AA741357  | Hs.5174   | nidogen (enactin)                         | 5.3 |
|    | 433323 | AA805132  | Hs.159142 | ESTs                                      | 5.3 |
|    | 412326 | R07566    | Hs.73817  | small inducible cytokine A3 (homologous   | 5.3 |
|    | 418630 | AI351311  | Hs.251946 | poly(A)-binding protein, cytoplasmic 1-l  | 5.3 |
|    | 420075 | AF142482  | Hs.203846 | TEA domain family member 3                | 5.2 |
| 20 | 427676 | AA394062  | Hs.300772 | tropomyosin 2 (beta)                      | 5.2 |
|    | 407729 | T40707    | Hs.270862 | ESTs                                      | 5.2 |
|    | 416908 | AA333990  | Hs.80424  | coagulation factor XIII, A1 polypeptide   | 5.2 |
|    | 414372 | AA143654  |           | gb:zo65a02.r1 Stralagene pancreas (93720  | 5.2 |
|    | 433556 | W56321    | Hs.111460 | calcium/calmodulin-dependent protein kin  | 5.2 |
| 25 | 424998 | U58515    | Hs.154138 | chitinase 3-like 2                        | 5.2 |
|    | 407603 | AW955705  | Hs.62604  | Homo sapiens, clone IMAGE:4299322, mRNA,  | 5.2 |
|    | 445118 | AI208762  | Hs.345572 | ESTs                                      | 5.2 |
|    | 408523 | AW833259  | Hs.314287 | ESTs                                      | 5.2 |
|    | 412530 | AA766268  | Hs.266273 | hypothetical protein FLJ13346             | 5.2 |
| 30 | 449300 | AI656959  | Hs.346514 | ESTs                                      | 5.2 |
|    | 429732 | U20158    | Hs.2488   | lymphocyte cytosolic protein 2 (SH2 doma  | 5.2 |
|    | 423757 | AL049337  | Hs.132571 | Homo sapiens mRNA; cDNA DKF Zp564P016 (fr | 5.1 |
|    | 439570 | T79925    | Hs.269165 | ESTs, Weakly similar to ALU1_HUMAN ALU S  | 5.1 |
|    | 415323 | BE269352  | Hs.949    | neutrophil cytosolic factor 2 (65kD, chr  | 5.1 |
| 35 | 443604 | C03577    | Hs.9615   | myosin regulatory light chain 2, smooth   | 5.1 |
|    | 421247 | BE391727  | Hs.102910 | general transcription factor IIH, polype  | 5.1 |
|    | 416913 | AW934714  |           | gb:RC1-DT0001-031299-011-a11 DT0001 Homo  | 5.1 |
|    | 419968 | X04430    | Hs.93913  | interleukin 6 (interferon, beta 2)        | 5.0 |
|    | 424009 | F11690    |           | gb:HSC30D041 normalized infant brain cDN  | 5.0 |
| 40 | 418283 | S79895    | Hs.83942  | cathepsin K (pseudosclerosis)             | 5.0 |
|    | 429469 | M64590    | Hs.27     | glycine dehydrogenase (decarboxylating;   | 5.0 |
|    | 417404 | NM_007350 | Hs.82101  | pleckstrin homology-like domain, family   | 5.0 |
|    | 408829 | NM_006042 | Hs.48384  | heparan sulfate (glucosamine) 3-O-sulfot  | 5.0 |
|    | 418097 | R45137    | Hs.21868  | ESTs                                      | 5.0 |
| 45 | 453331 | AI240665  |           | ESTs                                      | 4.9 |
|    | 429433 | AA452899  | Hs.213586 | ESTs, Weakly similar to KIAA1353 protein  | 4.9 |
|    | 426044 | AA502490  | Hs.170290 | ESTs                                      | 4.9 |
|    | 444161 | N52543    | Hs.142940 | ESTs                                      | 4.9 |
|    | 428227 | AA321649  | Hs.2248   | small inducible cytokine subfamily B (Cy  | 4.9 |
| 50 | 432242 | AW022715  | Hs.162160 | ESTs, Weakly similar to ALU4_HUMAN ALU S  | 4.9 |
|    | 447752 | M73700    | Hs.105938 | lactotransferrin                          | 4.9 |
|    | 439627 | BE621702  | Hs.29076  | hypothetical protein FLJ21841             | 4.9 |
|    | 402274 |           |           | C19000498*:gi 4567179 gb AAD23607.1 AC00  | 4.9 |
|    | 444656 | AI277924  | Hs.145199 | ESTs                                      | 4.9 |
| 55 | 422087 | X58968    | Hs.111301 | matrix metalloproteinase 2 (gelatinase A  | 4.9 |
|    | 443744 | AI084326  | Hs.271548 | ESTs, Weakly similar to I78885 serine/th  | 4.9 |
|    | 416871 | H98716    |           | gb:yx13d08.s1 Soares melanocyte 2NbHM Ho  | 4.9 |
|    | 409112 | BE243971  | Hs.50649  | quinone oxidoreductase homolog            | 4.8 |
|    | 403481 |           |           | Target Exon                               | 4.8 |
| 60 | 443740 | R56434    | Hs.21062  | ESTs                                      | 4.8 |
|    | 435005 | U80743    | Hs.306094 | trinucleotide repeat containing 12        | 4.8 |
|    | 429163 | AA884766  |           | gb:am20a10.s1 Soares_NFL_T_GBC_S1 Homo s  | 4.8 |
|    | 451418 | BE387790  | Hs.26369  | hypothetical protein FLJ20287             | 4.8 |
|    | 428403 | AI393048  | Hs.326159 | leucine rich repeat (in FLII) interactin  | 4.8 |
| 65 | 430968 | AW972830  |           | gb:EST384925 MAGE resequences, MAGL Homo  | 4.8 |
|    | 425212 | AW962253  | Hs.171618 | ESTs                                      | 4.8 |
|    | 409205 | AI952884  | Hs.14832  | ESTs, Moderately similar to unnamed prot  | 4.8 |
|    | 431176 | AI026984  | Hs.293662 | ESTs                                      | 4.8 |
|    | 420092 | AA814043  | Hs.88045  | ESTs                                      | 4.8 |
| 70 | 437834 | AA769294  | Hs.283854 | gb:nz36g03.s1 NCI_CGAP_GCB1 Homo sapiens  | 4.8 |
|    | 432363 | AA534489  |           | gb:n76g11.s1 NCI_CGAP_Co3 Homo sapiens    | 4.8 |
|    | 403011 |           |           | ENSP00000215330*:Probable serine/threoni  | 4.7 |
|    | 405348 |           |           | C7001664:gi 12698061 dbj BAB21849.1  (AB  | 4.7 |
|    | 447072 | D61594    | Hs.17279  | tyrosylprotein sulfotransferase 1         | 4.7 |
| 75 | 443318 | AI051603  | Hs.133141 | ESTs                                      | 4.7 |
|    | 421027 | AA761198  | Hs.55254  | ESTs                                      | 4.7 |
|    | 449318 | AW236021  | Hs.78531  | Homo sapiens, Similar to RIKEN cDNA 5730  | 4.7 |
|    | 429170 | NM_001394 | Hs.2359   | dual specificity phosphatase 4            | 4.7 |
|    | 411852 | AA528140  | Hs.107515 | ESTs, Weakly similar to T00329 hypothei   | 4.7 |
| 80 | 450166 | AA429504  |           | ESTs                                      | 4.7 |
|    | 438456 | AA913381  | Hs.20594  | ESTs                                      | 4.7 |
|    | 446839 | BE091926  | Hs.16244  | mitotic spindle coiled-coil related prot  | 4.7 |
|    | 438527 | AI969251  | Hs.115325 | RAB7, member RAS oncogene family-like 1   | 4.7 |
|    | 458946 | AA009716  | Hs.42311  | ESTs                                      | 4.7 |
|    | 454860 | AW835767  |           | gb:QV4-LT0016-240200-110-b08 LT0016 Homo  | 4.7 |
|    | 424736 | AF230877  | Hs.152701 | microtubule-interacting protein that ass  | 4.7 |
|    | 443426 | AF098158  | Hs.9329   | chromosome 20 open reading frame 1        | 4.6 |

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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
|    | 422648 | D86983    | Hs.118893 | Melanoma associated gene                 | 4.6 |
|    | 431319 | AA873350  | Hs.302232 | ESTs                                     | 4.6 |
|    | 445666 | R59960    | Hs.282386 | ESTs                                     | 4.6 |
|    | 416406 | D86961    | Hs.79299  | lipoma HMGIC fusion partner-like 2       | 4.6 |
| 5  | 422887 | AI751848  | Hs.49215  | ESTs                                     | 4.6 |
|    | 422938 | NM_001809 | Hs.1594   | centromere protein A (17kD)              | 4.6 |
|    | 405141 | Y14443    |           | zinc finger protein 200                  | 4.6 |
|    | 440210 | AW674562  | Hs.125296 | ESTs                                     | 4.6 |
|    | 432527 | AW975028  | Hs.102754 | ESTs                                     | 4.6 |
| 10 | 439726 | AW449893  | Hs.293707 | ESTs, Weakly similar to I38598 zinc fing | 4.6 |
|    | 435143 | R12375    | Hs.194600 | ESTs                                     | 4.6 |
|    | 422170 | AI791949  | Hs.112432 | anti-Mullerian hormone                   | 4.6 |
|    | 452874 | AK001061  | Hs.30925  | hypothetical protein FLJ10199            | 4.6 |
|    | 408996 | AI979168  | Hs.344096 | glycoprotein (transmembrane) nmb         | 4.6 |
| 15 | 412568 | AI878826  | Hs.74034  | caveolin 1, caveolae protein, 22kD       | 4.5 |
|    | 426215 | AW963419  | Hs.155223 | stanniocalcin 2                          | 4.5 |
|    | 413076 | U10564    | Hs.75188  | wee1 (S. pombe) homolog                  | 4.5 |
|    | 456759 | BE259150  | Hs.127792 | delta (Drosophila)-like 3                | 4.5 |
|    | 419735 | AW750056  | Hs.169577 | Homo sapiens cDNA FLJ14743 fis, clone NT | 4.5 |
| 20 | 433675 | AW977653  | Hs.75319  | ribonucleotide reductase M2 polypeptide  | 4.5 |
|    | 441217 | AI922183  | Hs.213246 | ESTs                                     | 4.5 |
|    | 435542 | AA687376  |           | ESTs                                     | 4.5 |
|    | 440435 | AL042201  | Hs.21273  | transcription factor NYD-sp10            | 4.5 |
|    | 400288 | X06256    | Hs.149609 | integrin, alpha 5 (fibronectin receptor, | 4.5 |
| 25 | 416114 | AI695549  | Hs.183868 | glucuronidase, beta                      | 4.5 |
|    | 437323 | AA371145  | Hs.194397 | leptin receptor                          | 4.5 |
|    | 425139 | AW630488  | Hs.25338  | protease, serine, 23                     | 4.5 |
|    | 423678 | AW963357  | Hs.7847   | ESTs                                     | 4.5 |
|    | 403961 |           |           | Target Exon                              | 4.5 |
| 30 | 443462 | AI064690  | Hs.171176 | ESTs                                     | 4.5 |
|    | 418483 | W26076    | Hs.221847 | ESTs                                     | 4.5 |
|    | 428873 | AI701609  | Hs.98908  | ESTs                                     | 4.5 |
|    | 410268 | AA316181  | Hs.81635  | six transmembrane epithelial antigen of  | 4.5 |
| 35 | 408298 | AI745325  | Hs.271923 | Homo sapiens cDNA: FLJ22785 fis, clone K | 4.5 |
|    | 449145 | AI632122  | Hs.198408 | ESTs                                     | 4.4 |
|    | 439574 | AI469788  | Hs.165190 | ESTs                                     | 4.4 |
|    | 423905 | AW579960  | Hs.135150 | lung type-I cell membrane-associated gly | 4.4 |
|    | 453387 | AI990741  | Hs.252809 | ESTs                                     | 4.4 |
| 40 | 447444 | AK000318  | Hs.18616  | hypothetical protein FLJ20311            | 4.4 |
|    | 433507 | AI817336  | Hs.191791 | ESTs                                     | 4.4 |
|    | 448048 | BE281291  | Hs.170408 | ESTs, Moderately similar to A47582 B-cel | 4.4 |
|    | 421064 | AI245432  | Hs.101382 | tumor necrosis factor, alpha-induced pro | 4.4 |
|    | 402604 |           |           | Target Exon                              | 4.4 |
| 45 | 446291 | BE397753  | Hs.14623  | interferon, gamma-inducible protein 30   | 4.4 |
|    | 424503 | NM_002205 | Hs.149609 | integrin, alpha 5 (fibronectin receptor, | 4.4 |
|    | 423600 | AI633559  | Hs.310359 | ESTs                                     | 4.4 |
|    | 403361 |           |           | NM_002210: Homo sapiens integrin, alpha  | 4.4 |
|    | 408432 | AW195262  |           | gb:xn67b05.x1 NCL_CGAP_CML1 Homo sapiens | 4.4 |
| 50 | 424489 | T48851    | Hs.274470 | D-siglec precursor,                      | 4.3 |
|    | 442264 | AI278777  | Hs.263455 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 4.3 |
|    | 447247 | AW369351  | Hs.287955 | Homo sapiens cDNA FLJ13090 fis, clone NT | 4.3 |
|    | 417018 | M16038    | Hs.80887  | v-yes-1 Yamaguchi sarcoma viral related  | 4.3 |
|    | 414020 | NM_002984 | Hs.75703  | small inducible cytokine A4 (homologous  | 4.3 |
| 55 | 439566 | AF086387  |           | gb:Homo sapiens full length insert cDNA  | 4.3 |
|    | 425242 | D13635    | Hs.155287 | KIAA0010 gene product                    | 4.3 |
|    | 423529 | T87318    | Hs.120411 | ESTs                                     | 4.3 |
|    | 439538 | AA837323  | Hs.56407  | ESTs                                     | 4.3 |
|    | 453682 | T79703    |           | gb:yd71e08.r1 Soares fetal liver spleen  | 4.3 |
| 60 | 425259 | AL049280  | Hs.155397 | Homo sapiens mRNA; cDNA DKFZp564K143 (fr | 4.3 |
|    | 417918 | AA209205  | Hs.163754 | hypothetical protein FLJ12606            | 4.3 |
|    | 426649 | AI914936  | Hs.97152  | ESTs                                     | 4.3 |
|    | 438875 | AA827640  | Hs.189059 | ESTs                                     | 4.3 |
|    | 445868 | BE169357  | Hs.207428 | ESTs                                     | 4.3 |
| 65 | 426509 | M31166    | Hs.2050   | pentaxin-related gene, rapidly induced b | 4.3 |
|    | 409893 | AW247090  | Hs.57101  | minichromosome maintenance deficient (S. | 4.3 |
|    | 432058 | AW665996  | Hs.130729 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 4.3 |
|    | 430694 | AA810624  | Hs.30936  | ESTs, Weakly similar to H2BH_HUMAN HISTO | 4.3 |
|    | 441523 | AW514263  | Hs.301771 | ESTs, Weakly similar to ALUF_HUMAN !!!!  | 4.2 |
| 70 | 443950 | NM_001425 | Hs.9999   | epithelial membrane protein 3            | 4.2 |
|    | 419896 | Z99362    |           | gb:HSZ99362 DKFZphamy1 Homo sapiens cDNA | 4.2 |
|    | 452994 | AW962597  | Hs.31305  | KIAA1547 protein                         | 4.2 |
|    | 420841 | AI625251  | Hs.94037  | hypothetical protein FLJ23053            | 4.2 |
|    | 441255 | R06350    | Hs.171635 | ESTs                                     | 4.2 |
| 75 | 416426 | AA180256  | Hs.210473 | Homo sapiens cDNA FLJ14872 fis, clone PL | 4.2 |
|    | 411789 | AF245505  | Hs.72157  | Adican                                   | 4.2 |
|    | 409638 | AW450420  | Hs.21335  | ESTs                                     | 4.2 |
|    | 439192 | AW970536  | Hs.105413 | ESTs                                     | 4.2 |
|    | 440684 | AI253123  | Hs.127356 | ESTs, Highly similar to S21424 nestin [H | 4.2 |
| 80 | 437470 | AL390147  | Hs.134742 | hypothetical protein DKFZp547D065        | 4.2 |
|    | 432343 | NM_002960 | Hs.2961   | S100 calcium-binding protein A3          | 4.2 |
|    | 401454 |           |           | NM_014226: Homo sapiens renal tumor anti | 4.2 |
|    | 431770 | BE221880  | Hs.268555 | 5'-3' exonuclease 2                      | 4.2 |
|    | 442326 | H92962    | Hs.124813 | hypothetical protein MGC14817            | 4.2 |

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|    |        |           |           |  |     |
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|    | 419402 | Z68155    | Hs.90291  | laminin, beta 2 (laminin S)              | 4.2 |
|    | 435703 | AW630133  | Hs.83313  | GK003 protein                            | 4.2 |
|    | 444609 | AW571659  | Hs.278081 | ESTs                                     | 4.2 |
|    | 404407 |           |           | Target Exon                              | 4.2 |
| 5  | 450581 | AF081513  | Hs.25195  | TGF-beta 4                               | 4.2 |
|    | 407838 | BE146411  | Hs.40342  | putative nuclear protein                 | 4.1 |
|    | 410407 | X66839    | Hs.63287  | carbonic anhydrase IX                    | 4.1 |
|    | 418883 | BE387036  | Hs.1211   | acid phosphatase 5, tartrate resistant   | 4.1 |
|    | 438998 | AI819863  | Hs.106243 | ESTs                                     | 4.1 |
| 10 | 421674 | T10707    | Hs.296355 | hypothetical protein FLJ23138            | 4.1 |
|    | 445921 | AW015211  | Hs.146181 | ESTs                                     | 4.1 |
|    | 453055 | AW291436  | Hs.31917  | Homo sapiens, clone MGC:9658, mRNA, comp | 4.1 |
|    | 413450 | Z99716    | Hs.75372  | N-acetylgalactosaminidase, alpha-        | 4.1 |
|    | 427463 | AA442224  | Hs.97900  | ESTs                                     | 4.1 |
| 15 | 450639 | AI703186  | Hs.277174 | ESTs                                     | 4.1 |
|    | 417576 | AA339449  | Hs.82285  | phosphoribosylglycinamide formyltransfer | 4.1 |
|    | 437269 | AA334384  | Hs.149420 | ESTs                                     | 4.1 |
|    | 415688 | AA166963  |           | gb:zc86d01.s1 Stratagene ovarian cancer  | 4.1 |
|    | 414300 | AI304870  | Hs.188680 | ESTs                                     | 4.1 |
| 20 | 413278 | BE563085  | Hs.833    | interferon-stimulated protein, 15 kDa    | 4.1 |
|    | 415024 | AI983981  | Hs.189114 | ESTs                                     | 4.1 |
|    | 408102 | U46351    | Hs.621    | lectin, galactoside-binding, soluble, 3  | 4.1 |
|    | 448019 | AW947164  | Hs.195641 | ESTs, Moderately similar to I38022 hypot | 4.1 |
| 25 | 451433 | AA021140  | Hs.269265 | ESTs, Weakly similar to A46010 X-linked  | 4.1 |
|    | 446523 | NM_003063 | Hs.334629 | sarcophilin                              | 4.1 |
|    | 427700 | AA262294  | Hs.180383 | dual specificity phosphatase 6           | 4.1 |
|    | 402239 |           |           | Target Exon                              | 4.1 |
|    | 423713 | AW754182  |           | gb:RC2-CT0321-131199-011-c01 CT0321 Homo | 4.1 |
| 30 | 437814 | AI088192  | Hs.135474 | ESTs, Weakly similar to DDx9_HUMAN ATP-D | 4.1 |
|    | 414948 | C15240    | Hs.182155 | ESTs                                     | 4.0 |
|    | 421307 | BE539976  | Hs.103305 | Homo sapiens mRNA; cDNA DKFZp434B0425 (f | 4.0 |
|    | 427375 | AL035450  | Hs.177536 | metallocarboxypeptidase CPX-1            | 4.0 |
|    | 450297 | AW901347  | Hs.38592  | hypothetical protein FLJ23342            | 4.0 |
|    | 449655 | AI021987  | Hs.59970  | ESTs                                     | 4.0 |
| 35 | 439978 | BE139460  | Hs.124673 | Homo sapiens cDNA FLJ11477 fis, clone HE | 4.0 |
|    | 432842 | AW674093  | Hs.334822 | hypothetical protein MGC4485             | 4.0 |
|    | 422282 | AF019225  | Hs.114309 | apolipoprotein L                         | 4.0 |
|    | 452574 | AF127481  | Hs.301946 | lymphoid blast crisis oncogene           | 4.0 |
| 40 | 449256 | AA059050  | Hs.59847  | ESTs                                     | 4.0 |
|    | 453385 | AW296101  | Hs.252806 | ESTs                                     | 4.0 |
|    | 443715 | AI583187  | Hs.9700   | cyclin E1                                | 4.0 |
|    | 451778 | AI826131  | Hs.62954  | ESTs, Weakly similar to zinc finger prot | 4.0 |
|    | 441287 | AW293132  | Hs.131373 | ESTs                                     | 4.0 |
| 45 | 418661 | NM_001949 | Hs.1189   | E2F transcription factor 3               | 4.0 |
|    | 420894 | AA744597  | Hs.88854  | ESTs                                     | 4.0 |
|    | 454120 | AB032990  | Hs.40719  | hypothetical protein KIAA1164            | 4.0 |
|    | 441627 | AA947552  | Hs.58086  | branched chain aminotransferase 1, cytos | 4.0 |
|    | 453948 | AI970797  | Hs.64859  | ESTs                                     | 4.0 |
| 50 | 444170 | AW613879  | Hs.102408 | ESTs                                     | 4.0 |
|    | 427221 | L15409    | Hs.174007 | von Hippel-Lindau syndrome               | 4.0 |
|    | 418821 | AA436002  | Hs.183161 | ESTs                                     | 4.0 |
|    | 418216 | AA662240  | Hs.283099 | AF15q14 protein                          | 4.0 |
|    | 435106 | AA100847  | Hs.5978   | ESTs, Highly similar to AF174600 1 F-box | 4.0 |
| 55 | 430890 | X54232    | Hs.2699   | glypican 1                               | 3.9 |
|    | 429490 | AI971131  | Hs.23889  | ESTs, Weakly similar to ALU7_HUMAN ALU S | 3.9 |
|    | 425292 | NM_005824 | Hs.155545 | 37 kDa leucine-rich repeat (LRR) protein | 3.9 |
|    | 436265 | AA731331  | Hs.190668 | ESTs                                     | 3.9 |
|    | 407304 | AA565832  | Hs.271649 | gb:nj32b03.s1 NCL_CGAP_AA1 Homo sapiens  | 3.9 |
| 60 | 433244 | AB040943  | Hs.271285 | KIAA1510 protein                         | 3.9 |
|    | 446960 | AW294936  | Hs.156762 | ESTs                                     | 3.9 |
|    | 406627 | T64904    | Hs.163780 | ESTs                                     | 3.9 |
|    | 420552 | AK000492  | Hs.98806  | hypothetical protein                     | 3.9 |
|    | 402082 |           |           | C18000743:g 6678363 ref NP_033416.1 t    | 3.9 |
| 65 | 419594 | AA013051  | Hs.91417  | topoisomerase (DNA) II binding protein   | 3.9 |
|    | 448966 | AW372914  | Hs.86149  | phosphoinositol 3-phosphate-binding prot | 3.9 |
|    | 427527 | AI809057  | Hs.293441 | immunoglobulin heavy constant mu         | 3.9 |
|    | 422564 | AI148006  | Hs.222120 | ESTs                                     | 3.9 |
|    | 418781 | T41160    | Hs.8404   | ESTs                                     | 3.9 |
| 70 | 431820 | AW410408  | Hs.271167 | L-pipecolic acid oxidase                 | 3.9 |
|    | 413095 | AA494359  | Hs.30715  | potassium voltage-gated channel, Isk-rel | 3.9 |
|    | 430637 | BE160081  | Hs.256290 | S100 calcium-binding protein A11 (calgiz | 3.9 |
|    | 443539 | AI076182  | Hs.134074 | ESTs, Moderately similar to ALU6_HUMAN A | 3.9 |
|    | 422173 | BE385828  | Hs.250619 | phorbol-like protein MDS019              | 3.9 |
| 75 | 433388 | AI432672  | Hs.288539 | hypothetical protein FLJ22191            | 3.8 |
|    | 403849 |           |           | Target Exon                              | 3.8 |
|    | 406646 | M33600    | Hs.308026 | major histocompatibility complex, class  | 3.8 |
|    | 445075 | AI651827  | Hs.344767 | ESTs                                     | 3.8 |
|    | 420004 | AW975532  | Hs.164039 | ESTs, Moderately similar to I38022 hypot | 3.8 |
| 80 | 449670 | F07693    | Hs.85603  | Homo sapiens mRNA; cDNA DKFZp434K2172 (f | 3.8 |
|    | 424479 | AF064238  | Hs.149098 | smoothelin                               | 3.8 |
|    | 449625 | NM_014253 |           | odt (odd Oz/ten-m, Drosophila) homolog 1 | 3.8 |
|    | 418641 | BE243136  | Hs.86947  | a disintegrin and metalloproteinase doma | 3.8 |
|    | 439979 | AW600291  | Hs.6823   | hypothetical protein FLJ10430            | 3.8 |

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| 5  | 427286 | AW732802  | Hs.2132   | epidermal growth factor receptor pathway  | 3.8 |
|    | 453920 | AI133148  | Hs.36602  | I factor (complement)                     | 3.8 |
|    | 453857 | AL080235  | Hs.35861  | DKFZP586E1621 protein                     | 3.8 |
|    | 406872 | AI760903  |           | gb:wi09h08.x1 NCL_CGAP_CLL1 Homo sapiens  | 3.8 |
|    | 403696 |           |           | C4001100*.gij 5852342 gb AAD54015.1  (AF0 | 3.8 |
| 10 | 417791 | AW965339  | Hs.111471 | ESTs                                      | 3.8 |
|    | 418036 | Z37976    | Hs.83337  | latent transforming growth factor beta b  | 3.8 |
|    | 404209 |           |           | Target Exon                               | 3.8 |
|    | 431454 | AW975980  | Hs.292918 | ESTs                                      | 3.8 |
|    | 410422 | AL042014  | Hs.63348  | Homo sapiens, clone MGC:15203, mRNA, com  | 3.8 |
| 15 | 406739 | AI566709  | Hs.182426 | ribosomal protein S2                      | 3.8 |
|    | 450810 | BE207588  | Hs.334360 | transforming growth factor beta 1 induce  | 3.8 |
|    | 457876 | AI821940  |           | ESTs, Moderately similar to ALU8_HUMAN A  | 3.8 |
|    | 435718 | R06569    | Hs.269534 | ESTs                                      | 3.8 |
|    | 429716 | R25685    | Hs.211933 | collagen, type XIII, alpha 1              | 3.8 |
| 20 | 442710 | AI015631  | Hs.23210  | ESTs                                      | 3.8 |
|    | 456534 | X91195    | Hs.100623 | phospholipase C, beta 3, neighbor pseudo  | 3.8 |
|    | 419764 | BE262524  | Hs.93183  | vasodilator-stimulated phosphoprotein     | 3.8 |
|    | 436674 | AA725002  | Hs.272018 | low molecular mass ubiquinone-binding pr  | 3.8 |
|    | 408896 | AI610447  | Hs.48778  | niban protein                             | 3.8 |
| 25 | 425300 | AW601773  | Hs.270259 | ESTs                                      | 3.8 |
|    | 432886 | BE159028  | Hs.279704 | chromatin accessibility complex 1         | 3.8 |
|    | 424090 | X99699    | Hs.139262 | XIAP associated factor-1                  | 3.7 |
|    | 420202 | AL036557  | Hs.95910  | putative lymphocyte G0/G1 switch gene     | 3.7 |
|    | 427584 | BE410293  | Hs.179718 | v-myb avian myeloblastosis viral oncogen  | 3.7 |
| 30 | 420579 | AA278449  | Hs.137429 | ESTs                                      | 3.7 |
|    | 406038 | Y14443    |           | zinc finger protein 200                   | 3.7 |
|    | 412590 | AL134388  | Hs.135033 | ESTs, Weakly similar to I38022 hypotheti  | 3.7 |
|    | 406714 | AI219304  | Hs.266959 | hemoglobin, gamma G                       | 3.7 |
|    | 412014 | AI620650  | Hs.43761  | ESTs, Weakly similar to A46010 X-linked   | 3.7 |
| 35 | 419713 | AW968058  | Hs.92381  | nudix (nucleoside diphosphate linked moi  | 3.7 |
|    | 449115 | AW959952  | Hs.37528  | ESTs, Weakly similar to AF090944 1 PRO06  | 3.7 |
|    | 408955 | BE315170  | Hs.8087   | Target CAT                                | 3.7 |
|    | 441362 | BE614410  | Hs.23044  | RAD51 (S. cerevisiae) homolog (E. coli Re | 3.7 |
|    | 413774 | AA131782  | Hs.182314 | ESTs                                      | 3.7 |
| 40 | 440225 | BE295782  | Hs.159    | tumor necrosis factor receptor superfam   | 3.7 |
|    | 414528 | AA148950  | Hs.188836 | ESTs                                      | 3.7 |
|    | 436137 | AI056769  | Hs.133512 | ESTs                                      | 3.7 |
|    | 414733 | BE514535  | Hs.77171  | minichromosome maintenance deficient (S.  | 3.7 |
|    | 406785 | AA588061  |           | gb:nk10d03.s1 NCL_CGAP_Co2 Homo sapiens   | 3.7 |
| 45 | 443361 | AI792628  | Hs.133273 | ESTs                                      | 3.7 |
|    | 434868 | R50032    | Hs.159263 | collagen, type VI, alpha 2                | 3.7 |
|    | 409557 | BE182896  | Hs.211193 | ESTs                                      | 3.7 |
|    | 420300 | AA258245  | Hs.127573 | Homo sapiens FKSG41 (FKSG41) mRNA, compl  | 3.7 |
|    | 427695 | R88483    | Hs.172862 | ESTs                                      | 3.7 |
| 50 | 407756 | AA116021  | Hs.38260  | ubiquitin specific protease 18            | 3.6 |
|    | 437916 | BE566249  | Hs.20999  | hypothetical protein FLJ23142             | 3.6 |
|    | 434563 | AW083994  | Hs.9469   | pleckstrin homology domain-containing, f  | 3.6 |
|    | 444371 | BE540274  | Hs.239    | forkhead box M1                           | 3.6 |
|    | 437816 | AI823445  | Hs.280699 | ESTs                                      | 3.6 |
| 55 | 405605 |           |           | C2001342:gij 127814 sp P26434 NAH4_RAT SO | 3.6 |
|    | 444794 | AI419991  | Hs.145225 | ESTs                                      | 3.6 |
|    | 430540 | AW245422  | Hs.106357 | Homo sapiens cDNA: FLJ22105 fis, clone H  | 3.6 |
|    | 429747 | M87507    | Hs.2490   | caspase 1, apoptosis-related cysteine pr  | 3.6 |
|    | 453785 | AI368236  | Hs.283732 | ESTs, Moderately similar to ALU1_HUMAN A  | 3.6 |
| 60 | 403267 |           |           | Target Exon                               | 3.6 |
|    | 440370 | AA884000  | Hs.8173   | hypothetical protein FLJ10803             | 3.6 |
|    | 447497 | AW167254  | Hs.205722 | ESTs                                      | 3.6 |
|    | 428600 | AW863261  | Hs.242413 | hypothetical protein DKFZp434K1421        | 3.6 |
|    | 428715 | AW293716  | Hs.53126  | ESTs                                      | 3.6 |
| 65 | 416097 | BE387371  | Hs.118964 | hypothetical protein FLJ20085             | 3.6 |
|    | 453438 | AI469935  | Hs.22792  | ESTs                                      | 3.6 |
|    | 427299 | AA830210  | Hs.214263 | ESTs, Moderately similar to ALU1_HUMAN A  | 3.6 |
|    | 434577 | R37316    | Hs.179769 | Homo sapiens cDNA: FLJ22487 fis, clone H  | 3.6 |
|    | 452785 | AL359942  | Hs.296434 | erythroid differentiation and denucleati  | 3.6 |
| 70 | 434467 | BE552368  | Hs.231853 | Homo sapiens cDNA FLJ13445 fis, clone PL  | 3.6 |
|    | 435523 | T62849    | Hs.11090  | membrane-spanning 4-domains, subfamily A  | 3.6 |
|    | 418267 | AI872319  | Hs.78935  | methionine aminopeptidase; eIF-2-associ   | 3.6 |
|    | 422156 | N34524    |           | gb:yy56d10.s1 Soares_multiple_sclerosis_  | 3.6 |
|    | 441224 | AU076964  | Hs.7753   | calumenin                                 | 3.6 |
| 75 | 458072 | AI890347  | Hs.271923 | Homo sapiens cDNA: FLJ22785 fis, clone K  | 3.6 |
|    | 435677 | AA694142  | Hs.293726 | ESTs, Weakly similar to TSGA RAT TESTIS   | 3.6 |
|    | 433325 | AW206986  | Hs.143905 | ESTs                                      | 3.6 |
|    | 420683 | AA830168  | Hs.271305 | ESTs                                      | 3.6 |
|    | 443206 | AB011420  | Hs.9075   | serine/threonine kinase 17a (apoptosis-i  | 3.6 |
| 80 | 454078 | AA601518  | Hs.22209  | secreted modular calcium-binding protein  | 3.6 |
|    | 404584 |           |           | Target Exon                               | 3.5 |
|    | 428311 | NM_005651 | Hs.183671 | tryptophan 2,3-dioxygenase                | 3.5 |
|    | 425922 | AL157466  | Hs.162751 | Homo sapiens mRNA; cDNA DKFZp761E2423 (f  | 3.5 |
|    | 415131 | D61119    |           | gb:HUM158C11B Clontech human fetal brain  | 3.5 |
|    | 412971 | AA889628  | Hs.35125  | ESTs                                      | 3.5 |
|    | 451593 | AF151879  | Hs.26706  | CGI-121 protein                           | 3.5 |
|    | 416427 | BE244050  | Hs.79307  | Rac/Cdc42 guanine exchange factor (GEF)   | 3.5 |



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|----|--------|-----------|-----------|--|-----|
|    | 427809 | M26380    | Hs.180878 | lipoprotein lipase                       | 3.5 |
|    | 443303 | U67319    | Hs.9216   | caspase 7, apoptosis-related cysteine pr | 3.5 |
|    | 422765 | AW409701  | Hs.1578   | baculoviral IAP repeat-containing 5 (sur | 3.5 |
|    | 445936 | BE543594  | Hs.61478  | hypothetical protein FLJ22329            | 3.5 |
| 5  | 411537 | BE073250  |           | gb:MR0-BT0551-060300-102-e05 BT0551 Homo | 3.5 |
|    | 432250 | AA452088  | Hs.274170 | Opa-interacting protein 2                | 3.5 |
|    | 458438 | AI141520  | Hs.151464 | ESTs, Weakly similar to ALUC_HUMAN !!!   | 3.5 |
|    | 407253 | AA411175  | Hs.141939 | ESTs, Moderately similar to S65657 alpha | 3.5 |
|    | 410507 | AA355288  | Hs.76064  | transitional epithelia response protein  | 3.5 |
| 10 | 412436 | AA655089  |           | gb:nu76d01.s1 NCL_CGAP_Alv1 Homo sapiens | 3.5 |
|    | 416933 | BE561850  | Hs.80506  | small nuclear ribonucleoprotein polypept | 3.5 |
|    | 437681 | AI207958  | Hs.166556 | Homo sapiens, Similar to TEA domain fami | 3.5 |
|    | 408247 | AA053451  | Hs.225632 | leucine zipper protein 3                 | 3.5 |
|    | 440074 | AA863045  | Hs.10569  | ESTs, Weakly similar to T00050 hypotheti | 3.5 |
| 15 | 422448 | AW372922  | Hs.116774 | integrin, alpha 1                        | 3.5 |
|    | 420676 | AI434780  | Hs.4248   | vav 2 oncogene                           | 3.5 |
|    | 417663 | R07483    | Hs.180461 | ESTs                                     | 3.5 |
|    | 451089 | AA903705  | Hs.4190   | Homo sapiens cDNA: FLJ23269 fis, clone C | 3.5 |
|    | 451446 | AI826288  | Hs.171637 | hypothetical protein MGC2628             | 3.5 |
| 20 | 414727 | BE466904  | Hs.190162 | gb:h28f03.x1 NCL_CGAP_GC6 Homo sapiens   | 3.5 |
|    | 421778 | AA428000  | Hs.283072 | actin related protein 2/3 complex, subun | 3.5 |
|    | 427413 | BE547647  | Hs.177781 | hypothetical protein MGC5518             | 3.5 |
|    | 414039 | M83221    | Hs.858    | v-rel avian reticuloendotheliosis viral  | 3.5 |
|    | 456304 | AI820973  |           | gb:nc21c02.y5 NCL_CGAP_Pr1 Homo sapiens  | 3.5 |
| 25 | 449162 | AI632740  | Hs.10476  | ESTs                                     | 3.5 |
|    | 437774 | AW978199  | Hs.291648 | ESTs, Weakly similar to t38022 hypotheti | 3.5 |
|    | 426827 | AW067805  | Hs.172655 | methyleneletrahydrofolate dehydrogenase  | 3.4 |
|    | 452203 | X57522    |           | transporter 1, ATP-binding cassette, sub | 3.4 |
|    | 450325 | AI935962  | Hs.26289  | ESTs                                     | 3.4 |
| 30 | 457211 | AW972565  | Hs.32399  | ESTs, Weakly similar to S51797 vasodilat | 3.4 |
|    | 419726 | U50330    | Hs.1274   | bone morphogenetic protein 1             | 3.4 |
|    | 417409 | BE272506  | Hs.82109  | syndecan 1                               | 3.4 |
|    | 412811 | H06382    |           | ESTs                                     | 3.4 |
|    | 430758 | T91568    | Hs.270616 | ESTs, Moderately similar to A34087 hypot | 3.4 |
| 35 | 425769 | U72513    | Hs.159486 | Human RPL13-2 pseudogene mRNA, complete  | 3.4 |
|    | 452682 | AA456193  | Hs.9071   | progesterone membrane binding protein    | 3.4 |
|    | 429500 | X78565    | Hs.289114 | hexabrachion (tenascin C, cytotoxicin)   | 3.4 |
|    | 447674 | BE270640  | Hs.19192  | cyclin-dependent kinase 2                | 3.4 |
|    | 443378 | AW392550  | Hs.9280   | proteasome (prosome, macropain) subunit, | 3.4 |
| 40 | 446134 | AW161234  | Hs.13993  | TBP-like 1                               | 3.4 |
|    | 418669 | U85992    | Hs.87197  | Human clone IMAGE:35527 unknown protein  | 3.4 |
|    | 425006 | R38685    | Hs.222746 | ESTs                                     | 3.4 |
|    | 435256 | AF193766  | Hs.13872  | cytokine-like protein C17                | 3.4 |
|    | 453379 | AA035261  | Hs.61753  | ESTs                                     | 3.4 |
| 45 | 448224 | R48700    | Hs.20733  | Homo sapiens cDNA: FLJ22356 fis, clone H | 3.4 |
|    | 455899 | BE155112  |           | gb:PM1-HT0350-151299-003-a03 HT0350 Homo | 3.4 |
|    | 422017 | NM_003877 | Hs.110776 | STAT induced STAT inhibitor-2            | 3.4 |
|    | 417395 | BE564245  | Hs.82084  | integrin beta 3 binding protein (beta3-e | 3.4 |
|    | 405046 |           |           | C3000978:gi9280045[dbj]BAB01579.1[(AB0   | 3.4 |
| 50 | 423178 | AI033140  | Hs.124983 | Homo sapiens mRNA: cDNA DKFZp564C142 (fr | 3.4 |
|    | 455142 | AW861840  |           | gb:CM0-CT0337-250200-243-g01 CT0337 Homo | 3.4 |
|    | 418819 | AA228776  | Hs.191721 | ESTs                                     | 3.4 |
|    | 428289 | M26301    | Hs.2253   | complement component 2                   | 3.4 |
| 55 | 412799 | AI267606  |           | gb:aq91h03.x1 Stanley Frontal SB pool 1  | 3.4 |
|    | 403108 |           |           | ENSP00000241415:Hypothetical 67.7 kDa p  | 3.4 |
|    | 421637 | AF035290  | Hs.106300 | Homo sapiens clone 23556 mRNA sequence   | 3.4 |
|    | 419373 | NM_003244 | Hs.90077  | TG-interacting factor (TALE family homeo | 3.4 |
|    | 424408 | AI754813  | Hs.146428 | collagen, type V, alpha 1                | 3.4 |
| 60 | 451061 | AW291487  | Hs.213659 | ESTs, Weakly similar to KIAA1357 protein | 3.4 |
|    | 433578 | BE336886  | Hs.3416   | adipose differentiation-related protein  | 3.4 |
|    | 439867 | AA847510  | Hs.161292 | ESTs                                     | 3.4 |
|    | 449249 | T52285    | Hs.193115 | Homo sapiens mRNA for KIAA1764 protein,  | 3.4 |
|    | 420982 | AW576160  | Hs.100729 | KIAA0692 protein                         | 3.4 |
|    | 440826 | AW383618  | Hs.346256 | ESTs, Moderately similar to ALU2_HUMAN A | 3.4 |
| 65 | 427687 | AW003867  | Hs.1570   | histamine receptor H1                    | 3.4 |
|    | 400533 |           |           | ENSP00000209376*-PRED65 protein (Fragmen | 3.3 |
|    | 436314 | AI983409  | Hs.189226 | ESTs                                     | 3.3 |
|    | 418110 | R43523    | Hs.217754 | hypothetical protein FLJ22202            | 3.3 |
|    | 448140 | AF146761  | Hs.20450  | BCM-like membrane protein precursor      | 3.3 |
| 70 | 402229 | BE262804  |           | mitochondrial ribosomal protein S2       | 3.3 |
|    | 410687 | U24389    | Hs.65436  | lysyl oxidase-like 1                     | 3.3 |
|    | 424614 | X54486    | Hs.151242 | serine (or cysteine) proteinase inhibito | 3.3 |
|    | 443338 | R99575    | Hs.302908 | ESTs                                     | 3.3 |
|    | 433062 | AK001757  | Hs.281348 | hypothetical protein FLJ10895            | 3.3 |
| 75 | 405303 |           |           | Target Exon                              | 3.3 |
|    | 410889 | X91662    | Hs.66744  | twist (Drosophila) homolog (acrocephalos | 3.3 |
|    | 406673 | M34996    | Hs.198253 | major histocompatibility complex, class  | 3.3 |
|    | 431721 | AB032996  | Hs.268044 | KIAA1170 protein                         | 3.3 |
|    | 426746 | J03626    | Hs.2057   | uridine monophosphate synthetase (crota  | 3.3 |
| 80 | 425262 | D87119    | Hs.155418 | GS3955 protein                           | 3.3 |
|    | 424947 | R77952    |           | ESTs, Weakly similar to alternatively sp | 3.3 |
|    | 437634 | AW293046  | Hs.255158 | ESTs                                     | 3.3 |
|    | 437014 | AA808757  | Hs.222531 | ESTs, Weakly similar to S59501 interfero | 3.3 |

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|----|--------|-----------|-----------|---|-----|
|    | 411688 | AW953440  |           | gb:EST365510 MAGE resequencas, MAGB Homo  | 3.3 |
|    | 447499 | AW262580  | Hs.147674 | protocadherin beta 16                     | 3.3 |
|    | 432625 | AI243596  | Hs.94830  | ESTs, Moderately similar to T03094 A-kin  | 3.3 |
| 5  | 435644 | AA700867  | Hs.269659 | ESTs                                      | 3.3 |
|    | 406060 |           |           | Target Exon                               | 3.3 |
|    | 425018 | BE245277  | Hs.154196 | E4F transcription factor 1                | 3.3 |
|    | 450728 | AW162923  | Hs.25363  | presenilin 2 (Alzheimer disease 4)        | 3.3 |
|    | 443105 | X96753    | Hs.9004   | chondroitin sulfate proteoglycan 4 (mela  | 3.3 |
| 10 | 414799 | AI752416  | Hs.77326  | insulin-like growth factor binding prote  | 3.3 |
|    | 435375 | AI733610  | Hs.187832 | ESTs                                      | 3.3 |
|    | 432693 | AW449630  | Hs.293790 | ESTs                                      | 3.3 |
|    | 449340 | AW235786  | Hs.195359 | hypothetical protein MGC10954             | 3.3 |
|    | 422530 | AW972300  | Hs.118110 | bone marrow stromal cell antigen 2        | 3.3 |
| 15 | 448002 | Y15227    | Hs.20149  | deleted in lymphocytic leukemia, 1        | 3.3 |
|    | 433160 | AW207002  | Hs.134342 | TASP for testis-specific adriamycin sens  | 3.3 |
|    | 429125 | AA446854  | Hs.271004 | ESTs, Weakly similar to I38022 hypotheti  | 3.3 |
|    | 452526 | W38537    | Hs.280740 | hypothetical protein MGC3040              | 3.3 |
|    | 416664 | H72780    | Hs.20289  | ESTs                                      | 3.3 |
|    | 444911 | U06117    | Hs.250    | xanthene dehydrogenase                    | 3.3 |
| 20 | 453544 | AA831785  | Hs.171914 | Homo sapiens cDNA FLJ14209 fis, clone NT  | 3.3 |
|    | 433042 | AW193534  | Hs.281895 | Homo sapiens cDNA FLJ11660 fis, clone HE  | 3.3 |
|    | 444046 | AI360834  | Hs.135094 | ESTs                                      | 3.3 |
|    | 411373 | BE326276  | Hs.8861   | ESTs                                      | 3.3 |
| 25 | 431865 | AA521106  | Hs.136375 | ESTs, Weakly similar to S65824 reverse t  | 3.3 |
|    | 408116 | AA251393  | Hs.289052 | Homo sapiens, Similar to RIKEN cDNA 5430  | 3.3 |
|    | 410006 | AW732308  | Hs.57783  | eukaryotic translation initiation factor  | 3.3 |
|    | 442485 | BE092285  | Hs.29724  | hypothetical protein FLJ13187             | 3.3 |
|    | 416379 | N38857    | Hs.203933 | ESTs                                      | 3.3 |
| 30 | 416308 | AW291942  | Hs.23628  | 3 beta-hydroxy-delta 5-C27-steroid oxido  | 3.3 |
|    | 427954 | J03060    | Hs.247551 | melaxin 1                                 | 3.3 |
|    | 459660 | M79082    |           | ESTs                                      | 3.3 |
|    | 419829 | AI924228  | Hs.115185 | ESTs, Moderately similar to PC4259 ferri  | 3.3 |
|    | 437945 | T78519    |           | gb:yd68c08.r1 Soares fetal liver spleen   | 3.3 |
|    | 400850 |           |           | Target Exon                               | 3.3 |
| 35 | 457244 | AA581385  | Hs.162473 | ESTs, Weakly similar to I38022 hypotheti  | 3.3 |
|    | 430462 | AI584156  | Hs.105640 | Homo sapiens, clone IMAGE:4139775, mRNA,  | 3.3 |
|    | 457653 | AI820719  | Hs.154662 | DnaJ (Hsp40) homolog, subfamily A, membe  | 3.3 |
|    | 431836 | AF178532  | Hs.271411 | beta-site APP-cleaving enzyme 2           | 3.2 |
| 40 | 440933 | AI208217  | Hs.142879 | ESTs                                      | 3.2 |
|    | 418079 | R40058    | Hs.6911   | ESTs                                      | 3.2 |
|    | 414280 | BE410789  | Hs.75873  | zyxin                                     | 3.2 |
|    | 425295 | AA431366  | Hs.37251  | ESTs                                      | 3.2 |
|    | 408872 | AI476139  | Hs.13291  | ESTs                                      | 3.2 |
| 45 | 416857 | AA188775  | Hs.292453 | ESTs                                      | 3.2 |
|    | 429599 | AA806106  | Hs.123654 | ESTs                                      | 3.2 |
|    | 437437 | AA226869  |           | hypothetical protein DKFZp762L0311        | 3.2 |
|    | 434274 | AA628539  | Hs.116252 | ESTs, Moderately similar to ALU1_HUMAN A  | 3.2 |
|    | 403349 | NM_001406 |           | ephrin-B3                                 | 3.2 |
| 50 | 449385 | AI650471  | Hs.347290 | ESTs                                      | 3.2 |
|    | 431421 | AW969118  | Hs.108144 | ESTs, Weakly similar to unnamed protein   | 3.2 |
|    | 419865 | NM_007020 | Hs.93502  | U1-snRNP binding protein homolog (70kD)   | 3.2 |
|    | 410700 | AA352335  | Hs.65641  | hypothetical protein FLJ20073             | 3.2 |
|    | 432044 | AW972727  |           | gb:EST384819 MAGE resequencas, MAGL Homo  | 3.2 |
| 55 | 412490 | AW803564  | Hs.288850 | Homo sapiens cDNA: FLJ22528 fis, clone H  | 3.2 |
|    | 408431 | AI338631  | Hs.43266  | Homo sapiens cDNA: FLJ22536 fis, clone H  | 3.2 |
|    | 430413 | AW842182  | Hs.241392 | small inducible cytokine A5 (RANTES)      | 3.2 |
|    | 448789 | BE539108  | Hs.22051  | hypothetical protein MGC15548             | 3.2 |
|    | 439332 | AW842747  | Hs.300870 | Homo sapiens mRNA; cDNA DKFZp547M072 (fr  | 3.2 |
| 60 | 418030 | BE207573  | Hs.83321  | neuromedin B                              | 3.2 |
|    | 428878 | AA436884  | Hs.48926  | ESTs                                      | 3.2 |
|    | 451527 | AF022813  | Hs.26518  | transmembrane 4 superfamily member 7      | 3.2 |
|    | 426406 | AI742501  | Hs.169756 | complement component 1, s subcomponent    | 3.2 |
|    | 448432 | AI783586  | Hs.208575 | ESTs                                      | 3.2 |
| 65 | 433894 | AI907582  | Hs.243293 | ESTs                                      | 3.2 |
|    | 436210 | AI825420  | Hs.197824 | ESTs                                      | 3.2 |
|    | 433791 | AA719352  | Hs.112718 | ESTs                                      | 3.2 |
|    | 450150 | AI754391  | Hs.23510  | Kruppel-like factor 12                    | 3.2 |
|    | 427513 | AI476318  | Hs.192480 | ESTs                                      | 3.2 |
| 70 | 423789 | AK002084  | Hs.132851 | hypothetical protein FLJ11222             | 3.2 |
|    | 451350 | AI791447  |           | gb:ni13a05.y5 NCI_CGAP_Co4 Homo sapiens   | 3.2 |
|    | 429065 | AI753247  | Hs.29643  | Homo sapiens cDNA FLJ13103 fis, clone NT  | 3.2 |
|    | 416784 | AA334592  | Hs.79914  | lumican                                   | 3.2 |
|    | 406851 | AA609784  |           | major histocompatibility complex, class   | 3.2 |
| 75 | 428032 | AW997704  | Hs.11493  | Homo sapiens cDNA FLJ13536 fis, clone PL  | 3.2 |
|    | 412646 | NM_006825 | Hs.74368  | transmembrane protein (63kD), endoplasmic | 3.2 |
|    | 432065 | AA401039  | Hs.2903   | protein phosphatase 4 (formerly X), cata  | 3.2 |
|    | 415709 | AA649850  | Hs.278558 | ESTs                                      | 3.2 |
|    | 422798 | R92347    | Hs.34574  | ESTs, Weakly similar to ALU1_HUMAN ALU S  | 3.2 |
| 80 | 437807 | AI017875  | Hs.136829 | ESTs                                      | 3.2 |
|    | 425171 | AW732240  | Hs.16365  | ESTs                                      | 3.2 |
|    | 448108 | AW300021  | Hs.170685 | ESTs                                      | 3.2 |
|    | 402523 |           |           | C1001173:gi 9743439 gb AAAF79932.2  (AF2  | 3.2 |
|    | 440146 | AW014231  | Hs.90790  | Homo sapiens cDNA: FLJ22930 fis, clone K  | 3.2 |

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|----|--------|-----------|-----------|--|-----|
|    | 429415 | NM_002593 | Hs.202097 | procollagen C-endopeptidase enhancer     | 3.2 |
|    | 422081 | AW136820  | Hs.196011 | ESTs                                     | 3.2 |
|    | 436258 | AW867491  | Hs.107125 | plasmalemma vesicle associated protein   | 3.2 |
|    | 410886 | AW809324  |           | gb:MR4-ST0121-141099-010-G06_1 ST0121 Ho | 3.2 |
| 5  | 442609 | AL020996  | Hs.8518   | selenoprotein N                          | 3.2 |
|    | 416188 | BE157260  | Hs.79070  | v-myc avian myelocytomatosis viral oncog | 3.2 |
|    | 441544 | AW300043  | Hs.127137 | ESTs                                     | 3.2 |
|    | 437860 | AA333063  | Hs.279898 | Homo sapiens cDNA: FLJ23165 fis, clone L | 3.2 |
|    | 419652 | AL157485  | Hs.91973  | hypothetical protein                     | 3.2 |
| 10 | 443623 | AA345519  | Hs.9641   | complement component 1, q subcomponent,  | 3.2 |
|    | 415198 | AW009480  | Hs.943    | natural killer cell transcript 4         | 3.2 |
|    | 441701 | AW339828  | Hs.127497 | ESTs                                     | 3.2 |
|    | 426384 | AI472078  | Hs.303652 | hypothetical protein FLJ13189 (FLJ13189) | 3.2 |
|    | 420886 | AA805453  |           | ESTs, Weakly similar to T29012 hypotheti | 3.2 |
| 15 | 428896 | AW291932  | Hs.98936  | ESTs                                     | 3.2 |
|    | 458253 | AW296952  | Hs.196802 | ESTs                                     | 3.2 |
|    | 456895 | AA354771  | Hs.43047  | Homo sapiens cDNA FLJ13585 fis, clone PL | 3.2 |
|    | 434818 | AA650097  | Hs.5996   | ESTs                                     | 3.2 |
|    | 424278 | AK000723  | Hs.144517 | hypothetical protein FLJ20716            | 3.2 |
| 20 | 434131 | AI858275  | Hs.143659 | ESTs                                     | 3.2 |
|    | 447111 | AI017574  | Hs.17409  | cysteine-rich protein 1 (intestinal)     | 3.1 |
|    | 443021 | AA368546  | Hs.8904   | Ig superfamily protein                   | 3.1 |
|    | 416677 | T83470    | Hs.334840 | ESTs, Moderately similar to I78885 serin | 3.1 |
|    | 429973 | AI423317  | Hs.164680 | ESTs                                     | 3.1 |
| 25 | 422545 | X02761    | Hs.287820 | fibronectin 1                            | 3.1 |
|    | 444006 | BE395085  | Hs.10086  | type I transmembrane protein Fn14        | 3.1 |
|    | 420116 | NM_013241 | Hs.95231  | FH1/FH2 domain-containing protein        | 3.1 |
|    | 401841 |           |           | NM_015113:Homo sapiens KIAA0399 protein  | 3.1 |
|    | 414416 | AW409985  | Hs.76084  | hypothetical protein MGC2721             | 3.1 |
| 30 | 431019 | NM_005249 | Hs.2714   | forkhead box G1B                         | 3.1 |
|    | 453707 | AW003879  | Hs.126522 | Homo sapiens, clone MGC:16722, mRNA, com | 3.1 |
|    | 432188 | AI362952  | Hs.2928   | solute carrier family 7 (cationic amino  | 3.1 |
|    | 407378 | AA299264  | Hs.57776  | ESTs, Moderately similar to I38022 hypot | 3.1 |
|    | 430701 | AI760833  | Hs.293971 | ESTs                                     | 3.1 |
| 35 | 429569 | AA454993  | Hs.138343 | ESTs, Weakly similar to I78885 serine/th | 3.1 |
|    | 458918 | H56499    | Hs.252692 | ESTs, Weakly similar to I38022 hypotheti | 3.1 |
|    | 439764 | T26535    | Hs.22744  | hypothetical protein MGC13105            | 3.1 |
|    | 452221 | C21322    | Hs.288057 | hypothetical protein FLJ22242            | 3.1 |
|    | 403969 |           |           | ENSP00000034663:Zinc finger protein 131  | 3.1 |
| 40 | 427359 | AW020782  | Hs.79881  | Homo sapiens cDNA: FLJ23006 fis, clone L | 3.1 |
|    | 414396 | BE548266  | Hs.76057  | galactose-4-epimerase, UDP-              | 3.1 |
|    | 444153 | AK001610  | Hs.10414  | hypothetical protein FLJ10748            | 3.1 |
|    | 414403 | AW969551  | Hs.76064  | ribosomal protein L27a                   | 3.1 |
|    | 444168 | AW379879  |           | gb:RC1-HT0256-081199-011-f01 HT0256 Homo | 3.1 |
| 45 | 410595 | AW629223  | Hs.64794  | zinc finger protein 183 (RING finger, C3 | 3.1 |
|    | 444881 | AI623288  | Hs.192805 | ESTs                                     | 3.1 |
|    | 440381 | AA917808  | Hs.190495 | ESTs                                     | 3.1 |
|    | 416207 | NM_014745 | Hs.79077  | Homo sapiens, clone MGC:2908, mRNA, comp | 3.1 |
|    | 439130 | AA306090  | Hs.124707 | ESTs                                     | 3.1 |
| 50 | 457579 | AB030816  | Hs.36761  | HRAS-like suppressor                     | 3.1 |
|    | 406736 | AI254733  | Hs.182426 | ribosomal protein S2                     | 3.1 |
|    | 420172 | AA601122  | Hs.95655  | secreted and transmembrane 1             | 3.1 |
|    | 428060 | AA420616  | Hs.249483 | ESTs                                     | 3.1 |
|    | 444143 | AW747996  | Hs.160999 | ESTs, Moderately similar to A56194 throm | 3.1 |
| 55 | 409154 | U72882    | Hs.50842  | interferon-induced protein 35            | 3.1 |
|    | 449426 | T92251    | Hs.198882 | ESTs                                     | 3.1 |
|    | 458760 | AI498631  | Hs.111334 | ferritin, light polypeptide              | 3.1 |
|    | 450811 | AI739486  | Hs.245497 | ESTs                                     | 3.1 |
|    | 425331 | AW962128  |           | gb:EST374201 MAGE resequences, MAGG Homo | 3.1 |
| 60 | 445211 | BE045601  | Hs.118248 | ESTs, Weakly similar to YC18_HUMAN HYPOT | 3.1 |
|    | 441318 | AI078234  | Hs.176130 | ESTs                                     | 3.1 |
|    | 450625 | AW970107  |           | gb:EST382188 MAGE resequences, MAGK Homo | 3.1 |
|    | 437640 | AA764893  | Hs.272155 | ESTs, Weakly similar to I38022 hypotheti | 3.1 |
|    | 444672 | Z95636    | Hs.11669  | laminin, alpha 5                         | 3.1 |
| 65 | 407047 | X65965    |           | gb:H.sapiens SOD-2 gene for manganese su | 3.1 |
|    | 413834 | BE296896  | Hs.224179 | ESTs, Weakly similar to I38022 hypotheti | 3.1 |
|    | 439755 | AW748482  | Hs.77873  | B7 homolog 3                             | 3.1 |
|    | 435520 | AA297990  | Hs.9315   | HNOEL-iso protein                        | 3.1 |
|    | 414598 | AI094221  | Hs.135150 | lung type-I cell membrane-associated gly | 3.1 |
| 70 | 440948 | AW188311  | Hs.128619 | ESTs                                     | 3.1 |
|    | 412851 | AI826502  | Hs.106149 | ESTs                                     | 3.1 |
|    | 417336 | R70429    | Hs.81988  | disabled (Drosophila) homolog 2 (mitogen | 3.1 |
|    | 417944 | AU077196  | Hs.82985  | collagen, type V, alpha 2                | 3.1 |
|    | 411671 | BE049094  |           | ESTs                                     | 3.1 |
| 75 | 430444 | AW296421  | Hs.121035 | ESTs                                     | 3.1 |
|    | 425843 | BE313280  | Hs.159627 | death associated protein 3               | 3.1 |
|    | 407721 | Y12735    | Hs.38018  | dual-specificity tyrosine-(Y)-phosphoryl | 3.1 |
|    | 439093 | AA534163  | Hs.5476   | Homo sapiens, clone IMAGE:3530123, mRNA, | 3.1 |
|    | 449523 | NM_000579 | Hs.54443  | chemokine (C-C motif) receptor 5         | 3.1 |
| 80 | 435664 | AI032087  | Hs.269819 | ESTs                                     | 3.1 |
|    | 453085 | AW954243  |           | KIAA0251 protein                         | 3.1 |
|    | 430314 | AA369601  | Hs.239138 | pre-B-cell colony-enhancing factor       | 3.0 |
|    | 447527 | AI702896  | Hs.42091  | ESTs                                     | 3.0 |

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|    |        |           |           |   |     |
|----|--------|-----------|-----------|---|-----|
|    | 432682 | AI376400  | Hs.159588 | ESTs                                      | 3.0 |
|    | 416941 | BE000150  | Hs.48778  | niban protein                             | 3.0 |
|    | 455481 | AW948317  |           | gb:RC0-MT0015-280300-021-a09 MT0015 Homo  | 3.0 |
| 5  | 445906 | N28939    | Hs.13434  | Homo sapiens clone 24418 mRNA sequence    | 3.0 |
|    | 408716 | AI567839  | Hs.151714 | Homo sapiens mRNA for KIAA1769 protein,   | 3.0 |
|    | 424308 | AW975531  | Hs.154443 | minichromosome maintenance deficient (S.  | 3.0 |
|    | 436443 | AW138211  | Hs.128746 | ESTs                                      | 3.0 |
|    | 425421 | L11669    | Hs.157145 | tetracycline transporter-like protein     | 3.0 |
| 10 | 427725 | U66839    | Hs.180533 | mitogen-activated protein kinase kinase   | 3.0 |
|    | 456816 | AK001509  | Hs.144391 | hypothetical protein FLJ10647             | 3.0 |
|    | 404632 |           |           | NM_022490:Homo sapiens hypothetical prot  | 3.0 |
|    | 411565 | AW851728  |           | gb:MR2-CT0222-011199-007-d05 CT0222 Homo  | 3.0 |
|    | 428917 | AA437337  | Hs.16689  | ESTs                                      | 3.0 |
|    | 424584 | H10692    | Hs.13310  | ESTs                                      | 3.0 |
| 15 | 452483 | AI903731  | Hs.106357 | valosin-containing protein                | 3.0 |
|    | 404453 |           |           | C8000963*:gij6329915[dbj]BAA86452.1 (AB   | 3.0 |
|    | 426931 | NM_003416 | Hs.2076   | zinc finger protein 7 (KIX 4, clone HF.1  | 3.0 |
|    | 455646 | BE064420  |           | gb:RC4-BT0311-241199-012-c08 BT0311 Homo  | 3.0 |
| 20 | 452188 | AI864208  | Hs.176275 | ESTs                                      | 3.0 |
|    | 409703 | NM_006187 | Hs.56009  | 2'-5'-oligoadenylate synthetase 3 (100 k  | 3.0 |
|    | 413922 | AI535895  | Hs.221024 | ESTs                                      | 3.0 |
|    | 452367 | U71207    | Hs.29279  | eyes absent (Drosophila) homolog 2        | 3.0 |
|    | 434070 | AF116652  | Hs.270087 | hypothetical protein PRO0813              | 3.0 |
| 25 | 406679 | AA070786  |           | gb:zm66b07.r1 Stratagene neuroepithelium  | 3.0 |
|    | 414747 | U30872    | Hs.77204  | centromere protein F (350/400kD, mitotin  | 3.0 |
|    | 435472 | AW972330  | Hs.283022 | triggering receptor expressed on myeloid  | 3.0 |
|    | 429612 | AF062649  | Hs.252587 | pituitary tumor-transforming 1            | 3.0 |
|    | 408989 | AW361666  | Hs.49500  | KIAA0746 protein                          | 3.0 |
| 30 | 418365 | AW014345  | Hs.161690 | ESTs                                      | 3.0 |
|    | 418677 | S83308    | Hs.87224  | SRY (sex determining region Y)-box 5      | 3.0 |
|    | 426765 | AA743603  | Hs.172108 | nucleoporin 88kD                          | 3.0 |
|    | 400295 | W72838    |           | AI905687:IL-BT095-190199-019 BT095 Homo   | 3.0 |
|    | 429751 | M55210    | Hs.214982 | laminin, gamma 1 (formerly LAMB2)         | 3.0 |
| 35 | 429940 | W25215    |           | gb:zb87a09.r1 Soares_senescent_fibroblas  | 3.0 |
|    | 412281 | AI810054  | Hs.14119  | ESTs                                      | 3.0 |
|    | 434898 | AW500458  | Hs.29956  | KIAA0460 protein                          | 3.0 |
|    | 424830 | AW270580  | Hs.189311 | ESTs, Weakly similar to putative p150 [H  | 3.0 |
|    | 459727 | AI906494  |           | gb:RC-BT113-060499-024 BT113 Homo sapien  | 3.0 |
| 40 | 453900 | AW003582  | Hs.226414 | ESTs, Weakly similar to ALU8_HUMAN ALU S  | 3.0 |
|    | 458729 | AI364504  | Hs.93967  | ESTs, Weakly similar to NBHUC8 decorin p  | 3.0 |
|    | 402105 |           |           | C18000230*:gij12585552[sp]Q9Y2Q1J2257_HU  | 3.0 |
|    | 425248 | AW957442  | Hs.252766 | ESTs                                      | 3.0 |
|    | 440995 | T57773    | Hs.10263  | ESTs                                      | 3.0 |
| 45 | 441360 | AI091713  | Hs.106597 | Homo sapiens, Similar to RIKEN cDNA 1110  | 3.0 |
|    | 432692 | AW974944  | Hs.200577 | ESTs                                      | 3.0 |
|    | 428899 | AA744610  | Hs.194431 | palladin                                  | 3.0 |
|    | 452811 | AA937079  | Hs.118983 | hypothetical protein FLJ12150             | 3.0 |
|    | 447183 | AI554733  | Hs.173182 | ESTs                                      | 3.0 |
| 50 | 429679 | NM_006290 | Hs.211600 | tumor necrosis factor, alpha-induced pro  | 3.0 |
|    | 416505 | H66470    | Hs.16004  | ESTs                                      | 3.0 |
|    | 420144 | AA811813  | Hs.119421 | ESTs                                      | 3.0 |
|    | 439184 | AW021842  | Hs.16533  | myosin phosphatase, target subunit 1      | 3.0 |
|    | 438033 | T26483    | Hs.6059   | EGF-containing fibulin-like extracellular | 3.0 |
| 55 | 442476 | AF069475  |           | gb:AF069475 Homo sapiens astrocytoma lib  | 3.0 |
|    | 441035 | AI694309  | Hs.126458 | ESTs                                      | 3.0 |
|    | 458810 | BE407125  | Hs.231510 | ESTs                                      | 3.0 |
|    | 435046 | AA662772  | Hs.174330 | ESTs, Weakly similar to ALU1_HUMAN ALU S  | 3.0 |
|    | 414271 | AK000275  | Hs.75871  | protein kinase C binding protein 1        | 3.0 |
| 60 | 450879 | AI742685  | Hs.210347 | ESTs                                      | 3.0 |
|    | 454036 | AA374756  | Hs.93560  | Homo sapiens mRNA for KIAA1771 protein,   | 3.0 |
|    | 403780 |           |           | C4001759:gij133250[sp]P19474[RO52_HUMAN   | 3.0 |
|    | 411543 | AW851248  |           | gb:IL3-CT0220-160200-066-F01 CT0220 Homo  | 3.0 |
|    | 440351 | AF030933  | Hs.7179   | RAD1 (S. pombe) homolog                   | 3.0 |
| 65 | 452139 | AA099969  | Hs.16331  | Homo sapiens cDNA: FLJ21482 fis, clone C  | 3.0 |
|    | 449433 | AI672096  | Hs.9012   | ESTs, Weakly similar to S26650 DNA-bind   | 3.0 |
|    | 413945 | NM_000591 | Hs.75627  | CD14 antigen                              | 3.0 |
|    | 433681 | AI004377  | Hs.200360 | Homo sapiens cDNA FLJ13027 fis, clone NT  | 3.0 |
|    | 422605 | H16646    | Hs.118666 | hypothetical protein PP591                | 3.0 |
| 70 | 443502 | AI074528  | Hs.133949 | ESTs                                      | 3.0 |
|    | 410781 | AI375672  | Hs.165028 | ESTs                                      | 3.0 |
|    | 449428 | AI651280  | Hs.195685 | ESTs                                      | 3.0 |
|    | 436671 | AW137159  | Hs.146151 | ESTs                                      | 3.0 |

TABLE 16B:

Pkey: Unique Eos probeset identifier number  
CAT number: Gene cluster number  
Accession: Genbank accession numbers

|    |        |            |  |
|----|--------|------------|--|
| 80 | Pkey   | CAT Number | Accession                                    |
|    | 408432 | 1058667_1  | AW195262 R27868 AW811262                     |
|    | 410886 | 1225822_1  | AW809324 BE144977 BE144956                   |
|    | 411537 | 1248899_1  | BE073250 BE073378 BE073379 AW850533 AW850529 |
|    | 411543 | 1249127_1  | AW851248 AW851425 AW850805 AW851021 AW850905 |

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|    |        |           |   |
|----|--------|-----------|---|
| 5  | 411565 | 1249756_1 | AW851728 AW851607 AW851621 AW851702 AW851647 AW851727 AW851658 AW851617 AW851628  |
|    | 411671 | 125369_1  | BE049094 AA700765 H86770 AA094646 R02483 C03868 N56170  |
|    | 411688 | 1254076_1 | AW953440 T08189 AW857085  |
|    | 412436 | 129439_1  | AA665089 AA135130 AA484059 AA102419 AW877765  |
|    | 412799 | 132817_1  | A1267606 AA121045 AA126521  |
|    | 412811 | 132943_1  | H06382 AW957730 AA352014 R13591 AA121201 D60420 BE263253 BE047862 Z41952 A1424991 A1693507 A1863108 AA599060 A1091148 AA598689  |
|    |        |           | R39887 AA813482 AW016452 H06383 R41807 A1364268 AA620528 A1241940 AW089149 AW090733 AW088875 Z38240 AA121202 R17734             |
|    |        |           | AA143654 AW753140 AA213770 AW970865 AA569075 AA492132   |
| 10 | 414372 | 143909_1  | D61119 D81508 D81734  |
|    | 415131 | 1523680_1 | AA168963 AW971218 AA493942  |
|    | 415688 | 154643_1  | H98716 N90792 N24283  |
|    | 416871 | 1626761_1 | AW934714 BE161007 BE162500 AW749902 AW749864 BE162498 BE161005 AA190449 AW513465 BE161006 BE162499                              |
|    | 416913 | 163001_1  | Z99362 Z99363   |
|    | 419896 | 1888662_1 | AA805453 AA281379   |
| 15 | 420886 | 197344_1  | N34524 AA305071 AW954803 AA502335 A1433430 A1203597 AW026670 AW265323 AW850787 AA317554 AW993643 AW835572 AW385512              |
|    | 422156 | 212379_1  | A1334966 W32951 H62656 H53902 R89904 AW835732   |
|    |        |           | AW754182 AW754198 AA329983  |
|    | 423713 | 231290_1  | F11690 AW965370 AA333586 D30830   |
|    | 424009 | 234177_1  | R77952 AA348809 AW959960 AW959962 A1565552 AW070702 AA973910 R85973   |
| 20 | 424947 | 245247_1  | AW962128 AA355353 AA427363  |
|    | 425331 | 250199_1  | AA884766 AW974271 AA592975 AA447312   |
|    | 429163 | 300543_1  | W25215 AA451079 AA461391  |
|    | 429940 | 310884_1  | AW972830 AA527647 AA489820 AA570362   |
|    | 430968 | 326269_1  | AW972727 AA524829 AW972733  |
| 25 | 432044 | 340773_1  | AA534489 AW970240 AW970323  |
|    | 432363 | 345469_1  | AA687376 H74234 AW975503  |
|    | 435542 | 407744_1  | AA226869 AA296516 AW959753 AA186390 AL359619 AA356195 AA148427 R22748 A1033624 BE548853 H95327 AW579751 BE561649 AA397533       |
|    | 437437 | 43709_1   | BE617136 AA236444 T89946 AA247450 N55777 W38725 A1743846 A1808406 AA922229 A1051464 W04713 R11251 W19656 A1042319 AA489276      |
|    |        |           | A1224533 H  |
| 30 | 437945 | 44580_1   | T78519 H59898 U72516  |
|    | 439518 | 47334_1   | W76326 AF086341 W72300  |
|    | 439566 | 47387_1   | AF086387 W77884 W72711  |
|    | 439710 | 47550_1   | AF086543 W96291 W96225  |
|    | 442476 | 543547_1  | AF069475 AF069477 AF069476  |
| 35 | 444168 | 593829_1  | AW379879 A1126285 H12014  |
|    | 449625 | 8113_1    | NM_014253 AF100772 BE088769 AL022718 BE161779 AW863569 BE161640 AL039060 BE168542 AW296554 AA323193 AA235370 AW779760           |
|    |        |           | N48674 A1375997 R45432 D59344 A1203107 F07491 R35360 R25094 A1913631 A1498402 T61382 A1016320 N45526 T61415 AA331486            |
|    |        |           | AA429504 R41904 AA279467 H09648 AA007236  |
| 40 | 450166 | 82677_1   | AA009647 AA131254 AA374293 AW954405 H04410 AW606284 AA151166 BE157467 BE157601 H04384 W46291 AW663674 H04021 H01532             |
|    | 450375 | 83327_1   | AA190993 H03231 H59605 H01642 AA852876 AA113758 AA626915 AA746952 A1161014 AA099554 R69067                                      |
|    |        |           | NM_004460 U09278 U76833 AW630055 AW471133 C02434 W45237 AW793518 BE070112 A1587479 A1624429 AW190535 A1466661 A1478772          |
|    |        |           | AW022657 AA528235 AA599775 AW613820 A1435793 AW594230 A1051768 A1200109 A1680296 AA436611 AW609728 W42634 A1682584 AA405569     |
|    |        |           | A1685653 AW0  |
|    |        |           | AW970107 AA513951 AA010406  |
| 45 | 450625 | 84032_1   | BE072881 BE072946 A1762181  |
|    | 451129 | 859870_1  | A1791447 A1791327 AW886809  |
|    | 451350 | 866945_1  | X57522 AW295947 A1346197 A1304693 L21205 L21206 L21207 L21208 L21204 NM_000593 F06770 F12630 X57521 R18264 T74462 AA346259      |
|    | 452203 | 903_2     | AW602508 AA904076 F08426 H23432 AA313737 AA393782 M78052 AA847441 AA487637 AA135770 AA353161 A1819778 AA054458 A1346733         |
|    |        |           | AW361447 A14  |
| 50 | 453085 | 94851_1   | AW954243 AA829930 AA412478 AA828434 AA814538 A1927418 A1192435 W52897 AA443666 AA031913 A1683306 AA918481 A1183314 D83907       |
|    |        |           | A1206832 AA876122 D83836 D83838 D82533 A1761290 A1191125 A1143749 AW771909 A1241436 A1767267 W56507 AA847787 AA568692 T10502    |
|    |        |           | A1247870  |
|    | 453331 | 96214_1   | A1240665 T53681 N77468 H51833 AA147247 R75732 C18450 R73999 A1095755 T49904 H03868 AA411580 R33395 AA410586 T48869 D63292       |
| 55 |        |           | R31981 H12498 H02668 AA035018 R75957 A1803329 R27528 R36203 A1809932 A1808765 R78948 AA411449 AA976929 A1378760 A1378620 T48870 |
|    |        |           | R7390   |
|    | 453682 | 977454_1  | T79703 T96307 AL079725  |
|    | 454860 | 1237732_1 | AW835767 AW835537 BE160187  |
|    | 455142 | 1254887_1 | AW861840 AW858329 AW858192 AW858189 AW858224 AW858351   |
| 60 | 455481 | 1293182_1 | AW948317 AW948322 AW948329 AW948316 AW948298 AW948330 AW948325 AW948324   |
|    | 455646 | 1348557_1 | BE064420 BE064435 BE064429 BE064414 BE064400 BE064517   |
|    | 455899 | 1381547_1 | BE155112 BE155154 BE155087 BE155247 BE155499 BE155367 BE155452  |
|    | 456304 | 176820_1  | A1820973 A1734077 A1820984 AA225796 AA225060 AA225101   |
|    | 457876 | 42814_2   | A1821940 N67106 A1744264 AA808846 AA643417 AA643416 Z70715  |

|    |              |   |
|----|--------------|---|
| 65 | TABLE 16C:   |   |
|    | Pkey:        | Unique number corresponding to an Eos probeset  |
|    | Ref:         | Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495. |
|    | Strand:      | Indicates DNA strand from which exons were predicted.   |
| 70 | Nt_position: | Indicates nucleotide positions of predicted exons.  |

|    |        |         |        |                         |
|----|--------|---------|--------|-------------------------|
|    | Pkey   | Ref     | Strand | Nt_position             |
| 75 | 400533 | 6981826 | Minus  | 277132-277595           |
|    | 400850 | 1927150 | Minus  | 4506-4691               |
|    | 401454 | 9186923 | Minus  | 114659-114832           |
|    | 401841 | 7684597 | Plus   | 89868-90006,91920-92085 |
|    | 402082 | 8117478 | Minus  | 190046-190183           |
|    | 402105 | 8131588 | Minus  | 22856-24055             |
|    | 402229 | 9965022 | Minus  | 15739-15951,16165-16779 |
| 80 | 402239 | 7690131 | Plus   | 38175-38304,42133-42266 |
|    | 402274 | 2935596 | Plus   | 5604-6527               |
|    | 402523 | 9798518 | Minus  | 18729-19283             |
|    | 402604 | 9909420 | Plus   | 20393-20767             |

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|    |        |         |       |                         |
|----|--------|---------|-------|-------------------------|
| 5  | 402855 | 9662953 | Minus | 59763-59909             |
|    | 403011 | 6693597 | Minus | 3468-3623               |
|    | 403108 | 8980955 | Plus  | 93253-93667             |
|    | 403267 | 7887182 | Plus  | 116078-121885           |
|    | 403349 | 8569773 | Minus | 167815-168374           |
|    | 403361 | 8570313 | Minus | 112496-112687           |
|    | 403481 | 9965004 | Plus  | 93496-93633             |
|    | 403696 | 3135242 | Minus | 143467-143634           |
| 10 | 403780 | 8076989 | Plus  | 93160-93409             |
|    | 403849 | 7708855 | Plus  | 95043-96519             |
|    | 403961 | 7596976 | Minus | 110393-110603           |
|    | 403969 | 8569909 | Plus  | 31237-31375,32405-32506 |
|    | 404209 | 5006246 | Minus | 11247-11514             |
|    | 404407 | 7329316 | Minus | 48154-48499             |
| 15 | 404453 | 7657714 | Plus  | 27768-29179             |
|    | 404584 | 9857511 | Plus  | 138651-139153           |
|    | 404632 | 9796668 | Plus  | 45096-45229             |
|    | 405046 | 7596829 | Minus | 4373-4528               |
|    | 405141 | 8980911 | Plus  | 99861-100054            |
| 20 | 405303 | 2078453 | Minus | 130607-130802           |
|    | 405348 | 2914717 | Minus | 43310-43462             |
|    | 405558 | 1621110 | Plus  | 4502-4644,5983-6083     |
|    | 405605 | 5836195 | Minus | 117070-117270           |
| 25 | 406038 | 8389537 | Plus  | 37764-37877             |
|    | 406060 | 6899623 | Minus | 20339-20746             |
|    | 406478 | 9857502 | Plus  | 68314-68523,68853-68950 |

TABLE 17A: ABOUT 1040 GENES UP-REGULATED IN GLIOBLASTOMA MULTIFORMA COMPARED TO NORMAL ADULT TISSUES

30 Table 17A lists about 1040 genes up-regulated in glioblastoma multiforma (GBM) compared to normal normal adult tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" glioblastoma to "average" normal tissues was greater than or equal to 3.0. The "average" GBM level was set to the 85<sup>th</sup> percentile amongst various GBM tumors. The "average" normal tissue level was set to the 85<sup>th</sup> percentile amongst various non-malignant adult tissues. In order to remove gene-specific background levels of non-specific hybridization, the 10<sup>th</sup> percentile value amongst the various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

35 Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 R1: Ratio of GLIOBLASTOMA MULTIFORMA compared to NORMAL ADULT TISSUES

|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
| 40 | Pkey   | ExAccn    | UnigenelD | Unigene Title                            | R1   |
|    | 431917 | D16181    | Hs.2868   | peripheral myelin protein 2              | 57.9 |
|    | 428321 | AI699994  | Hs.2868   | peripheral myelin protein 2              | 50.1 |
|    | 427343 | AI880044  | Hs.176977 | protein kinase C binding protein 2       | 49.6 |
|    | 413472 | BE242870  | Hs.75379  | solute carrier family 1 (glial high affi | 43.9 |
| 45 | 415817 | U88967    | Hs.78867  | protein tyrosine phosphatase, receptor-1 | 42.9 |
|    | 435147 | AL133731  | Hs.4774   | Homo sapiens mRNA; cDNA DKFZp761C1712 (f | 42.5 |
|    | 430838 | N46664    | Hs.169395 | hypothetical protein FLJ12015            | 37.9 |
|    | 418375 | NM_003081 | Hs.84389  | synaptosomal-associated protein, 25kD    | 37.1 |
| 50 | 449494 | AW237014  | Hs.315369 | Homo sapiens cDNA: FLJ23075 fis, clone L | 37.0 |
|    | 425088 | AA653372  | Hs.169395 | hypothetical protein FLJ12015            | 32.7 |
|    | 425842 | AI587490  | Hs.159623 | NK-2 (Drosophila) homolog B              | 32.4 |
|    | 419078 | M93119    | Hs.89584  | insulinoma-associated 1                  | 32.1 |
|    | 423849 | AL157425  | Hs.133315 | Homo sapiens mRNA; cDNA DKFZp761J1324 (f | 29.9 |
|    | 409389 | AB007979  | Hs.301281 | Homo sapiens mRNA, chromosome 1 specific | 28.8 |
| 55 | 413333 | M74028    | Hs.75297  | fibroblast growth factor 1 (acidic)      | 28.5 |
|    | 417183 | R52089    | Hs.172717 | ESTs                                     | 27.6 |
|    | 426325 | D28114    | Hs.169309 | myelin-associated oligodendrocyte basic  | 27.6 |
|    | 412733 | AA984472  | Hs.74554  | KIAA0080 protein                         | 25.9 |
|    | 422656 | AI870435  | Hs.1569   | LIM homeobox protein 2                   | 25.6 |
| 60 | 436878 | BE465204  | Hs.47448  | ESTs                                     | 24.9 |
|    | 437204 | AL110216  | Hs.22826  | ESTs, Weakly similar to I55214 salivary  | 24.3 |
|    | 429007 | D80642    |           | gb:HUM092E09B Human fetal brain (TFujiwa | 23.1 |
|    | 429276 | AF056085  | Hs.198612 | G protein-coupled receptor 51            | 23.1 |
|    | 409395 | U46745    | Hs.336678 | dystrobrevin, alpha                      | 23.0 |
| 65 | 435708 | AI362949  | Hs.75169  | ESTs                                     | 22.5 |
|    | 453392 | U23752    | Hs.32964  | SRY (sex determining region Y)-box 11    | 22.2 |
|    | 431941 | AK000106  | Hs.272227 | Homo sapiens cDNA FLJ20099 fis, clone CO | 22.1 |
|    | 418110 | R43523    | Hs.217754 | hypothetical protein FLJ22202            | 22.0 |
|    | 416829 | AB013805  | Hs.80220  | catenin (cadherin-associated protein), d | 21.7 |
| 70 | 444513 | AL120214  | Hs.7117   | glutamate receptor, ionotropic, AMPA 1   | 20.9 |
|    | 433551 | AI985544  | Hs.12450  | protocadherin 9                          | 19.8 |
|    | 452744 | AI267652  | Hs.246107 | Homo sapiens mRNA; cDNA DKFZp434E082 (fr | 19.1 |
|    | 425057 | AA826434  | Hs.1619   | achaete-scute complex (Drosophila) homol | 19.0 |
|    | 429903 | AL134197  | Hs.93597  | cyclin-dependent kinase 5, regulatory su | 19.0 |
| 75 | 447004 | AW296968  | Hs.157539 | ESTs                                     | 18.6 |
|    | 425048 | H05468    | Hs.164502 | ESTs                                     | 18.2 |
|    | 427897 | NM_017413 | Hs.303084 | apelin; peptide ligand for APJ receptor  | 18.0 |
|    | 421264 | AL039123  | Hs.103042 | microtubule-associated protein 1B        | 18.0 |
| 80 | 453642 | AI370936  | Hs.34074  | dipeptidylpeptidase VI                   | 17.8 |
|    | 424140 | Z48051    | Hs.141308 | myelin oligodendrocyte glycoprotein      | 17.7 |
|    | 444471 | AB020684  | Hs.11217  | KIAA0877 protein                         | 17.6 |
|    | 441350 | AB020690  | Hs.7782   | paraneoplastic antigen MA2               | 17.2 |
|    | 430691 | C14187    | Hs.103538 | ESTs                                     | 16.7 |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 433800 | AI034361  | Hs.135150 | lung type-I cell membrane-associated gly | 16.6 |
|    | 424581 | M62062    | Hs.150917 | catenin (cadherin-associated protein), a | 16.6 |
|    | 408562 | AI436323  | Hs.31141  | Homo sapiens mRNA for KIAA1568 protein,  | 16.5 |
|    | 423853 | AB011537  | Hs.133466 | slit (Drosophila) homolog 1              | 16.4 |
| 5  | 431019 | NM_005249 | Hs.2714   | forkhead box G1B                         | 16.4 |
|    | 449539 | W80363    | Hs.58446  | ESTs                                     | 16.4 |
|    | 450133 | AW969769  | Hs.105201 | ESTs                                     | 16.1 |
|    | 425799 | T08133    | Hs.182906 | Homo sapiens mRNA for KIAA1872 protein,  | 16.0 |
| 10 | 447359 | NM_012093 | Hs.18268  | adenylate kinase 5                       | 15.4 |
|    | 415910 | U20350    | Hs.78913  | chemokine (C-X3-C) receptor 1            | 15.3 |
|    | 459516 | AI049662  | Hs.246858 | EST                                      | 14.9 |
|    | 456759 | BE259150  | Hs.127792 | delta (Drosophila)-like 3                | 14.7 |
|    | 429466 | M85835    | Hs.12827  | ESTs                                     | 14.7 |
| 15 | 439979 | AW600291  | Hs.6823   | hypothetical protein FLJ10430            | 14.7 |
|    | 443785 | AW449952  | Hs.190125 | basic-helix-loop-helix-PAS protein       | 14.6 |
|    | 439415 | F05538    | Hs.4273   | ESTs                                     | 14.5 |
|    | 408604 | D51408    | Hs.21925  | ESTs                                     | 14.5 |
|    | 444378 | R41339    | Hs.47860  | neurotrophic tyrosine kinase, receptor,  | 14.3 |
| 20 | 428392 | H10233    | Hs.2265   | secretory granule, neuroendocrine protei | 14.0 |
|    | 418738 | AW388633  | Hs.6682   | solute carrier family 7, (cationic amino | 14.0 |
|    | 409799 | D11928    | Hs.76845  | phosphoserine phosphatase-like           | 13.9 |
|    | 439239 | AI031540  | Hs.235331 | ESTs                                     | 13.8 |
|    | 428342 | AI739168  |           | Homo sapiens cDNA FLJ13458 fis, clone PL | 13.7 |
| 25 | 448595 | AB014544  | Hs.21572  | KIAA0644 gene product                    | 13.6 |
|    | 441285 | NM_002374 | Hs.167    | microtubule-associated protein 2         | 13.5 |
|    | 428982 | NM_005097 | Hs.194704 | leucine-rich, glioma inactivated 1       | 13.4 |
|    | 441440 | AI807981  | Hs.30495  | ESTs                                     | 13.0 |
|    | 412959 | D87458    | Hs.75090  | KIAA0282 protein                         | 12.8 |
| 30 | 413597 | AW302885  | Hs.117183 | ESTs                                     | 12.8 |
|    | 441016 | AW138653  | Hs.25845  | ESTs                                     | 12.7 |
|    | 418338 | NM_002522 | Hs.84154  | neuronal pentraxin I                     | 12.6 |
|    | 423419 | R55336    | Hs.23539  | ESTs                                     | 12.6 |
|    | 445495 | BE622641  | Hs.38489  | ESTs, Weakly similar to I38022 hypotheri | 12.6 |
| 35 | 441497 | R51064    | Hs.23172  | ESTs                                     | 12.4 |
|    | 424893 | AW295112  | Hs.153648 | Homo sapiens cDNA FLJ13303 fis, clone OV | 12.2 |
|    | 453941 | U39817    | Hs.36820  | Bloom syndrome                           | 12.2 |
|    | 427701 | AA411101  | Hs.243886 | nuclear autoantigenic sperm protein (his | 12.2 |
|    | 446782 | AI653048  | Hs.144006 | ESTs                                     | 12.1 |
| 40 | 437268 | AI754847  | Hs.227571 | regulator of G-protein signalling 4      | 12.1 |
|    | 411411 | AA345241  | Hs.55950  | ESTs, Weakly similar to KIAA1330 protein | 11.9 |
|    | 448302 | AI480208  | Hs.182906 | Homo sapiens mRNA for KIAA1872 protein,  | 11.9 |
|    | 407034 | U84540    |           | gb.Human dystrobrevin isoform DTN-3 (DTN | 11.9 |
|    | 449625 | NM_014253 |           | odz (odd Oz/en-m, Drosophila) homolog 1  | 11.7 |
| 45 | 451099 | R52795    | Hs.25954  | interleukin 13 receptor, alpha 2         | 11.7 |
|    | 424432 | AB037821  | Hs.146858 | protocadherin 10                         | 11.6 |
|    | 451996 | AW514021  | Hs.245510 | ESTs                                     | 11.4 |
|    | 423678 | AW963357  | Hs.7847   | ESTs                                     | 11.4 |
|    | 445041 | T64183    | Hs.282982 | solute carrier                           | 11.3 |
| 50 | 442613 | AI004002  | Hs.130522 | Kv channel-interacting protein 1         | 11.2 |
|    | 419721 | NM_001650 | Hs.288650 | aquaporin 4                              | 11.2 |
|    | 446711 | AF169692  | Hs.12450  | protocadherin 9                          | 11.1 |
|    | 412986 | X81120    | Hs.75110  | cannabinoid receptor 1 (brain)           | 11.0 |
|    | 412140 | AA219691  | Hs.73625  | RAB6 interacting, kinesin-like (rabkines | 10.7 |
| 55 | 428728 | NM_016625 | Hs.191381 | hypothetical protein                     | 10.6 |
|    | 415849 | R20529    | Hs.6806   | ESTs                                     | 10.6 |
|    | 447198 | D61523    | Hs.283435 | ESTs                                     | 10.5 |
|    | 420602 | AF060877  | Hs.99236  | regulator of G-protein signalling 20     | 10.3 |
|    | 435793 | AB037734  | Hs.4993   | KIAA1313 protein                         | 10.3 |
| 60 | 409049 | AI423132  | Hs.146343 | ESTs                                     | 10.2 |
|    | 449611 | AI970394  | Hs.197075 | ESTs                                     | 10.2 |
|    | 402604 |           |           | Target Exon                              | 10.1 |
|    | 434277 | X77748    | Hs.3786   | glutamate receptor, metabotropic 3       | 10.0 |
|    | 440435 | AL042201  | Hs.21273  | transcription factor NYD-sp10            | 10.0 |
| 65 | 438080 | AA777381  | Hs.291530 | ESTs, Weakly similar to ALUC_HUMAN !!!   | 10.0 |
|    | 419271 | N34901    | Hs.238532 | ESTs                                     | 9.9  |
|    | 426344 | H41821    | Hs.322469 | transcriptional activator of the c-fos p | 9.8  |
|    | 449605 | AW138581  | Hs.198416 | ESTs                                     | 9.8  |
|    | 408081 | AW451597  | Hs.167409 | ESTs                                     | 9.8  |
| 70 | 452526 | W38537    | Hs.280740 | hypothetical protein MGC3040             | 9.8  |
|    | 411305 | BE241596  | Hs.69547  | myelin basic protein                     | 9.8  |
|    | 443455 | AB001025  | Hs.9349   | ryanodine receptor 3                     | 9.8  |
|    | 427540 | R12014    | Hs.20976  | ESTs                                     | 9.7  |
|    | 424790 | AL119344  | Hs.13326  | ESTs, Weakly similar to 2004399A chromos | 9.7  |
| 75 | 416892 | L24498    | Hs.80409  | growth arrest and DNA-damage-inducible,  | 9.6  |
|    | 452461 | N78223    | Hs.108106 | transcription factor                     | 9.6  |
|    | 449433 | AI672096  | Hs.9012   | ESTs, Weakly similar to S26650 DNA-bindi | 9.6  |
|    | 454027 | R40192    | Hs.21527  | Human DNA sequence from clone GS1-115M3  | 9.5  |
|    | 439199 | R40373    | Hs.26299  | ESTs                                     | 9.5  |
| 80 | 433896 | AW294729  | Hs.274461 | ESTs                                     | 9.3  |
|    | 416072 | AL110370  | Hs.79000  | growth associated protein 43             | 9.3  |
|    | 444119 | R41231    | Hs.184261 | ESTs, Weakly similar to T26686 hypotheri | 9.2  |
|    | 435624 | AF218942  | Hs.24889  | fornin 2                                 | 9.2  |
|    | 412788 | AA120960  | Hs.198416 | ESTs                                     | 9.2  |

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|----|--------|-----------|-----------|--|-----|
|    | 409902 | AI337658  | Hs.156351 | ESTs                                     | 9.2 |
|    | 427304 | AA761526  | Hs.163853 | ESTs                                     | 9.2 |
|    | 429918 | AW873986  | Hs.119383 | ESTs                                     | 9.1 |
| 5  | 442910 | AI365130  | Hs.11307  | ESTs, Weakly similar to T19326 hypotheti | 9.1 |
|    | 425187 | AW014486  | Hs.22509  | ESTs                                     | 9.1 |
|    | 436954 | AA740151  | Hs.130425 | ESTs                                     | 9.1 |
|    | 442710 | AI015631  | Hs.23210  | ESTs                                     | 9.1 |
|    | 411078 | AI222020  | Hs.182364 | CocoaCrisp                               | 9.0 |
| 10 | 438209 | AL120659  | Hs.6111   | aryl-hydrocarbon receptor nuclear transl | 9.0 |
|    | 437036 | AI571514  | Hs.133022 | ESTs                                     | 9.0 |
|    | 448672 | AI955511  | Hs.225106 | ESTs                                     | 9.0 |
|    | 451952 | AL120173  | Hs.301663 | ESTs                                     | 8.9 |
|    | 448743 | AB032962  | Hs.21896  | KIAA1136 protein                         | 8.9 |
|    | 412068 | S72043    | Hs.73133  | metallothionein 3 (growth inhibitory fac | 8.9 |
| 15 | 439451 | AF086270  | Hs.278554 | heterochromatin-like protein 1           | 8.8 |
|    | 419088 | AI538323  | Hs.52620  | integrin, beta 8                         | 8.8 |
|    | 445873 | AA250970  | Hs.251946 | poly(A)-binding protein, cytoplasmic 1-l | 8.8 |
|    | 410102 | AW248508  | Hs.279727 | ESTs; homologue of PEM-3 [Ciona savignyi | 8.8 |
|    | 449571 | AW016812  | Hs.200266 | ESTs                                     | 8.7 |
| 20 | 425354 | U62027    | Hs.155935 | complement component 3a receptor 1       | 8.7 |
|    | 452355 | N54926    | Hs.29202  | G protein-coupled receptor 34            | 8.7 |
|    | 410276 | AI554545  | Hs.68301  | angiotensin-2                            | 8.7 |
|    | 435501 | AW051819  | Hs.129908 | KIAA0591 protein                         | 8.6 |
|    | 407728 | AW071502  | Hs.175931 | ESTs                                     | 8.6 |
| 25 | 415293 | R49462    | Hs.106541 | ESTs                                     | 8.6 |
|    | 416857 | AA188775  | Hs.292453 | ESTs                                     | 8.6 |
|    | 425234 | AW152225  | Hs.165909 | ESTs, Weakly similar to I38022 hypotheti | 8.5 |
|    | 450375 | AA009647  |           | a disintegrin and metalloproteinase doma | 8.5 |
| 30 | 413063 | AL035737  | Hs.75184  | chitinase 3-like 1 (cartilage glycoprote | 8.4 |
|    | 438380 | T06430    | Hs.6194   | chondroitin sulfate proteoglycan BEHAB/b | 8.4 |
|    | 421659 | NM_014459 | Hs.106511 | protocadherin 17                         | 8.4 |
|    | 418097 | R45137    | Hs.21868  | ESTs                                     | 8.3 |
|    | 429183 | AB014604  | Hs.197955 | KIAA0704 protein                         | 8.2 |
| 35 | 424945 | AI221919  |           | hypothetical protein FLJ10582            | 8.2 |
|    | 455601 | AI368680  | Hs.816    | SRY (sex determining region Y)-box 2     | 8.2 |
|    | 453884 | AA355925  | Hs.36232  | KIAA0186 gene product                    | 8.2 |
|    | 407881 | AW072003  | Hs.40968  | heparan sulfate (glucosamine) 3-O-sulfot | 8.1 |
|    | 436887 | AW953157  | Hs.193235 | hypothetical protein DKFZp547D155        | 8.1 |
| 40 | 431721 | AB032996  | Hs.268044 | KIAA1170 protein                         | 8.1 |
|    | 417160 | N76497    | Hs.1787   | proteolipid protein 1 (Pelizaeus-Merzbac | 8.1 |
|    | 409041 | AB033025  | Hs.50081  | Hypothetical protein, XP_051860 (KIAA119 | 8.1 |
|    | 424085 | NM_002914 | Hs.139226 | replication factor C (activator 1) 2 (40 | 8.1 |
|    | 436039 | AW023323  | Hs.121070 | ESTs                                     | 8.0 |
| 45 | 449444 | AW818436  | Hs.23590  | solute carrier family 16 (monocarboxylic | 8.0 |
|    | 427463 | AA442224  | Hs.97900  | ESTs                                     | 8.0 |
|    | 440184 | AB002297  | Hs.7022   | dedicator of cyto-kinesis 3              | 7.9 |
|    | 409731 | AA125985  | Hs.56145  | thymosin, beta, identified in neuroblast | 7.8 |
|    | 451621 | AI879148  | Hs.26770  | fatty acid binding protein 7, brain      | 7.7 |
| 50 | 419929 | U90268    | Hs.93810  | cerebral cavernous malformations 1       | 7.7 |
|    | 419544 | AI909154  |           | gb:QV-BT200-010499-007 BT200 Homo sapien | 7.7 |
|    | 448555 | AI536697  | Hs.159863 | ESTs                                     | 7.7 |
|    | 414372 | AA143654  |           | gb:zo65a02.r1 Stratagene pancreas (93720 | 7.7 |
|    | 438527 | AI969251  | Hs.115325 | RAB7, member RAS oncogene family-like 1  | 7.7 |
| 55 | 400293 | N51002    | Hs.306480 | Homo sapiens mRNA; cDNA DKFZp761E2112 (I | 7.7 |
|    | 420362 | U79734    | Hs.97206  | huntingtin interacting protein 1         | 7.6 |
|    | 430132 | AA204686  | Hs.234149 | hypothetical protein FLJ20647            | 7.5 |
|    | 448543 | AW897741  | Hs.21380  | Homo sapiens mRNA; cDNA DKFZp586P1124 (I | 7.5 |
|    | 436140 | W87355    | Hs.269587 | ESTs                                     | 7.4 |
| 60 | 449340 | AW235786  | Hs.195359 | hypothetical protein MGC10954            | 7.4 |
|    | 446372 | AB020644  | Hs.14945  | long fatty acyl-CoA synthetase 2 gene    | 7.4 |
|    | 454117 | BE410100  | Hs.40368  | adaptor-related protein complex 1, sigma | 7.4 |
|    | 410434 | AF051152  | Hs.63668  | toll-like receptor 2                     | 7.4 |
|    | 454048 | H05626    | Hs.6921   | ESTs                                     | 7.4 |
| 65 | 441523 | AW514263  | Hs.301771 | ESTs, Weakly similar to ALUF_HUMAN !!!!  | 7.4 |
|    | 440074 | AA863045  | Hs.10669  | ESTs, Weakly similar to T00050 hypotheti | 7.4 |
|    | 438330 | AW450572  | Hs.257316 | ESTs                                     | 7.4 |
|    | 433556 | W56321    | Hs.111460 | calcium/calmodulin-dependent protein kin | 7.3 |
|    | 434808 | AF155108  | Hs.256150 | Homo sapiens, Similar to RIKEN cDNA 2810 | 7.3 |
| 70 | 445900 | AF070526  | Hs.125036 | Homo sapiens clone 24787 mRNA sequence   | 7.3 |
|    | 402855 |           |           | NM_001839: Homo sapiens calponin 3, acid | 7.2 |
|    | 422960 | AW890487  | Hs.63984  | cadherin 13, H-cadherin (heart)          | 7.2 |
|    | 439772 | AL365406  | Hs.10268  | Homo sapiens mRNA full length insert cDN | 7.2 |
|    | 433447 | U29195    | Hs.3281   | neuronal pentraxin II                    | 7.2 |
|    | 412709 | AL022327  | Hs.74518  | KIAA0027 protein                         | 7.2 |
| 75 | 445745 | AB007924  | Hs.13245  | KIAA0455 gene product                    | 7.2 |
|    | 447101 | N72185    | Hs.44189  | ESTs                                     | 7.2 |
|    | 448935 | AL078596  | Hs.22591  | nuclear receptor subfamily 2, group E, m | 7.1 |
|    | 409248 | AB033035  | Hs.51965  | KIAA1209 protein                         | 7.1 |
|    | 452785 | AL359942  | Hs.296434 | erythroid differentiation and denucleati | 7.1 |
| 80 | 424998 | U58515    | Hs.154138 | chitinase 3-like 2                       | 7.1 |
|    | 436607 | AW661783  | Hs.211061 | ESTs                                     | 7.1 |
|    | 447197 | R36075    |           | gb:yh88b01.s1 Soares placenta Nb2HP Homo | 7.1 |
|    | 419249 | X14767    | Hs.89768  | gamma-aminobutyric acid (GABA) A recepto | 7.1 |



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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
|    | 416111 | AA033813  | Hs.79018  | chromatin assembly factor 1, subunit A ( | 7.1 |
|    | 421633 | AF121860  | Hs.106260 | sorting nexin 10                         | 7.0 |
|    | 428976 | AL037824  | Hs.194695 | ras homolog gene family, member 1        | 7.0 |
| 5  | 444783 | AK001468  | Hs.62180  | anillin (Drosophila Scraps homolog), act | 7.0 |
|    | 408096 | BE250162  | Hs.83765  | dihydrofolate reductase                  | 7.0 |
|    | 426269 | H15302    | Hs.168950 | Homo sapiens mRNA; cDNA DKFZp566A1046 (f | 6.9 |
|    | 439978 | BE139460  | Hs.124673 | Homo sapiens cDNA FLJ11477 fis, clone HE | 6.9 |
|    | 439570 | T79925    | Hs.269165 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 6.9 |
| 10 | 422980 | N46569    | Hs.76722  | CCAAT/enhancer binding protein (C/EBP),  | 6.9 |
|    | 415279 | F04237    | Hs.1447   | glial fibrillary acidic protein          | 6.9 |
|    | 456965 | AW131888  | Hs.172792 | ESTs, Weakly similar to hypothetical pro | 6.9 |
|    | 447773 | AI423930  | Hs.36790  | ESTs, Weakly similar to putative p150 [H | 6.9 |
|    | 429927 | NM_001115 | Hs.2522   | adenylate cyclase 8 (brain)              | 6.9 |
| 15 | 447499 | AW262580  | Hs.147674 | protocadherin beta 16                    | 6.8 |
|    | 414696 | AF002020  | Hs.76918  | Niemann-Pick disease, type C1            | 6.8 |
|    | 441255 | R06350    | Hs.171635 | ESTs                                     | 6.8 |
|    | 429656 | X05608    | Hs.211584 | neurofilament, light polypeptide (68kD)  | 6.8 |
|    | 439566 | AF086387  |           | gb:Homo sapiens full length insert cDNA  | 6.8 |
| 20 | 435191 | R15912    | Hs.4817   | Homo sapiens clone 24461 mRNA sequence   | 6.8 |
|    | 420285 | AA258124  | Hs.293878 | ESTs, Moderately similar to ZN91_HUMAN Z | 6.8 |
|    | 430968 | AW972830  |           | gb:EST384925 MAGE resequences, MAGL Homo | 6.8 |
|    | 458332 | AI000341  | Hs.220491 | ESTs                                     | 6.8 |
|    | 449048 | Z45051    | Hs.22920  | similar to S68401 (cattle) glucose induc | 6.7 |
| 25 | 413627 | BE182082  | Hs.246973 | ESTs                                     | 6.7 |
|    | 415079 | R43179    | Hs.22895  | hypothetical protein FLJ23548            | 6.7 |
|    | 418677 | S83308    | Hs.87224  | SRY (sex determining region Y)-box 5     | 6.7 |
|    | 432281 | AK001239  | Hs.274263 | hypothetical protein FLJ10377            | 6.7 |
|    | 425741 | AF052152  | Hs.159412 | Homo sapiens clone 24628 mRNA sequence   | 6.7 |
| 30 | 421141 | AW117261  | Hs.125914 | ESTs                                     | 6.6 |
|    | 408829 | NM_006042 | Hs.48384  | heparan sulfate (glucosamine) 3-O-sulfol | 6.6 |
|    | 432154 | AI701523  | Hs.112577 | ESTs                                     | 6.6 |
|    | 425202 | AW962282  | Hs.152049 | ESTs, Weakly similar to I38022 hypotheti | 6.6 |
|    | 434164 | AW207019  | Hs.148135 | serine/threonine kinase 33               | 6.6 |
| 35 | 407182 | AA312551  | Hs.230157 | ESTs                                     | 6.6 |
|    | 445034 | AW293376  | Hs.143659 | ESTs                                     | 6.6 |
|    | 410909 | AW898161  | Hs.53112  | ESTs, Moderately similar to ALU8_HUMAN A | 6.6 |
|    | 441102 | AA973905  |           | intermediate filament protein syncollin  | 6.6 |
|    | 452834 | AI638627  | Hs.105685 | KIAA1688 protein                         | 6.6 |
| 40 | 429239 | AA448419  | Hs.45209  | ESTs                                     | 6.6 |
|    | 414175 | AI308876  | Hs.103849 | hypothetical protein DKFZp761D112        | 6.5 |
|    | 449300 | AI656959  | Hs.346514 | ESTs                                     | 6.5 |
|    | 446727 | AB011095  | Hs.16032  | KIAA0523 protein                         | 6.5 |
|    | 429250 | H56585    | Hs.198308 | tryptophan rich basic protein            | 6.5 |
| 45 | 420560 | AW207748  | Hs.59115  | ESTs                                     | 6.5 |
|    | 448321 | NM_005883 | Hs.20912  | adenomatous polyposis coli like          | 6.5 |
|    | 441390 | AI692560  | Hs.131175 | ESTs                                     | 6.5 |
|    | 407168 | R45175    | Hs.117183 | ESTs                                     | 6.4 |
|    | 447414 | D82343    | Hs.74376  | neuroblastoma (nerve tissue) protein     | 6.4 |
| 50 | 407235 | D20569    | Hs.169407 | SAC2 (suppressor of actin mutations 2, y | 6.4 |
|    | 433597 | AA708205  | Hs.100343 | ESTs                                     | 6.4 |
|    | 414528 | AA148950  | Hs.188836 | ESTs                                     | 6.4 |
|    | 414214 | D49958    | Hs.75819  | glycoprotein M6A                         | 6.4 |
|    | 445692 | Z44514    |           | Homo sapiens mRNA for KIAA1763 protein,  | 6.4 |
| 55 | 407895 | D76435    | Hs.41154  | Zic family member 1 (odd-paired Drosophi | 6.4 |
|    | 440152 | AB002376  | Hs.7006   | KIAA0378 protein                         | 6.4 |
|    | 453785 | AI368236  | Hs.283732 | ESTs, Moderately similar to ALU1_HUMAN A | 6.3 |
|    | 412530 | AA766268  | Hs.266273 | hypothetical protein FLJ13346            | 6.3 |
|    | 448902 | Z45998    | Hs.22543  | Homo sapiens mRNA; cDNA DKFZp76111912 (f | 6.3 |
| 60 | 452799 | AI948829  | Hs.213786 | ESTs                                     | 6.3 |
|    | 425523 | AB007948  | Hs.158244 | KIAA0479 protein                         | 6.3 |
|    | 444396 | T65213    | Hs.4257   | ESTs                                     | 6.3 |
|    | 422094 | AF129535  | Hs.272027 | F-box only protein 5                     | 6.3 |
|    | 420649 | AI866964  | Hs.124704 | ESTs, Moderately similar to S65657 alpha | 6.3 |
| 65 | 424028 | AF055084  | Hs.153692 | Homo sapiens cDNA FLJ14354 fis, clone Y7 | 6.3 |
|    | 447350 | AI375572  | Hs.172634 | ESTs                                     | 6.2 |
|    | 448148 | NM_016578 | Hs.20509  | HBV pX associated protein-8              | 6.2 |
|    | 436936 | AL134451  | Hs.197478 | ESTs                                     | 6.2 |
|    | 448243 | AW369771  | Hs.52620  | integrin, beta 8                         | 6.2 |
| 70 | 414727 | BE466904  | Hs.190162 | gb:hz28f03.x1 NCL_CGAP_GC6 Homo sapiens  | 6.2 |
|    | 420608 | BE548277  | Hs.103104 | ESTs                                     | 6.2 |
|    | 422949 | AA319435  |           | gb:EST21657 Adrenal gland tumor Homo sap | 6.2 |
|    | 418506 | AA084248  | Hs.85339  | G protein-coupled receptor 39            | 6.1 |
|    | 428242 | H55709    | Hs.2250   | leukemia inhibitory factor (cholinergic  | 6.1 |
| 75 | 423361 | AW170055  | Hs.47628  | ESTs                                     | 6.1 |
|    | 417417 | F05745    | Hs.89512  | ATPase, Ca transporting, plasma membrane | 6.1 |
|    | 447072 | D61594    | Hs.17279  | tyrosylprotein sulfotransferase 1        | 6.1 |
|    | 415651 | AI207162  | Hs.3815   | stathmin-like-protein RB3                | 6.0 |
| 80 | 418030 | BE207573  | Hs.83321  | neuromedin B                             | 6.0 |
|    | 429469 | M64590    | Hs.27     | glycine dehydrogenase (decarboxylating;  | 6.0 |
|    | 417873 | BE266659  | Hs.293659 | Homo sapiens, Similar to RIKEN cDNA A430 | 6.0 |
|    | 429900 | AA460421  | Hs.30875  | ESTs                                     | 6.0 |
|    | 416439 | AA180363  | Hs.118769 | ESTs                                     | 6.0 |
|    | 439845 | AL355743  | Hs.56663  | Homo sapiens EST from clone 41214, full  | 6.0 |

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|----|--------|-----------|-----------|---|-----|
|    | 425905 | AB032959  | Hs.318584 | novel C3HC4 type Zinc finger (ring finger)      | 6.0 |
|    | 439518 | W76326    |           | gb:zd60d04.r1 Soares_fetal_heart_NbHH19W        | 6.0 |
|    | 426919 | AL041228  |           | ELAV (embryonic lethal, abnormal vision,        | 6.0 |
| 5  | 440492 | R39127    | Hs.21433  | hypothetical protein DKFZp547J036               | 5.9 |
|    | 432328 | AI572739  | Hs.195471 | 6-phosphofructo-2-kinase/fructose-2,6-bi        | 5.9 |
|    | 444190 | AI878918  | Hs.10526  | cysteine and glycine-rich protein 2             | 5.9 |
|    | 425984 | AW836277  | Hs.165636 | hypothetical protein DKFZp761C07121             | 5.9 |
|    | 425977 | R15138    | Hs.165570 | Homo sapiens clone 25052 mRNA sequence          | 5.9 |
| 10 | 449318 | AW236021  | Hs.78531  | Homo sapiens, Similar to RIKEN cDNA 5730        | 5.9 |
|    | 457465 | AW301344  | Hs.122908 | DNA replication factor                          | 5.9 |
|    | 453362 | H14988    | Hs.107375 | ESTs  | 5.9 |
|    | 453924 | R49295    | Hs.24886  | ESTs  | 5.9 |
|    | 414825 | X06370    | Hs.77432  | epidermal growth factor receptor (avian         | 5.8 |
| 15 | 433701 | AW445023  | Hs.15155  | ESTs  | 5.8 |
|    | 412777 | AI335773  | Hs.270123 | ESTs  | 5.8 |
|    | 419723 | AL120193  | Hs.335810 | longevity assurance (LAG1, <i>S. cerevisiae</i> | 5.8 |
|    | 438054 | AA776626  | Hs.169309 | ESTs  | 5.8 |
|    | 416427 | BE244050  | Hs.79307  | Rac/Cdc42 guanine exchange factor (GEF)         | 5.8 |
| 20 | 400292 | AA250737  | Hs.72472  | BMP-R1B   | 5.8 |
|    | 407748 | AL079409  | Hs.38176  | KIAA0606 protein; SCN Circadian Oscillat        | 5.8 |
|    | 453313 | BE005771  | Hs.153746 | hypothetical protein FLJ22490                   | 5.8 |
|    | 430188 | AL049242  | Hs.234794 | Homo sapiens mRNA; cDNA DKFZp564B083 (fr        | 5.8 |
|    | 411252 | AB018549  | Hs.69328  | MD-2 protein                                    | 5.8 |
| 25 | 448986 | H42169    | Hs.347310 | hypothetical protein FLJ14627                   | 5.7 |
|    | 440052 | AI633744  | Hs.195648 | ESTs, Weakly similar to I38022 hypothe          | 5.7 |
|    | 419704 | AA429104  | Hs.45057  | ESTs  | 5.7 |
|    | 420077 | AW512260  | Hs.87767  | ESTs  | 5.7 |
|    | 448966 | AW372914  | Hs.86149  | phosphoinositol 3-phosphate-binding prot        | 5.7 |
| 30 | 436511 | AA721252  | Hs.291502 | ESTs  | 5.7 |
|    | 424560 | AA158727  | Hs.150555 | protein predicted by clone 23733                | 5.7 |
|    | 423346 | AI267677  | Hs.127416 | synaptojanin 1                                  | 5.7 |
|    | 439249 | AF086060  | Hs.170053 | G-protein coupled receptor 88                   | 5.7 |
|    | 428588 | F12101    | Hs.185701 | Homo sapiens mRNA full length insert cDN        | 5.7 |
| 35 | 450927 | AI807804  | Hs.134342 | TASP for testis-specific adriamycin sens        | 5.7 |
|    | 451752 | AB032997  | Hs.26966  | KIAA1171 protein                                | 5.7 |
|    | 458814 | AI498957  | Hs.170861 | ESTs, Weakly similar to Z195_HUMAN ZINC         | 5.6 |
|    | 416406 | D86961    | Hs.79299  | lipoma HMGIC fusion partner-like 2              | 5.6 |
|    | 448275 | BE514434  | Hs.20830  | kinesin-like 2                                  | 5.6 |
| 40 | 413492 | D87470    | Hs.75400  | KIAA0280 protein                                | 5.6 |
|    | 444600 | R41398    | Hs.6996   | ESTs  | 5.6 |
|    | 421988 | AW450481  | Hs.161333 | ESTs  | 5.6 |
|    | 443297 | AI049864  | Hs.133029 | ESTs  | 5.6 |
|    | 433244 | AB040943  | Hs.271285 | KIAA1510 protein                                | 5.5 |
| 45 | 458809 | AW972512  | Hs.20985  | sin3-associated polypeptide, 30kD               | 5.5 |
|    | 448499 | BE613280  | Hs.77550  | hypothetical protein MGC1780                    | 5.5 |
|    | 447458 | AI741082  | Hs.158961 | ESTs  | 5.5 |
|    | 436643 | AA757626  | Hs.10941  | ESTs, Weakly similar to IPP1_HUMAN PROTE        | 5.5 |
|    | 407886 | AW969688  | Hs.100826 | ESTs  | 5.5 |
| 50 | 448944 | AB014605  | Hs.22599  | atrophin-1 interacting protein 1; activi        | 5.5 |
|    | 418630 | AI351311  | Hs.251946 | poly(A)-binding protein, cytoplasmic 1-I        | 5.5 |
|    | 415734 | NM_014747 | Hs.78748  | KIAA0237 gene product                           | 5.5 |
|    | 410099 | AA081630  |           | KIAA0036 gene product                           | 5.5 |
|    | 453128 | AW026516  | Hs.31791  | acylphosphatase 2, muscle type                  | 5.5 |
| 55 | 444670 | H58373    | Hs.332938 | hypothetical protein MGC5370                    | 5.5 |
|    | 420345 | AW295230  | Hs.25231  | ESTs  | 5.5 |
|    | 420092 | AA814043  | Hs.88045  | ESTs  | 5.5 |
|    | 414821 | M63835    | Hs.77424  | Fc fragment of IgG, high affinity Ia, re        | 5.4 |
|    | 429876 | AB028977  | Hs.225974 | KIAA1054 protein                                | 5.4 |
| 60 | 415863 | AW952691  | Hs.93485  | Homo sapiens mRNA; cDNA DKFZp761D191 (fr        | 5.4 |
|    | 429149 | AW193360  | Hs.197962 | ESTs, Weakly similar to I38022 hypothe          | 5.4 |
|    | 415486 | H12214    | Hs.13284  | ESTs, Weakly similar to 2109260A B cell         | 5.4 |
|    | 429643 | AA455889  | Hs.167279 | FYVE-finger-containing Rab5 effector pro        | 5.4 |
|    | 446657 | AI335191  | Hs.260702 | ESTs, Weakly similar to 2109260A B cell         | 5.4 |
| 65 | 439662 | H97552    | Hs.269060 | ESTs  | 5.4 |
|    | 444165 | AL137443  | Hs.10441  | hypothetical protein FLJ11236                   | 5.4 |
|    | 439192 | AW970536  | Hs.105413 | ESTs  | 5.3 |
|    | 448769 | N66037    | Hs.38173  | ESTs  | 5.3 |
|    | 410555 | U92649    | Hs.64311  | a disintegrin and metalloproteinase doma        | 5.3 |
| 70 | 424922 | BE386547  | Hs.217112 | hypothetical protein MGC10825                   | 5.3 |
|    | 423905 | AW579960  | Hs.135150 | lung type-I cell membrane-associated gly        | 5.3 |
|    | 429433 | AA452899  | Hs.213586 | ESTs, Weakly similar to KIAA1353 protein        | 5.3 |
|    | 427359 | AW020782  | Hs.79881  | Homo sapiens cDNA: KIAA23005 fis, clone L       | 5.3 |
|    | 422544 | AB018259  | Hs.118140 | KIAA0716 gene product                           | 5.3 |
| 75 | 420547 | AF155140  | Hs.98738  | gonadotropin-regulated testicular RNA he        | 5.3 |
|    | 424624 | AB032947  | Hs.151301 | Ca2+-dependent activator protein for secr       | 5.2 |
|    | 441797 | AI936933  | Hs.214635 | ESTs  | 5.2 |
|    | 428832 | AA578229  | Hs.324239 | ESTs, Moderately similar to ZN91_HUMAN Z        | 5.2 |
|    | 418079 | R40058    | Hs.6911   | ESTs  | 5.2 |
| 80 | 445740 | T78281    | Hs.13226  | Homo sapiens clone 25181 mRNA sequence          | 5.2 |
|    | 416426 | AA180256  | Hs.210473 | Homo sapiens cDNA FLJ14872 fis, clone PL        | 5.2 |
|    | 436109 | AA922153  | Hs.132760 | hypothetical protein MGC15729                   | 5.2 |
|    | 433647 | AA603367  | Hs.222294 | ESTs  | 5.2 |
|    | 452786 | R61362    | Hs.106642 | ESTs, Weakly similar to T09052 hypothe          | 5.1 |

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|    | 436443 | AW138211  | Hs.128746 | ESTs                                     | 5.1 |
|    | 408243 | Y00787    | Hs.624    | interleukin 8                            | 5.1 |
|    | 404819 |           |           | NM_002688*:Homo sapiens peanut (Drosophi | 5.1 |
| 5  | 424914 | AA348410  | Hs.119065 | ESTs                                     | 5.1 |
|    | 453331 | AI240665  |           | ESTs                                     | 5.1 |
|    | 444656 | AI277924  | Hs.145199 | ESTs                                     | 5.1 |
|    | 437387 | AI198874  | Hs.28847  | AD026 protein                            | 5.1 |
|    | 421027 | AA761198  | Hs.55254  | ESTs                                     | 5.1 |
| 10 | 410631 | AA086469  | Hs.47171  | ESTs                                     | 5.1 |
|    | 454293 | H49739    | Hs.134013 | ESTs, Moderately similar to HK61_HUMAN H | 5.1 |
|    | 416220 | N49776    | Hs.170994 | hypothetical protein MGC10946            | 5.1 |
|    | 419498 | AL036591  | Hs.20887  | hypothetical protein FLJ10392            | 5.1 |
|    | 421040 | AA715026  | Hs.135280 | ESTs                                     | 5.1 |
| 15 | 415170 | R44386    | Hs.164578 | ESTs                                     | 5.1 |
|    | 412590 | AL134388  | Hs.135033 | ESTs, Weakly similar to I38022 hypotheti | 5.1 |
|    | 448985 | AA324885  | Hs.22777  | carbonic anhydrase XI                    | 5.0 |
|    | 433929 | AI375499  | Hs.27379  | ESTs                                     | 5.0 |
|    | 409638 | AW450420  | Hs.21335  | ESTs                                     | 5.0 |
| 20 | 437916 | BE566249  | Hs.20999  | hypothetical protein FLJ23142            | 5.0 |
|    | 400533 |           |           | ENSP00000209376*:PRED65 protein (Fragmen | 5.0 |
|    | 430130 | AL137311  | Hs.234074 | Homo sapiens mRNA; cDNA DKFZp761G02121 ( | 5.0 |
|    | 437372 | AA323968  | Hs.283631 | hypothetical protein DKFZp547G183        | 5.0 |
|    | 414737 | AI160386  | Hs.125087 | ESTs                                     | 5.0 |
| 25 | 422864 | AA318323  | Hs.12827  | gb:EST20390 Retina II Homo sapiens cDNA  | 5.0 |
|    | 428878 | AA436884  | Hs.48926  | ESTs                                     | 5.0 |
|    | 428841 | AI418430  | Hs.104935 | ESTs                                     | 5.0 |
|    | 428110 | AI312485  | Hs.138294 | ESTs, Moderately similar to Z195_HUMAN Z | 5.0 |
|    | 444170 | AW613879  | Hs.102408 | ESTs                                     | 4.9 |
| 30 | 448765 | R15337    | Hs.21958  | Homo sapiens mRNA; cDNA DKFZp547D086 (fr | 4.9 |
|    | 452106 | AI141031  | Hs.21342  | ESTs                                     | 4.9 |
|    | 417404 | NM_007350 | Hs.82101  | pleckstrin homology-like domain, family  | 4.9 |
|    | 414300 | AI304870  | Hs.188680 | ESTs                                     | 4.9 |
|    | 429399 | AA452244  | Hs.16727  | ESTs                                     | 4.9 |
| 35 | 439726 | AW449893  | Hs.293707 | ESTs, Weakly similar to I38598 zinc fing | 4.9 |
|    | 428873 | AI701609  | Hs.98908  | ESTs                                     | 4.9 |
|    | 451516 | AI800515  | Hs.12024  | ESTs                                     | 4.9 |
|    | 407792 | AI077715  | Hs.39384  | putative secreted ligand homologous to f | 4.9 |
|    | 415836 | D54745    | Hs.80247  | cholecystokinin                          | 4.9 |
| 40 | 447247 | AW369351  | Hs.287955 | Homo sapiens cDNA FLJ13090 fis, clone NT | 4.9 |
|    | 436805 | AA731533  | Hs.270751 | ESTs                                     | 4.9 |
|    | 423175 | W27595    | Hs.347310 | hypothetical protein FLJ14627            | 4.9 |
|    | 415402 | AA164687  | Hs.177576 | mannosyl (alpha-1,3-)-glycoprotein beta- | 4.9 |
|    | 422263 | AA307639  | Hs.129908 | KIAA0591 protein                         | 4.8 |
| 45 | 443715 | AI583187  | Hs.9700   | cyclin E1                                | 4.8 |
|    | 413248 | T64858    | Hs.21433  | hypothetical protein DKFZp547J036        | 4.8 |
|    | 434811 | AW971205  | Hs.114280 | ESTs                                     | 4.8 |
|    | 441287 | AW293132  | Hs.131373 | ESTs                                     | 4.8 |
|    | 428862 | NM_000346 | Hs.2316   | SRY (sex determining region Y)-box 9 (ca | 4.8 |
| 50 | 413834 | BE296896  | Hs.224179 | ESTs, Weakly similar to I38022 hypotheti | 4.8 |
|    | 443740 | R56434    | Hs.21062  | ESTs                                     | 4.8 |
|    | 416871 | H98716    |           | gb:yx13d08.s1 Soares melanocyte 2NbHM Ho | 4.8 |
|    | 441916 | AA993571  | Hs.129075 | ESTs                                     | 4.8 |
|    | 413530 | AA130158  | Hs.19977  | ESTs, Moderately similar to ALU8_HUMAN A | 4.8 |
| 55 | 424240 | AB023185  | Hs.143535 | calcium/calmodulin-dependent protein kin | 4.8 |
|    | 414998 | NM_002543 | Hs.77729  | oxidised low density lipoprotein (lectin | 4.8 |
|    | 448425 | AI500359  | Hs.346112 | ESTs                                     | 4.8 |
|    | 423600 | AI633559  | Hs.310359 | ESTs                                     | 4.8 |
|    | 424687 | J05070    | Hs.151738 | matrix metalloproteinase 9 (gelatinase B | 4.8 |
| 60 | 423869 | BE409301  | Hs.134012 | C1q-related factor                       | 4.8 |
|    | 425402 | AI215881  | Hs.24970  | ESTs, Weakly similar to B34323 GTP-bind  | 4.7 |
|    | 422809 | AK001379  | Hs.121028 | hypothetical protein FLJ10549            | 4.7 |
|    | 407808 | AA663559  | Hs.279789 | histone deacetylase 3                    | 4.7 |
|    | 428748 | AW593206  | Hs.98785  | Ksp37 protein                            | 4.7 |
| 65 | 434859 | BE255080  | Hs.299315 | collapsin response mediator protein-5; C | 4.7 |
|    | 431820 | AW410408  | Hs.271167 | L-pipecolic acid oxidase                 | 4.7 |
|    | 409100 | H98216    | Hs.42245  | ESTs, Moderately similar to I38022 hypot | 4.7 |
|    | 420133 | AA426117  | Hs.155543 | ESTs                                     | 4.7 |
|    | 420297 | AI628272  | Hs.88323  | ESTs, Weakly similar to ALU1_HUMAN ALU S | 4.7 |
| 70 | 443462 | AI064690  | Hs.171176 | ESTs                                     | 4.7 |
|    | 424481 | R19453    | Hs.1787   | proteolipid protein 1 (Pelizaeus-Merzbac | 4.7 |
|    | 431454 | AW975980  | Hs.292918 | ESTs                                     | 4.7 |
|    | 432682 | AI376400  | Hs.159588 | ESTs                                     | 4.7 |
|    | 434933 | R91095    | Hs.4276   | KIAA1701 protein                         | 4.7 |
| 75 | 421247 | BE391727  | Hs.102910 | general transcription factor IIH, polype | 4.7 |
|    | 435538 | AB011540  | Hs.4930   | low density lipoprotein receptor-related | 4.7 |
|    | 441703 | AW390054  | Hs.192843 | leucine zipper protein FKSG14            | 4.7 |
|    | 418661 | NM_001949 | Hs.1189   | E2F transcription factor 3               | 4.7 |
|    | 412266 | N59006    | Hs.26133  | ESTs                                     | 4.7 |
| 80 | 417675 | AI808607  | Hs.3781   | similar to murine leucine-rich repeat pr | 4.6 |
|    | 422564 | AI148006  | Hs.222120 | ESTs                                     | 4.6 |
|    | 427250 | R35941    | Hs.25418  | ESTs                                     | 4.6 |
|    | 427695 | R88483    | Hs.172862 | ESTs                                     | 4.6 |
|    | 434269 | AK001991  | Hs.3781   | similar to murine leucine-rich repeat pr | 4.6 |

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| 5  | 407603 | AW955705  | Hs.62604  | Homo sapiens, clone IMAGE:4299322, mRNA, | 4.6 |
|    | 427687 | AW003867  | Hs.1570   | histamine receptor H1                    | 4.6 |
|    | 427194 | AA399018  | Hs.250835 | ESTs                                     | 4.6 |
|    | 440286 | U29589    | Hs.7138   | cholinergic receptor, muscarinic 3       | 4.6 |
|    | 427099 | AB032953  | Hs.173560 | odd Oz/ten-m homolog 2 (Drosophila, mous | 4.6 |
| 10 | 458760 | AI498631  | Hs.111334 | femtin, light polypeptide                | 4.6 |
|    | 433675 | AW977653  | Hs.75319  | ribonucleotide reductase M2 polypeptide  | 4.6 |
|    | 429170 | NM_001394 | Hs.2359   | dual specificity phosphatase 4           | 4.6 |
|    | 427712 | AI368024  | Hs.283696 | ESTs                                     | 4.6 |
|    | 437834 | AA769294  | Hs.283854 | gb:zn36g03.s1 NCI_CGAP_GC81 Homo sapiens | 4.6 |
| 15 | 408947 | AL080093  | Hs.49117  | Homo sapiens mRNA; cDNA DKFZp564N1662 (f | 4.6 |
|    | 424458 | M29273    | Hs.1780   | myelin associated glycoprotein           | 4.6 |
|    | 450568 | AL050078  | Hs.25159  | Homo sapiens cDNA FLJ10784 fis, clone NT | 4.6 |
|    | 424635 | AA420687  | Hs.115455 | Homo sapiens cDNA FLJ14259 fis, clone PL | 4.6 |
|    | 440491 | R35252    | Hs.130558 | ESTs, Weakly similar to 2109260A B cell  | 4.6 |
| 20 | 428409 | AW117207  | Hs.98523  | ESTs                                     | 4.5 |
|    | 423476 | AL035633  |           | Human DNA sequence from clone RP5-1046G1 | 4.5 |
|    | 421977 | W94197    | Hs.110165 | ribosomal protein L26 homolog            | 4.5 |
|    | 440105 | AA694010  | Hs.6932   | Homo sapiens clone 23809 mRNA sequence   | 4.5 |
|    | 422411 | AW749443  | Hs.22511  | ESTs                                     | 4.5 |
| 25 | 443361 | AI792528  | Hs.133273 | ESTs                                     | 4.5 |
|    | 453857 | AL080235  | Hs.35861  | DKFZP586E1621 protein                    | 4.5 |
|    | 408432 | AW195262  |           | gb:xn67b05.x1 NCI_CGAP_CML1 Homo sapiens | 4.5 |
|    | 444127 | N63620    | Hs.13281  | ESTs                                     | 4.5 |
|    | 417435 | NM_005181 | Hs.82129  | carbonic anhydrase III, muscle specific  | 4.5 |
| 30 | 422661 | NM_014700 | Hs.119004 | KIAA0665 gene product                    | 4.5 |
|    | 440684 | AI253123  | Hs.127356 | ESTs, Highly similar to S21424 nestin [H | 4.5 |
|    | 407385 | AA610150  | Hs.272072 | ESTs, Weakly similar to 138022 hypotheti | 4.5 |
|    | 425256 | BE297611  | Hs.155392 | collapsin response mediator protein 1    | 4.5 |
|    | 441364 | AW450466  | Hs.126830 | ESTs, Weakly similar to YD38_YEAST HYPOT | 4.5 |
| 35 | 430471 | AF064845  | Hs.241523 | hypothetical protein FLJ10142            | 4.5 |
|    | 412043 | BE156622  | Hs.333371 | Homo sapiens clone TA40 untranslated mRN | 4.5 |
|    | 426503 | AA380153  |           | gb:EST93093 Skin tumor I Homo sapiens cD | 4.5 |
|    | 418771 | AA807881  | Hs.25329  | ESTs                                     | 4.4 |
|    | 414706 | AW340125  | Hs.76989  | KIAA0097 gene product                    | 4.4 |
| 40 | 424800 | AL035588  | Hs.153203 | MyoD family inhibitor                    | 4.4 |
|    | 441217 | AI922183  | Hs.213246 | ESTs                                     | 4.4 |
|    | 422421 | AA325138  | Hs.235873 | hypothetical protein FLJ22672            | 4.4 |
|    | 446619 | AU076643  | Hs.313    | secreted phosphoprotein 1 (osteopontin,  | 4.4 |
|    | 444153 | AK001610  | Hs.10414  | hypothetical protein FLJ10748            | 4.4 |
| 45 | 435542 | AA687376  |           | ESTs                                     | 4.4 |
|    | 443912 | R37257    | Hs.184780 | ESTs                                     | 4.4 |
|    | 414922 | D00723    | Hs.77631  | glycine cleavage system protein H (amino | 4.4 |
|    | 432527 | AW975028  | Hs.102754 | ESTs                                     | 4.4 |
|    | 410082 | AA081594  | Hs.158311 | Musashi (Drosophila) homolog 1           | 4.4 |
| 50 | 446936 | H10207    | Hs.47314  | ESTs                                     | 4.4 |
|    | 425212 | AW962253  | Hs.171618 | ESTs                                     | 4.4 |
|    | 426925 | NM_001196 | Hs.315589 | Homo sapiens cDNA: FLJ22373 fis, clone H | 4.4 |
|    | 427221 | L15409    | Hs.174007 | von Hippel-Lindau syndrome               | 4.4 |
|    | 439274 | AF086092  | Hs.48372  | ESTs                                     | 4.4 |
| 55 | 412799 | AI267606  |           | gb:aq91h03.x1 Stanley Frontal SB pool 1  | 4.4 |
|    | 430676 | AF084866  |           | gb:Homo sapiens envelope protein RIC-3 ( | 4.4 |
|    | 405348 |           |           | C7001664:gil12698061[dbj BAB21849.1] (AB | 4.4 |
|    | 419412 | AW161058  | Hs.90297  | synuclein, beta                          | 4.3 |
|    | 447397 | BE247676  | Hs.18442  | E-1 enzyme                               | 4.3 |
| 60 | 409125 | R17268    | Hs.343567 | axonal transport of synaptic vesicles    | 4.3 |
|    | 433323 | AA805132  | Hs.159142 | ESTs                                     | 4.3 |
|    | 450530 | NM_006668 | Hs.25121  | cytochrome P450, subfamily 46 (cholester | 4.3 |
|    | 428227 | AA321649  | Hs.2248   | small inducible cytokine subfamily B (Cy | 4.3 |
|    | 408622 | AA056060  | Hs.202577 | Homo sapiens cDNA FLJ12166 fis, clone MA | 4.3 |
| 65 | 433610 | AA806822  | Hs.112547 | ESTs                                     | 4.3 |
|    | 429281 | AA830856  | Hs.29808  | Homo sapiens cDNA: FLJ21122 fis, clone C | 4.3 |
|    | 451320 | AW118072  |           | diacylglycerol kinase, zeta (104kD)      | 4.3 |
|    | 430979 | AI479755  | Hs.129010 | ESTs                                     | 4.3 |
|    | 452092 | BE245374  | Hs.27842  | hypothetical-protein FLJ11210            | 4.3 |
| 70 | 438456 | AA913381  | Hs.20594  | ESTs                                     | 4.3 |
|    | 433236 | NM_004296 | Hs.3221   | regulator of G-protein signalling 6      | 4.3 |
|    | 445133 | AW157646  | Hs.198689 | ESTs                                     | 4.3 |
|    | 412125 | Y17114    | Hs.73393  | eyes absent (Drosophila) homolog 4       | 4.2 |
|    | 432882 | NM_013257 | Hs.279696 | serum/glucocorticoid regulated kinase-ii | 4.2 |
| 75 | 407846 | AA426202  | Hs.40403  | Cbp/p300-interacting transactivator, wit | 4.2 |
|    | 417918 | AA209205  | Hs.163754 | hypothetical protein FLJ12606            | 4.2 |
|    | 424489 | T48851    | Hs.274470 | D-siglec precursor,                      | 4.2 |
|    | 453682 | T79703    |           | gb:yd71e08.r1 Soares fetal liver spleen  | 4.2 |
|    | 445568 | H00918    | Hs.268744 | ATPase, Na? transporting, beta 2 polypep | 4.2 |
| 80 | 448526 | AB028946  | Hs.21361  | KIAA1023 protein                         | 4.2 |
|    | 426457 | AW894667  | Hs.169965 | chimerin (chimaerin) 1                   | 4.2 |
|    | 415796 | R87548    | Hs.78854  | ATPase, Na? transporting, beta 2 polypep | 4.2 |
|    | 438875 | AA827640  | Hs.189059 | ESTs                                     | 4.2 |
|    | 428001 | H97428    | Hs.219907 | ESTs, Moderately similar to Transforming | 4.2 |
|    | 410361 | BE391804  | Hs.62661  | guanylate binding protein 1, interferon- | 4.2 |
|    | 445921 | AW015211  | Hs.146181 | ESTs                                     | 4.2 |
|    | 412190 | R16180    | Hs.274461 | ESTs                                     | 4.2 |

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|    | 445666 | R59960    | Hs.282386 | ESTs                                     | 4.2 |
|    | 439538 | AA837323  | Hs.56407  | ESTs                                     | 4.2 |
|    | 437814 | AI088192  | Hs.135474 | ESTs, Weakly similar to DDX9_HUMAN ATP-D | 4.2 |
| 5  | 410264 | AK001853  | Hs.61508  | Homo sapiens cDNA FLJ10991 fis, clone PL | 4.2 |
|    | 409091 | AW970386  | Hs.269423 | ESTs                                     | 4.2 |
|    | 459527 | AW977556  | Hs.291735 | ESTs, Weakly similar to I78885 serine/th | 4.2 |
|    | 426271 | AF026547  | Hs.169047 | chondroitin sulfate proteoglycan 3 (neur | 4.2 |
|    | 432731 | R31178    | Hs.287820 | fibronectin 1                            | 4.2 |
| 10 | 423135 | N67655    | Hs.26411  | ESTs                                     | 4.2 |
|    | 446131 | NM_000929 | Hs.290    | phospholipase A2, group V                | 4.2 |
|    | 424736 | AF230877  | Hs.152701 | microtubule-interacting protein that ass | 4.2 |
|    | 408298 | AI745325  | Hs.271923 | Homo sapiens cDNA: FLJ22785 fis, clone K | 4.2 |
|    | 452234 | AW084176  | Hs.223296 | ESTs, Weakly similar to I38022 hypotheti | 4.2 |
| 15 | 451468 | AW503398  | Hs.293663 | ESTs, Moderately similar to I38022 hypot | 4.2 |
|    | 429421 | AL031658  |           | Human DNA sequence from clone RP1-310O13 | 4.2 |
|    | 422374 | AW732869  | Hs.1519   | protein kinase, cAMP-dependent, regulato | 4.1 |
|    | 402145 |           |           | Target Exon                              | 4.1 |
|    | 440483 | AI200836  | Hs.150386 | ESTs                                     | 4.1 |
| 20 | 425018 | BE245277  | Hs.154196 | E4F transcription factor 1               | 4.1 |
|    | 448048 | BE281291  | Hs.170408 | ESTs, Moderately similar to A47582 B-cel | 4.1 |
|    | 445868 | BE169357  | Hs.207428 | ESTs                                     | 4.1 |
|    | 431725 | X65724    | Hs.2839   | Norie disease (pseudoglioma)             | 4.1 |
|    | 435575 | AF213457  | Hs.44234  | triggering receptor expressed on myeloid | 4.1 |
| 25 | 424726 | AK001007  | Hs.138760 | Homo sapiens cDNA FLJ10145 fis, clone HE | 4.1 |
|    | 450325 | AI935962  | Hs.26289  | ESTs                                     | 4.1 |
|    | 450639 | AI703186  | Hs.277174 | ESTs                                     | 4.1 |
|    | 445102 | AW204610  | Hs.22270  | ESTs                                     | 4.1 |
|    | 416547 | H62914    | Hs.268946 | ESTs, Weakly similar to PC4259 ferritin  | 4.1 |
| 30 | 430387 | AW372884  | Hs.240770 | nuclear cap binding protein subunit 2, 2 | 4.1 |
|    | 408296 | AL117452  | Hs.44155  | DKFZP586G1517 protein                    | 4.1 |
|    | 439519 | AA837118  | Hs.118366 | ESTs                                     | 4.1 |
|    | 442326 | H92962    | Hs.124813 | hypothetical protein MGC14817            | 4.1 |
|    | 404150 |           |           | Target Exon                              | 4.1 |
| 35 | 420805 | L10333    | Hs.99947  | reticulon 1                              | 4.1 |
|    | 429125 | AA446854  | Hs.271004 | ESTs, Weakly similar to I38022 hypotheti | 4.1 |
|    | 427302 | AA400540  | Hs.135282 | Homo sapiens cDNA FLJ11554 fis, clone HE | 4.1 |
|    | 444534 | AW271626  | Hs.42294  | ESTs                                     | 4.1 |
|    | 437414 | AW894071  | Hs.48448  | hypothetical protein DKFZp547C176        | 4.1 |
| 40 | 418512 | AW498974  |           | diacylglycerol kinase, zeta (104kD)      | 4.1 |
|    | 414217 | AI309298  | Hs.279898 | Homo sapiens cDNA: FLJ23165 fis, clone L | 4.1 |
|    | 449328 | AI962493  | Hs.345303 | ESTs                                     | 4.1 |
|    | 432683 | AW995441  | Hs.10475  | ESTs                                     | 4.1 |
|    | 435312 | AJ243396  | Hs.4865   | voltage-gated sodium channel beta-3 subu | 4.1 |
| 45 | 429163 | AA884766  |           | gb:am20a10.s1 Soares_NFL_T_GBC_S1 Homo s | 4.1 |
|    | 453096 | AW294631  | Hs.11325  | ESTs                                     | 4.1 |
|    | 414683 | S78296    | Hs.76888  | hypothetical protein MGC12702            | 4.0 |
|    | 433623 | H29882    |           | ESTs                                     | 4.0 |
|    | 422170 | AI791949  | Hs.112432 | anti-Mullerian hormone                   | 4.0 |
| 50 | 424120 | T80579    | Hs.290270 | ESTs                                     | 4.0 |
|    | 448548 | R13209    | Hs.21413  | solute carrier family 12, (potassium-chl | 4.0 |
|    | 433009 | AA761668  |           | gb:nz24c08.s1 NCI_CGAP_GCB1 Homo sapiens | 4.0 |
|    | 434834 | AF156774  | Hs.324020 | 1-acylglycerol-3-phosphate O-acyltranse  | 4.0 |
|    | 439099 | AB037800  | Hs.6462   | protein kinase C and casein kinase subst | 4.0 |
| 55 | 444001 | AI095087  | Hs.152299 | ESTs, Moderately similar to S65657 alpha | 4.0 |
|    | 413554 | AA319146  | Hs.75426  | secretogranin II (chromogranin C)        | 4.0 |
|    | 423279 | AW959861  | Hs.290943 | ESTs                                     | 4.0 |
|    | 457211 | AW972565  | Hs.32399  | ESTs, Weakly similar to S51797 vasodilat | 4.0 |
|    | 450581 | AF081513  | Hs.25195  | TGF-beta 4                               | 4.0 |
| 60 | 435854 | AJ278120  | Hs.4996   | putative ankyrin-repeat containing prote | 4.0 |
|    | 433615 | AA732982  | Hs.269607 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 4.0 |
|    | 424001 | W67883    | Hs.137476 | paternally expressed 10                  | 4.0 |
|    | 432058 | AW665996  | Hs.130729 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 4.0 |
|    | 423713 | AW754182  |           | gb:RC2-CT0321-131199-011-c01 CT0321 Homo | 4.0 |
| 65 | 419629 | AB020695  | Hs.91662  | KIAA0888 protein                         | 4.0 |
|    | 439108 | AW163034  | Hs.6467   | synaptogyrin 3                           | 4.0 |
|    | 440866 | AI703103  | Hs.271360 | hypothetical protein MGC16275            | 4.0 |
|    | 422887 | AI751848  | Hs.49215  | ESTs                                     | 4.0 |
|    | 405331 |           |           | NM_024560:Homo sapiens hypothetical prot | 4.0 |
| 70 | 457005 | AJ007421  | Hs.172597 | sal (Drosophila)-like 3                  | 4.0 |
|    | 437948 | AA772920  | Hs.303527 | ESTs                                     | 4.0 |
|    | 440471 | AA886146  | Hs.307944 | ESTs                                     | 4.0 |
|    | 432149 | AW614326  | Hs.133483 | ESTs, Weakly similar to T34549 probable  | 4.0 |
|    | 449655 | AI021987  | Hs.59970  | ESTs                                     | 4.0 |
| 75 | 448299 | AA497044  | Hs.20887  | hypothetical protein FLJ10392            | 4.0 |
|    | 435743 | T66861    | Hs.12962  | ESTs                                     | 4.0 |
|    | 412659 | AW753865  | Hs.74376  | olfactomedin related ER localized protei | 4.0 |
|    | 430694 | AA810624  | Hs.30936  | ESTs, Weakly similar to H2BH_HUMAN HISTO | 3.9 |
| 80 | 437807 | AI017875  | Hs.136829 | ESTs                                     | 3.9 |
|    | 440085 | BE270761  | Hs.23158  | ESTs                                     | 3.9 |
|    | 449722 | BE280074  | Hs.23960  | cydin B1                                 | 3.9 |
|    | 445523 | Z30118    | Hs.293788 | ESTs, Moderately similar to unnamed prot | 3.9 |
|    | 420948 | AB016898  | Hs.100469 | myeloid/lymphoid or mixed-lineage leukem | 3.9 |
|    | 407198 | H91679    |           | gb:yy04a07.s1 Soares fetal liver spleen  | 3.9 |

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|    | 447519 | U46258    | Hs.339665 | ESTs                                     | 3.9 |
|    | 429038 | AL023513  | Hs.194766 | seizure related gene 5 (mouse)-like      | 3.9 |
|    | 414761 | AU077228  | Hs.77256  | enhancer of zeste (Drosophila) homolog 2 | 3.9 |
| 5  | 404584 |           |           | Target Exon                              | 3.9 |
|    | 449670 | F07693    | Hs.85603  | Homo sapiens mRNA; cDNA DKFZp434K2172 (f | 3.9 |
|    | 414117 | W88559    | Hs.1787   | proteolipid protein 1 (Pelizaeus-Merzbac | 3.9 |
|    | 433290 | R20077    | Hs.302185 | Homo sapiens clone 23618 mRNA sequence   | 3.9 |
|    | 441707 | R42637    | Hs.21963  | hypothetical protein DKFZp761B0514       | 3.9 |
| 10 | 431789 | H19500    | Hs.269222 | mitogen-activated protein kinase 4       | 3.9 |
|    | 434149 | Z43829    | Hs.244624 | hypothetical protein MGC5469             | 3.9 |
|    | 446896 | T15767    | Hs.22452  | Homo sapiens mRNA for KIAA1737 protein,  | 3.9 |
|    | 411555 | AF113537  | Hs.70669  | HMP19 protein                            | 3.9 |
|    | 426646 | AA382787  | Hs.122713 | ESTs                                     | 3.9 |
| 15 | 450297 | AW901347  | Hs.38592  | hypothetical protein FLJ23342            | 3.9 |
|    | 429228 | AI553633  | Hs.326447 | ESTs                                     | 3.9 |
|    | 451433 | AA021140  | Hs.269265 | ESTs, Weakly similar to A46010 X-linked  | 3.9 |
|    | 447937 | AL109716  | Hs.20034  | Homo sapiens mRNA full length insert cDN | 3.9 |
|    | 436734 | AI937612  | Hs.273758 | hypothetical protein FLJ23112            | 3.9 |
| 20 | 417576 | AA339449  | Hs.82285  | phosphoribosylglycinamide formyltransfer | 3.9 |
|    | 417632 | R20855    | Hs.5422   | glycoprotein M6B                         | 3.9 |
|    | 414245 | BE148072  | Hs.75850  | WAS protein family, member 1             | 3.9 |
|    | 418203 | X54942    | Hs.83758  | CDC28 protein kinase 2                   | 3.9 |
|    | 453438 | AI469935  | Hs.22792  | ESTs                                     | 3.9 |
| 25 | 408449 | NM_004408 | Hs.166161 | dynamitin 1                              | 3.8 |
|    | 411048 | AK001742  | Hs.67991  | hypothetical protein DKFZp434G0522       | 3.8 |
|    | 445819 |           |           | NM_002578:Homo sapiens p21 (CDKN1A)-acti | 3.8 |
|    | 445255 | NM_014841 | Hs.12477  | synaptoosomal-associated protein, 91 kDa | 3.8 |
|    | 432715 | AA247152  | Hs.200483 | ESTs, Weakly similar to KIAA1074 protein | 3.8 |
| 30 | 457292 | AI921270  | Hs.281462 | hypothetical protein FLJ14251            | 3.8 |
|    | 432593 | AW301003  | Hs.51483  | ESTs, Weakly similar to hypothetical pro | 3.8 |
|    | 413589 | AW452631  | Hs.313803 | ESTs, Highly similar to AF157833 1 noncl | 3.8 |
|    | 426847 | S78723    | Hs.298623 | 5-hydroxytryptamine (serotonin) receptor | 3.8 |
|    | 410768 | AF038185  | Hs.66187  | Homo sapiens clone 23700 mRNA sequence   | 3.8 |
| 35 | 417791 | AW965339  | Hs.111471 | ESTs                                     | 3.8 |
|    | 454120 | AB032990  | Hs.40719  | hypothetical protein KIAA1164            | 3.8 |
|    | 425154 | NM_001851 | Hs.154850 | collagen, type IX, alpha 1               | 3.8 |
|    | 449145 | AI632122  | Hs.198408 | ESTs                                     | 3.8 |
|    | 446997 | AA383439  | Hs.16758  | Spir-1 protein                           | 3.8 |
| 40 | 407304 | AA565832  | Hs.271649 | gb:nj32b03.s1 NCI_CGAP_AA1 Homo sapiens  | 3.8 |
|    | 437269 | AA334384  | Hs.149420 | ESTs                                     | 3.8 |
|    | 443539 | AI076182  | Hs.134074 | ESTs, Moderately similar to ALU6_HUMAN A | 3.8 |
|    | 426855 | AL117427  | Hs.172778 | Homo sapiens mRNA; cDNA DKFZp566P013 (fr | 3.8 |
|    | 418821 | AA436002  | Hs.183161 | ESTs                                     | 3.8 |
| 45 | 408875 | NM_015434 | Hs.48604  | DKFZP434B168 protein                     | 3.8 |
|    | 422175 | N79885    | Hs.6382   | ESTs, Highly similar to T00391 hypotheti | 3.8 |
|    | 432488 | AA551010  | Hs.216640 | ESTs                                     | 3.8 |
|    | 450582 | AI339732  |           | G-rich RNA sequence binding factor 1     | 3.8 |
| 50 | 426380 | AI291267  | Hs.149990 | ESTs                                     | 3.8 |
|    | 451407 | AA131376  | Hs.343809 | fibroblast growth factor 12B             | 3.8 |
|    | 451778 | AI826131  | Hs.62954  | ESTs, Weakly similar to zinc finger prot | 3.8 |
|    | 425652 | AB021742  | Hs.322431 | neurogenic differentiation 2             | 3.8 |
|    | 412820 | BE001236  |           | gb:CM3-BN0075-240200-101-d11 BN0075 Homo | 3.8 |
|    | 412193 | AI684467  | Hs.144057 | ESTs                                     | 3.8 |
| 55 | 431117 | AF003522  | Hs.250500 | delta (Drosophila)-like 1                | 3.8 |
|    | 433042 | AW193534  | Hs.281895 | Homo sapiens cDNA FLJ11660 fis, clone HE | 3.8 |
|    | 437756 | AA767537  | Hs.197096 | ESTs                                     | 3.8 |
|    | 451367 | AA923729  | Hs.26322  | cell cycle related kinase                | 3.8 |
|    | 425390 | AI092634  | Hs.156114 | protein tyrosine phosphatase, non-recept | 3.8 |
| 60 | 445292 | AV653264  | Hs.13982  | Homo sapiens cDNA FLJ14666 fis, clone NT | 3.8 |
|    | 425843 | BE313280  | Hs.159627 | death associated protein 3               | 3.8 |
|    | 443301 | AI733614  | Hs.220587 | ESTs, Moderately similar to ALU5_HUMAN A | 3.7 |
|    | 440210 | AW674562  | Hs.125296 | ESTs                                     | 3.7 |
|    | 430287 | AW182459  | Hs.125759 | ESTs, Weakly similar to LEU5_HUMAN LEUKE | 3.7 |
| 65 | 437252 | AI433833  | Hs.164159 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 3.7 |
|    | 409327 | L41162    | Hs.53563  | collagen, type IX, alpha 3               | 3.7 |
|    | 429084 | AJ001443  | Hs.195614 | splicing factor 3b, subunit 3, 130kD     | 3.7 |
|    | 457183 | H91882    | Hs.118569 | Dvl-binding protein IDAX (inhibition of  | 3.7 |
|    | 403696 |           |           | C4001100*gi15852342[gb]AAD54015.1] (AF0  | 3.7 |
| 70 | 408670 | AF160967  | Hs.46784  | potassium large conductance calcium-acti | 3.7 |
|    | 416677 | T83470    | Hs.334840 | ESTs, Moderately similar to I78885 serin | 3.7 |
|    | 422253 | W81526    | Hs.118329 | ESTs, Moderately similar to GAD_HUMAN GA | 3.7 |
|    | 450154 | R15891    | Hs.281587 | Human (clone CTG-A4) mRNA sequence       | 3.7 |
|    | 408453 | AI369838  | Hs.45127  | chondroitin sulfate proteoglycan 5 (neur | 3.7 |
| 75 | 440553 | AA889416  | Hs.344043 | Homo sapiens cDNA FLJ14459 fis, clone HE | 3.7 |
|    | 428536 | AI143139  | Hs.2288   | visinin-like 1                           | 3.7 |
|    | 426413 | AA377823  |           | gb:EST90805 Synovial sarcoma Homo sapien | 3.7 |
|    | 409172 | Z99399    | Hs.122593 | ESTs                                     | 3.7 |
| 80 | 441627 | AA947552  | Hs.58086  | branched chain aminotransferase 1, cytos | 3.7 |
|    | 418216 | AA662240  | Hs.283099 | AF15q14 protein                          | 3.7 |
|    | 408790 | AW580227  | Hs.47860  | neurotrophic tyrosine kinase, receptor,  | 3.7 |
|    | 437449 | AL390153  | Hs.208339 | Homo sapiens mRNA; cDNA DKFZp762G113 (fr | 3.7 |
|    | 436035 | AA703679  | Hs.106999 | ESTs, Weakly similar to SYT5_HUMAN SYNAP | 3.7 |
|    | 451697 | AW449774  | Hs.296380 | POM (POM121 rat homolog) and ZP3 fusion  | 3.7 |

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|    | 436961 | AW375974  | Hs.156704 | ESTs                                     | 3.7 |
|    | 409953 | AA332277  | Hs.57691  | cadherin 18, type 2                      | 3.7 |
|    | 435832 | AA425688  | Hs.41641  | Bruno (Drosophila) -like 4, RNA binding  | 3.7 |
|    | 424343 | AW956360  | Hs.4748   | adenylate cyclase activating polypeptide | 3.6 |
| 5  | 437470 | AL390147  | Hs.134742 | hypothetical protein DKFZp547D065        | 3.6 |
|    | 440168 | AA868507  | Hs.126141 | ESTs                                     | 3.6 |
|    | 427624 | AA406245  | Hs.24895  | ESTs                                     | 3.6 |
|    | 418293 | AI224483  | Hs.16063  | hypothetical protein FLJ21877            | 3.6 |
| 10 | 445888 | AF070564  | Hs.13415  | Homo sapiens clone 24571 mRNA sequence   | 3.6 |
|    | 458912 | AI911066  |           | ESTs                                     | 3.6 |
|    | 419390 | AI701162  | Hs.90207  | hypothetical protein MGC11138            | 3.6 |
|    | 449256 | AA059050  | Hs.59847  | ESTs                                     | 3.6 |
|    | 425010 | T16837    | Hs.4241   | ESTs                                     | 3.6 |
| 15 | 412754 | AW160375  | Hs.74565  | amyloid beta (A4) precursor-like protein | 3.6 |
|    | 400777 |           |           | NM_007325*:Homo sapiens glutamate recept | 3.6 |
|    | 438831 | BE263273  | Hs.6439   | synapsin II                              | 3.6 |
|    | 419235 | AW470411  | Hs.288433 | neurotrimin                              | 3.6 |
|    | 424947 | R77952    |           | ESTs, Weakly similar to alternatively sp | 3.6 |
| 20 | 407624 | AW157431  | Hs.248941 | ESTs                                     | 3.6 |
|    | 440351 | AF030933  | Hs.7179   | RAD1 (S. pombe) homolog                  | 3.6 |
|    | 440404 | AI015881  | Hs.324527 | mitochondrial ribosomal protein S5       | 3.6 |
|    | 439267 | AA287747  | Hs.173012 | ESTs, Weakly similar to A46010 X-linked  | 3.6 |
|    | 424340 | AA339036  | Hs.7033   | ESTs                                     | 3.6 |
| 25 | 423178 | AI033140  | Hs.124983 | Homo sapiens mRNA; cDNA DKFZp564C142 (fr | 3.6 |
|    | 418064 | BE387287  | Hs.83384  | S100 calcium-binding protein, beta (neur | 3.6 |
|    | 428483 | AI908539  | Hs.184592 | KIAA0344 gene product                    | 3.6 |
|    | 453875 | AW001783  | Hs.232711 | ESTs                                     | 3.6 |
|    | 430183 | BE010038  |           | gb:PM3-BN0176-100400-001-g04 BN0176 Homo | 3.6 |
| 30 | 431552 | AI815863  | Hs.259873 | axonal transport of synaptic vesicles    | 3.6 |
|    | 424278 | AK000723  | Hs.144517 | hypothetical protein FLJ20716            | 3.6 |
|    | 434131 | AI858275  | Hs.143659 | ESTs                                     | 3.6 |
|    | 435923 | BE301930  | Hs.5010   | Homo sapiens clone 24672 mRNA sequence   | 3.6 |
|    | 415709 | AA649850  | Hs.278558 | ESTs                                     | 3.6 |
| 35 | 437640 | AA764893  | Hs.272155 | ESTs, Weakly similar to I38022 hypotheti | 3.6 |
|    | 419586 | AI088485  | Hs.144759 | ESTs, Weakly similar to I38022 hypotheti | 3.6 |
|    | 414040 | N58513    | Hs.32171  | ESTs                                     | 3.6 |
|    | 427315 | AA179949  | Hs.175563 | Homo sapiens mRNA; cDNA DKFZp564N0763 (f | 3.6 |
|    | 410711 | AB002316  | Hs.65746  | KIAA0318 protein                         | 3.6 |
| 40 | 445953 | AI612775  | Hs.145710 | ESTs                                     | 3.6 |
|    | 444794 | AI419991  | Hs.145225 | ESTs                                     | 3.6 |
|    | 411968 | AI207410  | Hs.69280  | Homo sapiens, clone IMAGE:3636299, mRNA, | 3.6 |
|    | 428180 | AI129767  | Hs.182874 | guanine nucleotide binding protein (G pr | 3.6 |
|    | 415283 | R40504    | Hs.21245  | ESTs                                     | 3.6 |
| 45 | 433160 | AW207002  | Hs.134342 | TASP for testis-specific adriamycin sens | 3.5 |
|    | 410386 | W26187    | Hs.3327   | Homo sapiens cDNA: FLJ22219 fis, clone H | 3.5 |
|    | 430818 | AI311928  | Hs.348156 | gb:qo89h04.x1 NCI_CGAP_Kid5 Homo sapiens | 3.5 |
|    | 433932 | AW954599  | Hs.169330 | neuronal protein                         | 3.5 |
|    | 420578 | AA813546  | Hs.99034  | GTP-binding protein Rho7                 | 3.5 |
| 50 | 456723 | Z43902    | Hs.4748   | adenylate cyclase activating polypeptide | 3.5 |
|    | 416340 | N31772    | Hs.79226  | fasciculation and elongation protein zet | 3.5 |
|    | 451455 | AI937227  | Hs.8821   | hepcidin antimicrobial peptide           | 3.5 |
|    | 412719 | AW016610  | Hs.816    | ESTs                                     | 3.5 |
|    | 435910 | AI084152  | Hs.21782  | ESTs, Weakly similar to ALU7_HUMAN ALU S | 3.5 |
| 55 | 439340 | AB032436  | Hs.6535   | brain-specific Na-dependent inorganic ph | 3.5 |
|    | 458072 | AI890347  | Hs.271923 | Homo sapiens cDNA: FLJ22785 fis, clone K | 3.5 |
|    | 439710 | AF086543  |           | gb:Homo sapiens full length insert cDNA  | 3.5 |
|    | 453896 | AW293483  | Hs.255205 | KIAA1853 protein                         | 3.5 |
|    | 407253 | AA411175  | Hs.141939 | ESTs, Moderately similar to S65657 alpha | 3.5 |
| 60 | 449969 | AW295142  | Hs.180187 | Homo sapiens cDNA FLJ14337 fis, clone PL | 3.5 |
|    | 439231 | AW581935  | Hs.141480 | Homo sapiens mRNA; cDNA DKFZp434N079 (fr | 3.5 |
|    | 424332 | AA338919  | Hs.101615 | ESTs                                     | 3.5 |
|    | 456497 | AW967956  | Hs.123648 | ESTs, Weakly similar to AF108460 1 ubinu | 3.5 |
|    | 442264 | AI278777  | Hs.263455 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 3.5 |
| 65 | 404295 |           |           | Target Exon                              | 3.5 |
|    | 427209 | H06509    | Hs.92423  | KIAA1566 protein                         | 3.5 |
|    | 439627 | BE621702  | Hs.29076  | hypothetical protein FLJ21841            | 3.5 |
|    | 427513 | AI476318  | Hs.192480 | ESTs                                     | 3.5 |
|    | 458435 | AI418718  | Hs.144121 | ESTs, Weakly similar to T46916 hypotheti | 3.5 |
| 70 | 435545 | AA687415  | Hs.28107  | ESTs                                     | 3.5 |
|    | 413199 | M62843    | Hs.75236  | ELAV (embryonic lethal, abnormal vision, | 3.5 |
|    | 441607 | NM_005010 | Hs.7912   | neuronal cell adhesion molecule          | 3.5 |
|    | 452449 | AW068658  | Hs.20943  | ESTs                                     | 3.5 |
|    | 443257 | AI334040  | Hs.11614  | HSPC065 protein                          | 3.5 |
| 75 | 423641 | AL137256  | Hs.130489 | ATPase, aminophospholipid transporter-li | 3.5 |
|    | 427581 | NM_014788 | Hs.179703 | KIAA0129 gene product                    | 3.5 |
|    | 424090 | X99699    | Hs.139262 | XIAP associated factor-1                 | 3.5 |
|    | 422906 | U80773    | Hs.121580 | Human EST clone 42944 mariner transposon | 3.5 |
|    | 429698 | AI685086  | Hs.26339  | ESTs, Weakly similar to S21348 probable  | 3.5 |
| 80 | 439920 | H05430    | Hs.288433 | neurotrimin                              | 3.5 |
|    | 436899 | AA764852  | Hs.291567 | ESTs                                     | 3.5 |
|    | 414178 | AW957372  | Hs.46791  | ESTs, Weakly similar to I38022 hypotheti | 3.5 |
|    | 418365 | AW014345  | Hs.161690 | ESTs                                     | 3.4 |
|    | 414598 | AI094221  | Hs.135150 | lung type-I cell membrane-associated gly | 3.4 |

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|    | 452571 | W31518    | Hs.34665  | ESTs                                     | 3.4 |
|    | 443633 | AL031290  | Hs.9654   | similar to pregnancy-associated plasma p | 3.4 |
|    | 408955 | BE315170  | Hs.8087   | Target CAT                               | 3.4 |
| 5  | 443206 | AB011420  | Hs.9075   | serine/threonine kinase 17a (apoptosis-i | 3.4 |
|    | 419617 | AL008583  | Hs.91622  | neuronal pentraxin receptor              | 3.4 |
|    | 454171 | AW854832  |           | gb:QV2-CT0261-201099-011-f05 CT0261 Homo | 3.4 |
|    | 426529 | AF090100  | Hs.170241 | Homo sapiens clone IMAGE 23915           | 3.4 |
|    | 440652 | AI216751  | Hs.143977 | ESTs                                     | 3.4 |
| 10 | 450813 | AI739625  | Hs.203376 | ESTs                                     | 3.4 |
|    | 429323 | NM_001649 | Hs.2391   | apical protein, Xenopus laevis-like      | 3.4 |
|    | 439774 | AL360257  | Hs.213493 | Homo sapiens mRNA full length insert cDN | 3.4 |
|    | 409892 | AW956113  | Hs.7149   | gb:EST368183 MAGE resequences, MAGD Homo | 3.4 |
|    | 439963 | AW247529  | Hs.6793   | platelet-activating factor acetylhydrola | 3.4 |
| 15 | 416558 | U03272    | Hs.79432  | fibrillin 2 (congenital contractural ara | 3.4 |
|    | 453740 | AL120295  | Hs.311809 | ESTs, Moderately similar to PC4259 ferri | 3.4 |
|    | 435256 | AF193766  | Hs.13872  | cytokine-like protein C17                | 3.4 |
|    | 453305 | R39224    | Hs.267997 | EHM2 gene                                | 3.4 |
|    | 425287 | R88249    | Hs.155524 | peanut (Drosophila)-like 2               | 3.4 |
| 20 | 417663 | R07483    | Hs.180461 | ESTs                                     | 3.4 |
|    | 448533 | AL119710  | Hs.21365  | nucleosome assembly protein 1-like 3     | 3.4 |
|    | 441834 | AL138034  | Hs.7979   | KIAA0736 gene product                    | 3.4 |
|    | 457876 | AI821940  |           | ESTs, Moderately similar to ALU8_HUMAN A | 3.4 |
|    | 407842 | BE410100  | Hs.40368  | adaptor-related protein complex 1, sigma | 3.4 |
| 25 | 422676 | D28481    | Hs.1570   | histamine receptor H1                    | 3.4 |
|    | 408926 | AF217525  | Hs.49002  | Down syndrome cell adhesion molecule     | 3.4 |
|    | 430762 | AI343652  | Hs.105667 | ESTs                                     | 3.4 |
|    | 430890 | X54232    | Hs.2699   | glypican 1                               | 3.4 |
|    | 445078 | AI869975  | Hs.4775   | junctional protein 3                     | 3.4 |
| 30 | 423257 | AW161039  | Hs.125878 | synapsin III                             | 3.4 |
|    | 417402 | BE503227  | Hs.134759 | ESTs                                     | 3.4 |
|    | 410011 | AB020641  | Hs.57856  | PFTAIRE protein kinase 1                 | 3.4 |
|    | 404541 |           |           | NM_030795:Homo sapiens slathmin-like 4 ( | 3.4 |
|    | 436291 | BE568452  | Hs.344037 | protein regulator of cytokinesis 1       | 3.4 |
| 35 | 443672 | AA323362  | Hs.9667   | butyrobetaine (gamma), 2-oxoglutarate di | 3.4 |
|    | 432140 | AK000404  | Hs.272688 | hypothetical protein FLJ20397            | 3.4 |
|    | 451061 | AW291487  | Hs.213659 | ESTs, Weakly similar to KIAA1357 protein | 3.4 |
|    | 425782 | U66468    | Hs.159525 | cell growth regulatory with EF-hand doma | 3.4 |
|    | 420692 | AW976345  |           | gb:EST388454 MAGE resequences, MAGN Homo | 3.4 |
| 40 | 410507 | AA355288  | Hs.76064  | transitional epithelia response protein  | 3.4 |
|    | 412436 | AA665089  |           | gb:nu76d01.s1 NCI_CGAP_Alv1 Homo sapiens | 3.4 |
|    | 448112 | AW245919  | Hs.34969  | hypothetical protein DKFZp566N034        | 3.4 |
|    | 429269 | AA449013  | Hs.99203  | ESTs                                     | 3.4 |
|    | 408037 | AW271720  | Hs.42233  | hypothetical protein FLJ10300            | 3.3 |
| 45 | 418858 | AW961605  | Hs.21145  | hypothetical protein RG083M05.2          | 3.3 |
|    | 420050 | AL118615  | Hs.94653  | neurochondrin                            | 3.3 |
|    | 436277 | R88520    | Hs.120917 | ESTs                                     | 3.3 |
|    | 430412 | AW341754  | Hs.189305 | ESTs                                     | 3.3 |
|    | 408554 | AA836381  | Hs.315111 | nuclear receptor co-repressor/HDAC3 comp | 3.3 |
| 50 | 432663 | AI984317  | Hs.122589 | ESTs                                     | 3.3 |
|    | 449919 | AI674685  | Hs.200141 | ESTs                                     | 3.3 |
|    | 438509 | R45367    | Hs.101191 | ESTs                                     | 3.3 |
|    | 429037 | X81895    | Hs.194765 | H.sapiens GENX-5624 mRNA, 3' UTR         | 3.3 |
|    | 445537 | AJ245671  | Hs.12844  | EGF-like-domain, multiple 6              | 3.3 |
| 55 | 425537 | AB007913  | Hs.158291 | KIAA0444 protein                         | 3.3 |
|    | 408369 | R38438    | Hs.182575 | solute carrier family 15 (H?? transport  | 3.3 |
|    | 449686 | AW072813  | Hs.270868 | ESTs, Moderately similar to ALU4_HUMAN A | 3.3 |
|    | 417333 | AL157545  | Hs.173179 | bromodomain and PHD finger containing, 3 | 3.3 |
|    | 410592 | R94088    | Hs.43569  | ESTs                                     | 3.3 |
| 60 | 439444 | AI277652  | Hs.54578  | ESTs, Weakly similar to I38022 hypotheti | 3.3 |
|    | 435375 | AI733610  | Hs.187832 | ESTs                                     | 3.3 |
|    | 409746 | NM_004794 | Hs.55294  | RAB33A, member RAS oncogene family       | 3.3 |
|    | 425588 | F07396    | Hs.46627  | ESTs                                     | 3.3 |
|    | 412155 | R38167    | Hs.12449  | Homo sapiens transmembrane protein HTMP1 | 3.3 |
| 65 | 425242 | D13635    | Hs.155287 | KIAA0010 gene product                    | 3.3 |
|    | 417280 | AW173116  | Hs.250103 | ESTs                                     | 3.3 |
|    | 423748 | AI149048  | Hs.30211  | hypothetical protein FLJ22313            | 3.3 |
|    | 452856 | AF034799  | Hs.30881  | protein tyrosine phosphatase, receptor t | 3.3 |
|    | 419103 | Z40229    | Hs.96423  | hypothetical protein FLJ23033            | 3.3 |
| 70 | 435718 | R06569    | Hs.269534 | ESTs                                     | 3.3 |
|    | 449249 | T52285    | Hs.193115 | Homo sapiens mRNA for KIAA1764 protein,  | 3.3 |
|    | 423770 | AW976766  | Hs.132776 | Homo sapiens cDNA FLJ10077 fls, clone HE | 3.3 |
|    | 409557 | BE182896  | Hs.211193 | ESTs                                     | 3.3 |
|    | 439285 | AL133916  |           | hypothetical protein FLJ20093            | 3.3 |
| 75 | 421183 | AL135740  | Hs.102447 | TSC-22-like                              | 3.3 |
|    | 433894 | AI907682  | Hs.243293 | ESTs                                     | 3.3 |
|    | 445225 | AI216555  | Hs.202398 | ESTs                                     | 3.3 |
|    | 411379 | AI816344  | Hs.12554  | ESTs, Weakly similar to NPL4_HUMAN NUCLE | 3.3 |
|    | 436207 | AA334774  | Hs.12845  | hypothetical protein MGC13159            | 3.3 |
| 80 | 436870 | AW204219  | Hs.155560 | calnexin                                 | 3.3 |
|    | 441791 | AW372449  | Hs.61271  | hypothetical protein FLJ21159            | 3.3 |
|    | 408547 | AA574291  | Hs.57837  | ESTs                                     | 3.3 |
|    | 420982 | AW576160  | Hs.100729 | KIAA0692 protein                         | 3.3 |
|    | 451625 | R56793    | Hs.106576 | alanine-glyoxylate aminotransferase 2-li | 3.3 |



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|----|--------|-----------|-----------|---|-----|
|    | 418932 | L34059    | Hs.89484  | cadherin 4, type 1, R-cadherin (retinal)  | 3.3 |
|    | 453496 | AA442103  | Hs.33084  | solute carrier family 2 (facilitated glu  | 3.3 |
|    | 423169 | BE047009  | Hs.21837  | ESTs, Weakly similar to KIAA0927 protein  | 3.3 |
|    | 418049 | AA211467  | Hs.190488 | Homo sapiens, Similar to nuclear localiz  | 3.3 |
| 5  | 441243 | AI767056  | Hs.193002 | ESTs                                      | 3.3 |
|    | 444427 | H25094    | Hs.293663 | ESTs, Moderately similar to I38022 hypot  | 3.3 |
|    | 449115 | AW959952  | Hs.37528  | ESTs, Weakly similar to AF090944 1 PRO06  | 3.3 |
|    | 446416 | AV658299  | Hs.163959 | ESTs                                      | 3.3 |
|    | 437762 | T78028    | Hs.154679 | synaptotagmin I                           | 3.3 |
| 10 | 450336 | AA046814  | Hs.288928 | Homo sapiens cDNA: FLJ23296 fis, clone H  | 3.3 |
|    | 433842 | AI652156  | Hs.26346  | ESTs                                      | 3.3 |
|    | 444124 | R43097    | Hs.6818   | ESTs                                      | 3.3 |
|    | 423858 | AL137326  | Hs.133483 | Homo sapiens mRNA; cDNA DKFZp434B0650 (f  | 3.3 |
|    | 454792 | AW820794  | Hs.252406 | hypothetical protein FLJ12296 similar to  | 3.3 |
| 15 | 412775 | AA709046  | Hs.27552  | Homo sapiens mRNA; cDNA DKFZp586N2424 (f  | 3.3 |
|    | 429609 | AF002246  | Hs.210863 | cell adhesion molecule with homology to   | 3.2 |
|    | 413951 | AW051200  | Hs.75640  | natriuretic peptide precursor A           | 3.2 |
|    | 433325 | AW206986  | Hs.143905 | ESTs                                      | 3.2 |
|    | 449092 | U91641    | Hs.22985  | alpha2,8-sialyltransferase                | 3.2 |
| 20 | 422390 | AW450893  | Hs.121830 | ESTs, Weakly similar to T42682 hypotheti  | 3.2 |
|    | 424899 | AL119387  | Hs.119062 | ESTs                                      | 3.2 |
|    | 454253 | AV660717  | Hs.47144  | DKFZP586N0819 protein                     | 3.2 |
|    | 410126 | BE169274  |           | KIAA0036 gene product                     | 3.2 |
| 25 | 456508 | AA502764  | Hs.123469 | ESTs, Weakly similar to AF208855 1 BM-01  | 3.2 |
|    | 405303 |           |           | Target Exon                               | 3.2 |
|    | 420871 | AA702972  | Hs.65300  | ESTs                                      | 3.2 |
|    | 442432 | BE093589  | Hs.38178  | hypothetical protein FLJ23468             | 3.2 |
|    | 425769 | U72513    | Hs.159486 | Human RPL13-2 pseudogene mRNA, complete   | 3.2 |
| 30 | 442320 | AI287817  | Hs.129636 | ESTs                                      | 3.2 |
|    | 407378 | AA299264  | Hs.57776  | ESTs, Moderately similar to I38022 hypot  | 3.2 |
|    | 439764 | T26535    | Hs.22744  | hypothetical protein MGC13105             | 3.2 |
|    | 410425 | BE278367  | Hs.63510  | KIAA0141 gene product                     | 3.2 |
|    | 422156 | N34524    |           | gb:yy56d10.s1 Soares_multiple_sclerosis_  | 3.2 |
| 35 | 451489 | NM_005503 | Hs.26468  | amyloid beta (A4) precursor protein-bind  | 3.2 |
|    | 457358 | AI479755  | Hs.129010 | ESTs                                      | 3.2 |
|    | 407721 | Y12735    | Hs.38018  | dual-specificity tyrosine-(Y)-phosphoryl  | 3.2 |
|    | 452372 | AI885742  | Hs.228474 | ESTs                                      | 3.2 |
|    | 459660 | M79082    |           | ESTs                                      | 3.2 |
| 40 | 437085 | AA743935  | Hs.202329 | ESTs                                      | 3.2 |
|    | 419852 | AW503756  | Hs.286184 | hypothetical protein dJ551D2.5            | 3.2 |
|    | 440080 | AW051597  | Hs.143707 | ESTs                                      | 3.2 |
|    | 449714 | AB033015  | Hs.23941  | KIAA1189 protein                          | 3.2 |
|    | 450407 | NM_000810 | Hs.24959  | gamma-aminobutyric acid (GABA) A recepto  | 3.2 |
| 45 | 423165 | AI937547  | Hs.124915 | hypothetical protein MGC2601              | 3.2 |
|    | 449961 | AW266634  | Hs.133100 | ESTs                                      | 3.2 |
|    | 454036 | AA374756  | Hs.93560  | Homo sapiens mRNA for KIAA1771 protein,   | 3.2 |
|    | 419865 | NM_007020 | Hs.93502  | U1-snRNP binding protein homolog (70kD)   | 3.2 |
|    | 423420 | AI571364  | Hs.128382 | Homo sapiens mRNA; cDNA DKFZp76111224 (f  | 3.2 |
| 50 | 420352 | BE258835  |           | gb:601117374F1 NIH_MGC_16 Homo sapiens c  | 3.2 |
|    | 424641 | AB001106  | Hs.151413 | glia maturation factor, beta              | 3.2 |
|    | 453544 | AA831785  | Hs.171914 | Homo sapiens cDNA FLJ14209 fis, clone NT  | 3.2 |
|    | 447877 | AI435184  | Hs.164252 | ESTs                                      | 3.2 |
|    | 419683 | AA248897  | Hs.48784  | ESTs                                      | 3.2 |
| 55 | 451026 | AA013218  | Hs.157492 | cer-d4 (mouse) homolog                    | 3.2 |
|    | 422709 | AA315331  | Hs.153485 | ESTs                                      | 3.2 |
|    | 432809 | AA565509  | Hs.131703 | ESTs                                      | 3.2 |
|    | 446593 | W79572    | Hs.13277  | hypothetical protein FLJ22054             | 3.2 |
|    | 457728 | AW974811  |           | gb:EST386916 MAGE resequences, MAGN Homo  | 3.2 |
| 60 | 403790 |           |           | NM_001334*:Homo sapiens cathepsin O (CTS  | 3.2 |
|    | 445413 | AA151342  | Hs.12677  | CGI-147 protein                           | 3.2 |
|    | 438703 | AI803373  | Hs.31599  | ESTs                                      | 3.1 |
|    | 434577 | R37316    | Hs.179769 | Homo sapiens cDNA: FLJ22487 fis, clone H  | 3.1 |
|    | 422772 | AL119585  | Hs.120228 | KIAA0749 protein                          | 3.1 |
| 65 | 433434 | AA588429  |           | gb:nc022b03.s1 NCI_CGAP_P122 Homo sapiens | 3.1 |
|    | 427961 | AW293165  | Hs.143134 | ESTs                                      | 3.1 |
|    | 414430 | AI346201  | Hs.76118  | ubiquitin carboxyl-terminal esterase L1   | 3.1 |
|    | 420552 | AK000492  | Hs.98806  | hypothetical protein                      | 3.1 |
|    | 456209 | W60633    | Hs.297792 | ESTs                                      | 3.1 |
| 70 | 418819 | AA228776  | Hs.191721 | ESTs                                      | 3.1 |
|    | 438944 | AA302517  | Hs.92732  | KIAA1444 protein                          | 3.1 |
|    | 439086 | AF085947  |           | gb:Homo sapiens full length insert cDNA   | 3.1 |
|    | 451734 | NM_006176 | Hs.26944  | neurogranin (protein kinase C substrate,  | 3.1 |
|    | 415257 | F03016    | Hs.27513  | ESTs                                      | 3.1 |
| 75 | 442789 | AW904361  | Hs.131191 | ESTs, Weakly similar to ALU7_HUMAN ALU S  | 3.1 |
|    | 432675 | AI791855  | Hs.105884 | ESTs                                      | 3.1 |
|    | 426600 | NM_003378 | Hs.171014 | VEGF nerve growth factor inducible        | 3.1 |
|    | 435092 | AL137310  | Hs.4749   | Homo sapiens mRNA; cDNA DKFZp761E13121 (  | 3.1 |
|    | 439039 | AI656707  | Hs.48713  | ESTs                                      | 3.1 |
| 80 | 450358 | AB010098  | Hs.24907  | coronin, actin-binding protein, 2B        | 3.1 |
|    | 400850 |           |           | Target Exon                               | 3.1 |
|    | 417636 | R08916    | Hs.191212 | ESTs                                      | 3.1 |
|    | 425790 | AW136286  | Hs.288446 | ESTs                                      | 3.1 |
|    | 415314 | N88802    | Hs.5422   | glycoprotein M6B                          | 3.1 |

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|    |        |           |           |   |     |
|----|--------|-----------|-----------|---|-----|
| 5  | 436456 | AW292677  | Hs.248122 | G protein-coupled receptor 24             | 3.1 |
|    | 408601 | U47928    | Hs.86122  | protein A                                 | 3.1 |
|    | 420885 | AA805453  |           | ESTs, Weakly similar to T29012 hypotheti  | 3.1 |
|    | 437162 | AW005505  | Hs.5464   | thyroid hormone receptor coactivating pr  | 3.1 |
|    | 445704 | AI493742  | Hs.167700 | ESTs, Moderately similar to I38022 hypot  | 3.1 |
| 10 | 440700 | AW952281  | Hs.296184 | guanine nucleotide binding protein (G pr  | 3.1 |
|    | 414747 | U30872    | Hs.77204  | centromere protein F (350/400kD, mitotin  | 3.1 |
|    | 431553 | X78075    | Hs.2799   | cartilage linking protein 1               | 3.1 |
|    | 405605 |           |           | C2001342:gil127814[sp]P26434[NAH4_RAT SO  | 3.1 |
|    | 431467 | N71831    | Hs.256398 | Homo sapiens mRNA: cDNA DKFZp434E0528 (f  | 3.1 |
| 15 | 457561 | AA331517  | Hs.286055 | chimerin (chimaerin) 2                    | 3.1 |
|    | 412507 | L36645    | Hs.73964  | EphA4                                     | 3.1 |
|    | 413448 | AL134467  | Hs.25307  | Homo sapiens clone 24812 mRNA sequence    | 3.1 |
|    | 444168 | AW379879  |           | gb:RC1-HT0256-081199-011-01 HT0256 Homo   | 3.1 |
|    | 400090 |           |           | Eos Control                               | 3.1 |
| 20 | 433642 | BE466341  | Hs.189746 | ESTs, Weakly similar to I38022 hypotheti  | 3.1 |
|    | 422938 | NM_001809 | Hs.1594   | centromere protein A (17kD)               | 3.1 |
|    | 426318 | AA375125  | Hs.147112 | Homo sapiens cDNA: FLJ22322 fis, clone H  | 3.1 |
|    | 428896 | AW291932  | Hs.98936  | ESTs                                      | 3.1 |
|    | 449277 | AA001064  | Hs.43670  | ESTs                                      | 3.1 |
| 25 | 426509 | M31166    | Hs.2050   | pentaxin-related gene, rapidly induced b  | 3.1 |
|    | 412216 | AW901517  |           | gb:RC5-NN1013-310300-021-C03 NN1013 Homo  | 3.1 |
|    | 428845 | AL157579  | Hs.153610 | KIAA0751 gene product                     | 3.1 |
|    | 431512 | BE270734  | Hs.2795   | lactate dehydrogenase A                   | 3.1 |
|    | 418113 | AI272141  | Hs.83484  | SRY (sex determining region Y)-box 4      | 3.0 |
| 30 | 450661 | AW952160  | Hs.83849  | ESTs                                      | 3.0 |
|    | 448448 | NM_014954 | Hs.21239  | KIAA0985 protein                          | 3.0 |
|    | 422631 | BE218919  | Hs.118793 | hypothetical protein FLJ10688             | 3.0 |
|    | 419687 | AI638859  | Hs.227699 | ESTs, Weakly similar to T2D3_HUMAN TRANS  | 3.0 |
|    | 450963 | AI864668  | Hs.48832  | ESTs                                      | 3.0 |
| 35 | 435060 | AI422719  | Hs.120873 | ESTs, Weakly similar to fork head like p  | 3.0 |
|    | 440274 | R24595    | Hs.7122   | scrapie responsive protein 1              | 3.0 |
|    | 437438 | AL359620  | Hs.14217  | hypothetical protein DKFZp762P2111        | 3.0 |
|    | 435401 | R44477    | Hs.10056  | hypothetical protein FLJ14621             | 3.0 |
|    | 416737 | AF154335  | Hs.79691  | UIM domain protein                        | 3.0 |
| 40 | 445314 | AI689948  | Hs.65489  | Homo sapiens cDNA: FLJ21517 fis, clone C  | 3.0 |
|    | 425870 | R13406    | Hs.56782  | ESTs                                      | 3.0 |
|    | 425294 | AF033827  | Hs.155553 | HNK-1 sulfotransferase                    | 3.0 |
|    | 416404 | AA180138  | Hs.107924 | ESTs                                      | 3.0 |
|    | 413995 | BE048146  | Hs.75671  | syntaxin 1A (brain)                       | 3.0 |
| 45 | 422798 | R92347    | Hs.34574  | ESTs, Weakly similar to ALU1_HUMAN ALU S  | 3.0 |
|    | 426384 | AI472078  | Hs.303662 | hypothetical protein FLJ13189 (FLJ13189)  | 3.0 |
|    | 430147 | R60704    | Hs.234434 | hairly/enhancer-of-split related with YRP | 3.0 |
|    | 425264 | AA353953  | Hs.20369  | ESTs, Weakly similar to gonadotropin ind  | 3.0 |
|    | 406917 | X65964    |           | gb:H.sapiens nestin gene.                 | 3.0 |
| 50 | 425262 | D87119    | Hs.155418 | GS3955 protein                            | 3.0 |
|    | 401558 |           |           | ENSP00000220478*:SECRETOGNANIN III.       | 3.0 |
|    | 439345 | AW444759  | Hs.146171 | ESTs                                      | 3.0 |
|    | 414865 | AA157155  | Hs.274414 | hypothetical protein FLJ14457             | 3.0 |
|    | 453976 | BE463830  | Hs.163714 | ESTs                                      | 3.0 |
| 55 | 404283 |           |           | ENSP00000244751*:Copine-like protein KIA  | 3.0 |
|    | 432890 | NM_014442 | Hs.279751 | sialic acid binding Ig-like lectin 8      | 3.0 |
|    | 451491 | AI972094  | Hs.286221 | Homo sapiens cDNA FLJ13741 fis, clone PL  | 3.0 |
|    | 442573 | H93366    | Hs.7567   | branched chain aminotransferase 1, cytos  | 3.0 |
|    | 428361 | NM_015905 | Hs.183858 | transcriptional intermediary factor 1     | 3.0 |
| 60 | 443753 | AW367578  | Hs.134749 | ESTs                                      | 3.0 |
|    | 417868 | AI078534  | Hs.122592 | ESTs                                      | 3.0 |
|    | 443898 | AW804296  | Hs.9950   | Sec61 gamma                               | 3.0 |
|    | 438869 | AF075009  |           | gb:Homo sapiens full length insert cDNA   | 3.0 |
|    | 453900 | AW003582  | Hs.226414 | ESTs, Weakly similar to ALU8_HUMAN ALU S  | 3.0 |
| 65 | 447714 | AW296313  | Hs.255537 | ESTs                                      | 3.0 |
|    | 426581 | AB040956  | Hs.135890 | KIAA1523 protein                          | 3.0 |
|    | 421126 | M74587    | Hs.102122 | insulin-like growth factor binding prote  | 3.0 |
|    | 410762 | AF226053  | Hs.66170  | HSKM-B protein                            | 3.0 |
|    | 431462 | AW583672  | Hs.256311 | granin-like neuroendocrine peptide precu  | 3.0 |
| 70 | 452221 | C21322    | Hs.288057 | hypothetical protein FLJ22242             | 3.0 |
|    | 412326 | R07566    | Hs.73817  | small inducible cytokine A3 (homologous   | 3.0 |
|    | 428600 | AW863261  | Hs.242413 | hypothetical protein DKFZp434K1421        | 3.0 |
|    | 426501 | AW043782  | Hs.293616 | ESTs                                      | 3.0 |
|    | 405558 |           |           | Target Exon                               | 3.0 |
| 75 | 421483 | NM_003388 | Hs.104717 | hypothetical protein MGC11333             | 3.0 |
|    | 448681 | AL109781  | Hs.21754  | Homo sapiens mRNA full length insert cDN  | 3.0 |
|    | 452108 | AW135982  | Hs.203013 | hypothetical protein FLJ12748             | 3.0 |
|    | 429569 | AA454993  | Hs.138343 | ESTs, Weakly similar to I78885 serine/th  | 3.0 |
|    | 450728 | AW162923  | Hs.25363  | presenilin 2 (Alzheimer disease 4)        | 3.0 |
| 80 | 429371 | NM_001703 | Hs.200586 | brain-specific angiogenesis inhibitor 2   | 3.0 |
|    | 437435 | AA249439  | Hs.27027  | hypothetical protein DKFZp762H1311        | 3.0 |
|    | 432188 | AI362952  | Hs.2928   | solute carrier family 7 (cationic amino   | 3.0 |
|    | 404632 |           |           | NM_022490.Homo sapiens hypothetical prot  | 3.0 |
|    | 452619 | AW298597  | Hs.61884  | Homo sapiens, clone IMAGE:4298026, mRNA,  | 3.0 |
|    | 421458 | NM_003654 | Hs.104576 | carbohydrate (keratan sulfate Gal-6) sul  | 3.0 |
|    | 419038 | AW134924  | Hs.190325 | ESTs                                      | 3.0 |
|    | 453563 | AW608906  | Hs.181163 | hypothetical protein MGC5629              | 3.0 |

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405239 U89281 oxidative 3 alpha hydroxysteroid dehydro 3.0

TABLE 17B:

Pkey: Unique Eos probeset identifier number  
CAT number: Gene cluster number  
Accession: Genbank accession numbers

| Pkey   | CAT Number | Accession  |
|--------|------------|--|
| 408432 | 1058667_1  | AW195262 R27868 AW811262   |
| 410099 | 117647_1   | AA081630 T08671 A1174254 D83874 AW959843 AA364503 AA693467 AW993370 BE327037 AA167714 N79906 AW901977 AW901980 W52882 T07735 AA484549 W60090 D52685 T23811 BE327043 AW901768 BE551237 AA917004 AA716027 A1439658 AA283724 A1805992 A1457096 AA084618 BE467736 A1092635 A1887863 A1697593 AA436618 A1167419 A1418634 T31586 AA436630 AA706191 A1041169 A1422304 T03534 AA211402 A1204899 A1366472 AW827081 AA788593 T32736 A1767935 AA167791 AA747914 AA663870 A1865504 |
| 410126 | 117761_1   | BE169274 AW893230 AA210998 H24222 AA081774 BE000935 BE000834 AA334880  |
| 412216 | 1283670_1  | AW901517 AW901523 AW901521 AW901547  |
| 412436 | 129439_1   | AA665089 AA135130 AA484059 AA102419 AW877765   |
| 412799 | 132817_1   | A1267606 AA121045 AA126521   |
| 412820 | 1330039_1  | BE001236 BE001177 BE001180 BE001234  |
| 414372 | 143909_1   | AA143654 AW753140 AA213770 AW970865 AA569075 AA492132  |
| 416871 | 1626761_1  | H98716 N90792 N24283   |
| 418512 | 176394_1   | AW498974 T09332 R58460 AA350990 T33786 T30936 AA350905 T08592 T09274 AA224297 D54678 T08951 R15346 AW953188 AA350074 AW890649  |
| 419544 | 185760_2   | A1909154 AA526337 AA244193 A1909153  |
| 420352 | 192979_1   | BE258835 AW968316 AA258918 AW843305 R14744 A1580388 BE071923 R36280  |
| 420692 | 195649_1   | AW976345 AA279423 AA761070   |
| 420886 | 197344_1   | AA805453 AA281379  |
| 422156 | 212379_1   | N34524 AA305071 AW954803 AA502335 A1433430 A1203597 AW026670 AW265323 AW850787 AA317554 AW993643 AW835572 AW385512 A1334966 W32951 H62656 H53902 R88904 AW835732   |
| 422949 | 223184_1   | AA319435 N56456 AA319377 AW961532 T48452 AA894424  |
| 423476 | 22861_1    | A1035633 F11794 F11783 H18042 T66089 H29379 R19493 AW134660 A1299437 AL133995 AA057405 N78357 AA917450 A1002692 T09252 T65008 H29290 A1200874 AA894415 A1732887 A1791768 A1733447 AA988785 N62128 T09261 AW956936  |
| 423713 | 231290_1   | AW754182 AW754198 AA329983   |
| 424945 | 245223_1   | A1221919 Z19967 AA348780 AW964077 AW166028 BE540193 N94800 AA452368 N99604 A1341345 AW298800 AA724961 AA931158 A1741227 A1806660 A1982626 D81263 D53937 D52496 AA974487 AW043854 N50483 Z39997 A1492961 A1361526 F04002 AA452141 T23551 A1472655 A1193567 A1341984 N92658 T32870 R52664 N50428 AW089291 A1934175 A1423737 D60665   |
| 424947 | 245247_1   | R77952 AA348809 AW959960 AW959962 A1565552 AW070702 AA973910 R85973  |
| 426413 | 256650_1   | AA377823 AW954494 A1022688   |
| 426503 | 258283_1   | AA380153 AA380233 AW963529   |
| 426919 | 273507_1   | AL041228 D82004 D61361 A1203314 A1990307 AW900295 A1018308 AW087473 AW183530 AA393346 H50055 AA935601  |
| 428342 | 290035_2   | A1739168 AA426249 A1199636 AW505198 AW977291 AA824583 AA883419 AA724079 A1015524 A1377728 AW293582 A1928140 AA731438 A1092404 A1085630 AA731340  |
| 429007 | 298301_1   | D80642 AA443145 AL119015 AW904500  |
| 429163 | 300543_1   | AA884766 AW974271 AA592975 AA447312  |
| 429421 | 30431_1    | AL031658 A1693758 AL040619 AW977914 AA811957 A1352198 AW104364 AA648367 AA897604 AW341668 A1201382 AL040620  |
| 430183 | 31412_2    | BE010038 AA676833 A1311783 T86895 W68032 BE064393 BE064394 BE157228 BE183282 A1936370 AA552514 T67280 AA039909   |
| 430676 | 32168_1    | AF084866 AF084870 AF084864 AF084867 AF084868 AF084865 AF084868 AW818206 AW812038 BE144813 BE144812 AW812041 AW812040 AW812067 BE061583 BE061604 T05808 A1352469 AA580921 BE141783 BE141782 BE061601 AW814393 AW885029  |
| 430968 | 326269_1   | AW972830 AA527647 AA489820 AA570362  |
| 433009 | 357371_1   | AA761668 AA573621 R92814 R09670  |
| 433434 | 366095_1   | AA588429 A1972567 AW504832 A1299694  |
| 433523 | 368873_1   | H29882 AW655533 AW149901 A1572917 AA598500 A1686466 A1336390 AW864390 AW864320   |
| 435542 | 407744_1   | AA687376 H74234 AW975503   |
| 438869 | 46651_1    | AF075009 R63109 R63068   |
| 439086 | 46852_1    | AF085947 H70981 H78989   |
| 439285 | 47065_1    | AL133916 N79113 AF086101 N76721 AW950828 AA364013 AW955684 A1346341 A1867454 N54784 A1655270 A1421279 AW014882 AA775552 N62351 N59253 AA626243 A1341407 BE175639 AA456968 A1358918 AA457077  |
| 439518 | 47334_1    | W76326 AF086341 W72300   |
| 439566 | 47387_1    | AF086387 W77884 W72711   |
| 439710 | 47550_1    | AF086543 W96291 W96225   |
| 441102 | 509604_1   | AA973905 A1299888 AA917019 H63235 T90771   |
| 444168 | 593829_1   | AW379879 A1126285 H12014   |
| 446692 | 689623_1   | Z44514 A1352097 A1803984 AW235923 AW196558 A1954637 A1336983   |
| 447197 | 711623_1   | R36075 A1366546 R36167   |
| 449625 | 8113_1     | NM_014253 AF100772 BE088769 AL022718 BE161779 AW863569 BE161640 AL039060 BE168542 AW296554 AA323193 AA235370 AW779760 N48674 A1375997 R45432 D59344 A1203107 F07491 R35360 R25094 A1913631 A1498402 T61382 A1016320 N45526 T61415 AA331486   |
| 450375 | 83327_1    | AA009647 AA131254 AA374293 AW954405 H04410 AW606284 AA151166 BE157467 BE157601 H04384 W46291 AW663674 H04021 H01532 AA190993 H03231 H59605 H01642 AA852876 AA113758 AA626915 AA746952 A1161014 AA099554 R69067   |
| 450582 | 83933_1    | A1339732 AA010300 AW515041 AA768334 N29860 AA425874 AA425118 AA855829 AW936878   |
| 451320 | 86576_1    | AW118072 A1631982 T15734 AA224195 A1701458 W20198 F26326 AA890570 N90552 AW071907 A1671352 A1375892 T03517 R88265 A1124088 AA224388 A1084316 A1354686 T36652 A1140719 A1720211 T03490 A1372637 T15415 AW205836 AA630384 T03515 T33230 AA017131 AA443303 T33623 A1222556 T33511 T33785 A1419606 D55612  |
| 453331 | 96214_1    | A1240665 T53681 N77468 H51833 AA147247 R75732 C16450 R73999 A1095755 T49904 H03868 AA411580 R33395 AA410586 T48869 D63292 R31981 H12498 H02668 AA035018 R75957 A1803329 R27528 R36203 A1809932 A1808765 R78948 AA411449 AA976929 A1378760 A1378620 T48870 R73906 R75632 H03612 AA909684 N50695 H02580 H12839 N58781 AA742532 A1360919 H03502 BE208298 R68588 A1350463 R31935 AW069127 AA411621 R25671 R36105 H12451 H03869 H51263 AA035486 R25109 R25110 AA147933      |
| 453682 | 977454_1   | T79703 T96307 AL079725   |
| 454171 | 1049240_1  | AW854832 AW854798 AW854857 AW854816 AW854834 AW854817  |
| 457728 | 393853_1   | AW974811 AA651634 AA550072   |
| 457876 | 42814_2    | A1821940 N67106 A1744264 AA808846 AA643417 AA643416 Z70715   |
| 458912 | 823104_1   | A1911066 A1933734 A1680888 A1003599  |

TABLE 17C:

Pkey: Unique number corresponding to an Eos probeset

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Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.

Strand: Indicates DNA strand from which exons were predicted.

Nt\_position: Indicates nucleotide positions of predicted exons.

|    |        |         |        |   |
|----|--------|---------|--------|---|
| 5  | Pkey   | Ref     | Strand | Nt_position   |
|    | 400533 | 6981826 | Minus  | 277132-277595   |
|    | 400777 | 8131663 | Plus   | 70745-71121   |
| 10 | 400850 | 1927150 | Minus  | 4506-4691   |
|    | 401558 | 7139678 | Plus   | 103510-104090   |
|    | 402145 | 8018280 | Plus   | 113086-114800   |
|    | 402604 | 9909420 | Plus   | 20393-20767   |
|    | 402855 | 9652953 | Minus  | 59763-59909   |
| 15 | 403696 | 3135242 | Minus  | 143457-143634   |
|    | 403790 | 8084957 | Minus  | 87825-87947,89835-90002   |
|    | 404150 | 7534008 | Plus   | 165811-165943   |
|    | 404283 | 2276311 | Minus  | 99460-99564   |
|    | 404295 | 9856663 | Minus  | 75747-75947   |
| 20 | 404541 | 8318559 | Plus   | 103456-103664   |
|    | 404584 | 9857511 | Plus   | 138651-139153   |
|    | 404632 | 9796668 | Plus   | 45096-45229   |
|    | 404819 | 4678240 | Plus   | 16223-16319,16427-16513,16736-16859,16941-17075,17170-17287,17389-17529,18261-18357,18443-18578 |
|    | 405239 | 7249119 | Plus   | 144345-144464,144690-144836,151750-151883,152407-152484   |
| 25 | 405303 | 2078453 | Minus  | 130607-130802   |
|    | 405331 | 3236226 | Minus  | 32502-32690   |
|    | 405348 | 2914717 | Minus  | 43310-43462   |
|    | 405558 | 1621110 | Plus   | 4502-4644,5983-6083   |
|    | 405605 | 5836195 | Minus  | 117070-117270   |
| 30 | 405819 | 4007557 | Plus   | 2830-2967   |

TABLE 18A: ABOUT 446 CNS-ENRICHED GENES SIGNIFICANTLY DOWN-REGULATED IN GLIOBLASTOMA MULTIFORMA COMPARED TO NORMAL ADULT CNS

Table 18A lists about 446 CNS-enriched genes significantly down-regulated in glioblastoma multiforma (GBM) compared to normal adult CNS tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" normal CNS to "average" GBM was greater than or equal to 2. The "average" normal CNS level was set to the 85<sup>th</sup> percentile amongst various normal CNS tissues. The "average" GBM level was set to the 85<sup>th</sup> percentile amongst various tumor samples. To enrich for CNS specific genes, the ratio of "average" CNS to "average" non-CNS normal adult tissues was calculated to be greater than or equal to 3. The "average" CNS level was set to the 85<sup>th</sup> percentile amongst various CNS tissues. The "average" normal non-CNS adult tissue level was set to the 95<sup>th</sup> percentile amongst various non-CNS normal tissues. In order to remove gene-specific background levels of non-specific hybridization, the 10<sup>th</sup> percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratios were evaluated.

Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 R1: Ratio of CNS to GLIOBLASTOMA MULTIFORMA  
 R2: Ratio of CNS to NON-CNS NORMAL ADULT TISSUES

|    |        |           |           |  |      |      |
|----|--------|-----------|-----------|--|------|------|
|    | Pkey   | ExAccn    | UnigenelD | Unigene Title                            | R1   | R2   |
|    | 425489 | M58594    | Hs.1905   | prolactin                                | 38.8 | 10.5 |
|    | 410330 | AW023630  | Hs.159425 | ESTs                                     | 23.4 | 23.4 |
| 50 | 430538 | AB032435  | Hs.242821 | differentiation-associated Na-dependent  | 22.6 | 22.6 |
|    | 417275 | X63578    | Hs.295449 | parvalbumin                              | 22.4 | 6.0  |
|    | 453590 | AF150278  | Hs.33578  | KIAA0820 protein                         | 22.3 | 22.3 |
|    | 428505 | AL035461  | Hs.2281   | chromogranin B (secretogranin 1)         | 21.8 | 21.8 |
| 55 | 453220 | AB033089  | Hs.32452  | Homo sapiens mRNA for KIAA1263 protein,  | 19.9 | 19.9 |
|    | 411498 | NM_014210 | Hs.70499  | ecotropic viral integration site 2A      | 19.4 | 19.4 |
|    | 408040 | AI266496  | Hs.22905  | ESTs, Weakly similar to RHG6_HUMAN RHO-G | 19.4 | 19.4 |
|    | 435145 | AI277259  | Hs.116631 | ESTs                                     | 18.5 | 3.8  |
|    | 407039 | X00368    |           | gb:Human prolactin gene 5' region.       | 18.1 | 18.1 |
| 60 | 409263 | AA069573  | Hs.50319  | ESTs                                     | 16.8 | 16.8 |
|    | 449078 | AK001256  | Hs.22975  | KIAA1576 protein                         | 16.1 | 16.1 |
|    | 426968 | U07616    | Hs.173034 | amphiphysin (Stiff-Mann syndrome with br | 15.3 | 15.3 |
|    | 432298 | AL118812  | Hs.274293 | Homo sapiens mRNA; cDNA DKFZp761G1111 (f | 15.1 | 15.1 |
|    | 424645 | NM_014682 | Hs.151449 | KIAA0535 gene product                    | 15.1 | 15.1 |
| 65 | 450590 | AI701507  | Hs.273740 | ESTs                                     | 14.9 | 3.8  |
|    | 417175 | R44558    | Hs.94002  | ESTs                                     | 14.6 | 8.9  |
|    | 423449 | AI497900  | Hs.33067  | ESTs                                     | 14.5 | 14.5 |
|    | 441869 | NM_003947 | Hs.8004   | huntingtin-associated protein interactin | 14.4 | 14.9 |
|    | 405560 | AW887701  |           | hypothetical protein FLJ20628            | 14.0 | 8.0  |
| 70 | 440209 | H05049    | Hs.247837 | neurexin 3                               | 13.9 | 18.7 |
|    | 439238 | N47305    | Hs.302161 | ESTs                                     | 13.9 | 5.3  |
|    | 452022 | AW072330  | Hs.293875 | ESTs                                     | 13.8 | 13.8 |
|    | 459080 | AW192083  | Hs.290855 | ESTs                                     | 13.5 | 13.5 |
|    | 425649 | U30930    | Hs.158540 | UDP glycosyltransferase 8 (UDP-galactose | 13.4 | 38.6 |
|    | 413324 | V00571    | Hs.75294  | corticotropin releasing hormone          | 13.2 | 13.2 |
| 75 | 443992 | AW022228  | Hs.322922 | ESTs                                     | 13.1 | 13.1 |
|    | 410635 | D58863    | Hs.334372 | chorionic somatomammotropin hormone 1 (p | 12.9 | 6.6  |
|    | 420156 | AW449258  | Hs.6187   | ESTs                                     | 12.5 | 12.5 |
|    | 416490 | AF090116  | Hs.79348  | regulator of G-protein signalling 7      | 12.5 | 12.5 |
|    | 450757 | BE081050  | Hs.31570  | ESTs, Weakly similar to KIAA1324 protein | 12.2 | 3.2  |
| 80 | 410037 | AB020725  | Hs.58009  | KIAA0918 protein                         | 12.2 | 12.2 |
|    | 433940 | H05129    |           | cyclic AMP-regulated phosphoprotein, 21  | 12.0 | 12.0 |
|    | 434367 | AB020700  | Hs.3830   | KIAA0893 protein                         | 11.6 | 5.6  |
|    | 410657 | AF063228  | Hs.65248  | dynein, cytoplasmic, intermediate polype | 11.5 | 11.5 |

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|    |        |           |           |  |      |      |
|----|--------|-----------|-----------|--|------|------|
| 5  | 431988 | AC002302  | Hs.77202  | protein kinase C, beta 1                 | 11.2 | 10.5 |
|    | 451783 | R42554    | Hs.210862 | T-box, brain, 1                          | 11.2 | 11.2 |
|    | 453165 | S74727    | Hs.32042  | aspartoacylase (aminoacylase 2, Canavan  | 10.7 | 10.7 |
|    | 452238 | F01811    | Hs.345757 | ESTs                                     | 10.6 | 3.8  |
|    | 417167 | AW206437  | Hs.4290   | ESTs                                     | 10.4 | 10.4 |
| 10 | 420033 | D59502    | Hs.292590 | ESTs                                     | 10.4 | 10.4 |
|    | 427224 | AL135554  | Hs.101937 | sine oculis homeobox (Drosophila) homolo | 10.4 | 3.9  |
|    | 424153 | AA451737  | Hs.141496 | MAGE-like 2                              | 10.3 | 5.1  |
|    | 413293 | AL047483  | Hs.302498 | GTP-binding protein homologous to Saccha | 10.0 | 10.0 |
|    | 400438 | AF185611  | Hs.115352 | Target                                   | 9.9  | 5.1  |
| 15 | 447750 | AI422234  | Hs.143434 | contactin 1                              | 9.8  | 9.8  |
|    | 419347 | C15944    | Hs.90005  | superiorcervical ganglia, neural specifi | 9.8  | 22.2 |
|    | 418207 | C14685    | Hs.34772  | ESTs                                     | 9.8  | 9.8  |
|    | 413409 | AI638418  | Hs.1440   | DEAD/H (Asp-Glu-Ala-Asp/His) box polypep | 9.4  | 9.4  |
|    | 447746 | AW015920  | Hs.161359 | ESTs                                     | 9.2  | 9.9  |
| 20 | 406311 |           |           | NM_021979*:Homo sapiens heat shock 70kD  | 9.1  | 11.5 |
|    | 444330 | AF597655  | Hs.49265  | ESTs                                     | 9.1  | 9.1  |
|    | 426365 | AA376667  | Hs.10283  | RNA binding motif protein 8B             | 9.0  | 4.1  |
|    | 427322 | AK002017  | Hs.176227 | hypothetical protein FLJ11155            | 8.9  | 8.9  |
|    | 439450 | R51613    | Hs.125304 | ESTs                                     | 8.7  | 8.3  |
| 25 | 429096 | AB011106  | Hs.196012 | KIAA0534 protein                         | 8.6  | 8.6  |
|    | 428652 | AA584272  | Hs.336224 | transmembrane protein with EGF-like and  | 8.6  | 8.6  |
|    | 408814 | N62499    | Hs.176227 | hypothetical protein FLJ11155            | 8.6  | 8.6  |
|    | 410309 | BE043077  | Hs.278153 | ESTs                                     | 8.5  | 8.5  |
|    | 408950 | AA707814  | Hs.14945  | long fatty acyl-CoA synthetase 2 gene    | 8.5  | 8.5  |
| 30 | 426814 | AF036943  | Hs.172619 | myelin transcription factor 1-like       | 8.5  | 14.2 |
|    | 416851 | AW963951  | Hs.85618  | ESTs                                     | 8.5  | 8.5  |
|    | 430004 | U27768    | Hs.227571 | regulator of G-protein signalling 4      | 8.4  | 15.7 |
|    | 412155 | R38167    | Hs.12449  | Homo sapiens transmembrane protein HTMP1 | 8.4  | 27.9 |
|    | 427061 | AB032971  | Hs.173392 | KIAA1145 protein                         | 8.4  | 8.4  |
| 35 | 412049 | N53437    | Hs.18268  | adenylate kinase 5                       | 8.3  | 10.7 |
|    | 452752 | AW044058  | Hs.33578  | KIAA0820 protein                         | 8.2  | 13.4 |
|    | 414699 | AI815523  | Hs.76390  | synuclein, alpha (non A4 component of am | 8.2  | 4.5  |
|    | 422756 | AA441787  | Hs.119689 | glycoprotein hormones, alpha polypeptide | 8.1  | 5.8  |
|    | 435648 | H24347    | Hs.27524  | ESTs                                     | 8.1  | 8.1  |
| 40 | 429470 | AI878901  | Hs.203862 | guanine nucleotide binding protein (G pr | 8.0  | 8.0  |
|    | 416133 | NM_001683 | Hs.89512  | ATPase, Ca transporting, plasma membrane | 8.0  | 8.0  |
|    | 438208 | AL041224  | Hs.65379  | ESTs                                     | 7.9  | 5.8  |
|    | 436427 | AI344378  | Hs.143399 | ESTs                                     | 7.8  | 7.8  |
|    | 441005 | Z41305    | Hs.303172 | Homo sapiens mRNA; cDNA DKFZp547G133 (fr | 7.7  | 7.7  |
| 45 | 442023 | AI187878  | Hs.144549 | ESTs                                     | 7.7  | 5.6  |
|    | 444458 | BE041526  | Hs.31746  | hypothetical protein DKFZp547F072        | 7.7  | 7.7  |
|    | 429033 | NM_007374 | Hs.194756 | sine oculis homeobox (Drosophila) homolo | 7.6  | 5.5  |
|    | 450642 | R39773    | Hs.7130   | copine IV                                | 7.6  | 5.6  |
|    | 446544 | AI631932  | Hs.7047   | ESTs, Weakly similar to Unknown [H.sapie | 7.5  | 12.4 |
| 50 | 438283 | AI458931  | Hs.37282  | ESTs                                     | 7.5  | 7.5  |
|    | 437073 | AI885608  | Hs.94122  | ESTs                                     | 7.5  | 7.5  |
|    | 408577 | H50572    | Hs.19515  | ESTs, Highly similar to NRG3_HUMAN PRO-N | 7.4  | 7.4  |
|    | 424264 | D80400    | Hs.239388 | Human DNA sequence from clone RP1-304B14 | 7.3  | 7.3  |
|    | 441264 | AA927170  | Hs.23290  | ESTs                                     | 7.3  | 7.3  |
| 55 | 450474 | AW872844  | Hs.117494 | ESTs                                     | 7.2  | 7.2  |
|    | 425352 | NM_000939 | Hs.1897   | proopiomelanocortin (adrenocorticotropin | 7.2  | 6.1  |
|    | 450715 | AI266484  | Hs.31570  | ESTs, Weakly similar to KIAA1324 protein | 7.2  | 7.2  |
|    | 450181 | H05254    | Hs.201198 | ESTs                                     | 7.2  | 7.2  |
|    | 415076 | NM_000857 | Hs.77890  | guanylate cyclase 1, soluble, beta 3     | 7.1  | 4.8  |
| 60 | 419318 | AW969742  | Hs.291005 | ESTs                                     | 7.1  | 3.1  |
|    | 423003 | AL120077  | Hs.122967 | kelch (Drosophila)-like 2 (Mayven)       | 7.0  | 7.0  |
|    | 434460 | AA478486  | Hs.3852   | KIAA0368 protein                         | 7.0  | 4.8  |
|    | 433921 | AA618174  |           | gb:nq14f01.s1 NCL CGAP_Thy1 Homo sapiens | 7.0  | 7.0  |
|    | 418940 | H17739    | Hs.288513 | Human DNA sequence from clone RP5-899C14 | 7.0  | 7.0  |
| 65 | 410765 | AI694972  | Hs.66180  | nucleosome assembly protein 1-like 2     | 7.0  | 8.0  |
|    | 457012 | R41480    | Hs.302754 | ESTs                                     | 6.9  | 6.9  |
|    | 416018 | AW138239  | Hs.78977  | proprotein convertase subtilisin/kexin t | 6.9  | 14.0 |
|    | 445898 | AF070623  | Hs.13423  | Homo sapiens clone 24468 mRNA sequence   | 6.9  | 6.9  |
|    | 415669 | NM_005025 | Hs.78589  | serine (or cysteine) proteinase inhibito | 6.9  | 10.2 |
| 70 | 433558 | AA833757  | Hs.201769 | ESTs, Weakly similar to T24435 hypothe   | 6.9  | 6.9  |
|    | 409031 | AA376836  | Hs.288856 | ESTs                                     | 6.8  | 6.8  |
|    | 409339 | AB020686  | Hs.54037  | ectonucleotide pyrophosphatase/phosphodi | 6.8  | 3.6  |
|    | 436568 | H12049    | Hs.91564  | ESTs                                     | 6.8  | 6.8  |
|    | 442593 | R39804    | Hs.31961  | ESTs                                     | 6.7  | 6.7  |
| 75 | 437948 | AA772920  | Hs.303527 | ESTs                                     | 6.7  | 24.8 |
|    | 412266 | N59006    | Hs.26133  | ESTs                                     | 6.6  | 30.9 |
|    | 422980 | N46569    | Hs.76722  | CCAAT/enhancer binding protein (C/EBP),  | 6.6  | 45.2 |
|    | 442026 | AI243749  | Hs.8074   | brain-specific angiogenesis inhibitor 3  | 6.5  | 6.5  |
|    | 429946 | R49390    | Hs.254129 | KIAA1678                                 | 6.4  | 4.5  |
| 80 | 445279 | R41900    | Hs.22245  | ESTs                                     | 6.4  | 6.4  |
|    | 428414 | AL049980  | Hs.184216 | DKFZP564C152 protein                     | 6.4  | 6.4  |
|    | 407868 | NM_000950 | Hs.40637  | proline-rich Gla (G-carboxyglutamic acid | 6.4  | 3.3  |
|    | 434104 | AF116691  | Hs.116459 | hypothetical protein PRO2198             | 6.4  | 4.0  |
|    | 443244 | AI457235  | Hs.166479 | ESTs                                     | 6.3  | 3.0  |
|    | 442042 | AI990506  | Hs.8077   | Homo sapiens mRNA; cDNA DKFZp547E184 (fr | 6.2  | 6.2  |
|    | 444783 | AK001468  | Hs.62180  | anillin (Drosophila Scraps homolog), act | 6.2  | 43.2 |
|    | 428536 | AI143139  | Hs.2288   | visinin-like 1                           | 6.0  | 22.1 |

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|    |        |           |           |  |     |      |
|----|--------|-----------|-----------|--|-----|------|
|    | 415114 | D60468    | Hs.94181  | ESTs                                     | 6.0 | 6.0  |
|    | 448958 | AB020651  | Hs.22653  | KIAA0844 protein                         | 5.9 | 5.9  |
|    | 431467 | N71831    | Hs.256398 | Homo sapiens mRNA; cDNA DKFZp434E0528 (f | 5.9 | 6.0  |
| 5  | 447138 | AI439112  | Hs.93828  | ESTs, Weakly similar to 2109260A B cell  | 5.8 | 5.8  |
|    | 414545 | AA149287  | Hs.76605  | ESTs                                     | 5.8 | 3.6  |
|    | 418202 | N48521    | Hs.26549  | KIAA1708 protein                         | 5.8 | 5.8  |
|    | 410389 | AW954049  | Hs.8177   | ESTs, Weakly similar to PIHUB6 salivary  | 5.7 | 9.6  |
|    | 444124 | R43097    | Hs.6818   | ESTs                                     | 5.7 | 9.3  |
| 10 | 408065 | AW954272  |           | gb:EST366342 MAGE resequences, MAGC Homo | 5.6 | 5.6  |
|    | 448533 | AL119710  | Hs.21365  | nucleosome assembly protein 1-like 3     | 5.6 | 9.6  |
|    | 425523 | AB007948  | Hs.158244 | KIAA0479 protein                         | 5.6 | 35.0 |
|    | 459697 | AA406062  | Hs.98002  | ESTs                                     | 5.6 | 5.4  |
|    | 408428 | NM_014787 | Hs.44896  | DnaJ (Hsp40) homolog, subfamily B, membe | 5.6 | 5.6  |
| 15 | 420111 | AA255652  |           | gb:zs21h11.r1 NCI_CGAP_GCB1 Homo sapiens | 5.5 | 3.2  |
|    | 450149 | AW969781  | Hs.132863 | Zic family member 2 (odd-paired Drosophi | 5.4 | 5.4  |
|    | 424918 | R13982    | Hs.169309 | myelin-associated oligodendrocyte basic  | 5.3 | 5.3  |
|    | 438202 | AW169287  | Hs.22588  | ESTs                                     | 5.3 | 5.3  |
|    | 448605 | AL109678  | Hs.21597  | Homo sapiens mRNA full length insert cDN | 5.3 | 5.3  |
| 20 | 425580 | L11144    | Hs.1907   | galatin                                  | 5.3 | 3.5  |
|    | 418866 | T65754    |           | gb:yc11c07.s1 Stratagene lung (937210) H | 5.3 | 3.8  |
|    | 430091 | AB032958  | Hs.233023 | KIAA1132 protein                         | 5.3 | 4.9  |
|    | 448786 | BE048842  | Hs.179075 | Homo sapiens cDNA FLJ11881 fis, clone HE | 5.2 | 5.2  |
|    | 427283 | AL119796  | Hs.174185 | ectonucleotide pyrophosphatase/phosphodi | 5.2 | 3.0  |
|    | 415666 | H72693    |           | gb:yu03c11.r1 Soares fetal liver spleen  | 5.2 | 5.2  |
| 25 | 410240 | AL157424  | Hs.61289  | synaptotagmin 2                          | 5.2 | 4.6  |
|    | 428784 | Y12851    | Hs.193470 | purinergic receptor P2X, ligand-gated io | 5.2 | 7.7  |
|    | 446692 | Z44514    |           | Homo sapiens mRNA for KIAA1763 protein,  | 5.2 | 33.0 |
|    | 428508 | BE252383  | Hs.184668 | SBB131 protein                           | 5.2 | 4.1  |
| 30 | 446353 | AI290919  | Hs.153661 | ESTs                                     | 5.1 | 5.1  |
|    | 423135 | N67655    | Hs.26411  | ESTs                                     | 5.1 | 8.2  |
|    | 437331 | AL353933  | Hs.21710  | hypothetical protein DKFZp761G0313       | 5.1 | 5.1  |
|    | 413988 | M81883    | Hs.324784 | glutamate decarboxylase 1 (brain, 67kD)  | 5.1 | 5.1  |
|    | 429859 | NM_007050 | Hs.225952 | protein tyrosine phosphatase, receptor I | 5.1 | 5.1  |
| 35 | 411379 | AI816344  | Hs.12554  | ESTs, Weakly similar to NPL4_HUMAN NUCLE | 5.0 | 11.2 |
|    | 408068 | AW148652  | Hs.167398 | ESTs                                     | 5.0 | 5.0  |
|    | 415734 | NM_014747 | Hs.78748  | KIAA0237 gene product                    | 5.0 | 27.4 |
|    | 439607 | BE540565  | Hs.159460 | ESTs                                     | 5.0 | 5.6  |
|    | 425984 | AW836277  | Hs.165636 | hypothetical protein DKFZp761C07121      | 4.9 | 29.3 |
| 40 | 414631 | AW970130  | Hs.65406  | ESTs                                     | 4.9 | 4.9  |
|    | 437117 | AL049256  | Hs.122593 | ESTs                                     | 4.9 | 3.8  |
|    | 418527 | AA450386  | Hs.7149   | Homo sapiens cDNA: FLJ21950 fis, clone H | 4.9 | 4.9  |
|    | 425073 | W39609    | Hs.22003  | solute carrier family 6 (neurotransmitte | 4.9 | 4.9  |
|    | 455364 | H72176    | Hs.4273   | hypothetical protein FLJ13159            | 4.9 | 4.9  |
| 45 | 443150 | AI034467  | Hs.34650  | ESTs                                     | 4.9 | 7.6  |
|    | 422411 | AW749443  | Hs.22511  | ESTs                                     | 4.9 | 12.0 |
|    | 414931 | AK000342  | Hs.77646  | Homo sapiens mRNA; cDNA DKFZp761M0223 (f | 4.9 | 3.4  |
|    | 430456 | AA314998  | Hs.241503 | hypothetical protein                     | 4.8 | 4.7  |
|    | 428186 | AW504300  | Hs.295605 | mannosidase, alpha, class 2A, member 2   | 4.8 | 3.9  |
| 50 | 433516 | AA595802  | Hs.33410  | ESTs, Weakly similar to T17279 hypotheti | 4.8 | 4.8  |
|    | 427287 | NM_014903 | Hs.174188 | KIAA0938 protein                         | 4.8 | 4.8  |
|    | 416101 | R24854    | Hs.268806 | ESTs                                     | 4.8 | 3.3  |
|    | 447252 | R90916    | Hs.12449  | Homo sapiens transmembrane protein HTMP1 | 4.8 | 3.2  |
|    | 458268 | AA428403  | Hs.106131 | ESTs                                     | 4.7 | 3.9  |
| 55 | 440105 | AA694010  | Hs.6932   | Homo sapiens clone 23809 mRNA sequence   | 4.7 | 8.2  |
|    | 445102 | AW204610  | Hs.22270  | ESTs                                     | 4.7 | 19.2 |
|    | 419643 | F06066    | Hs.91791  | chromosome 11 open reading frame 25      | 4.7 | 4.7  |
|    | 414949 | C15314    | Hs.323349 | ESTs                                     | 4.7 | 3.8  |
|    | 453534 | NM_014796 | Hs.33187  | KIAA0748 gene product                    | 4.7 | 4.7  |
| 60 | 445729 | H21066    | Hs.13223  | Homo sapiens mRNA full length insert cDN | 4.7 | 4.0  |
|    | 451032 | W03692    | Hs.323079 | Homo sapiens mRNA; cDNA DKFZp564P116 (fr | 4.7 | 4.9  |
|    | 434792 | AA649253  | Hs.132458 | ESTs                                     | 4.7 | 3.8  |
|    | 447104 | R19085    | Hs.210706 | Homo sapiens cDNA FLJ13182 fis, clone NT | 4.7 | 3.0  |
|    | 430537 | X62692    | Hs.2593   | phosphodiesterase 6B, cGMP-specific, rod | 4.6 | 4.6  |
| 65 | 453431 | AF094754  | Hs.32973  | glycine receptor, beta                   | 4.6 | 4.6  |
|    | 453302 | NM_000838 | Hs.32945  | glutamate receptor, metabotropic 1       | 4.6 | 4.6  |
|    | 429876 | AB028977  | Hs.225974 | KIAA1054 protein                         | 4.6 | 16.8 |
|    | 451516 | AI800515  | Hs.12024  | ESTs                                     | 4.6 | 6.3  |
|    | 433670 | AA604405  |           | gb:nc87h09.s1 NCI_CGAP_AA1 Homo sapiens  | 4.6 | 3.9  |
| 70 | 437380 | AL359577  | Hs.112198 | Homo sapiens mRNA; cDNA DKFZp547M073 (fr | 4.5 | 3.8  |
|    | 410366 | AI267589  | Hs.302689 | hypothetical protein                     | 4.5 | 10.4 |
|    | 419191 | U17195    | Hs.89665  | A kinase (PRKA) anchor protein 6         | 4.5 | 4.5  |
|    | 429290 | AF203032  | Hs.198750 | neurofilament, heavy polypeptide (200kD) | 4.5 | 3.3  |
|    | 424932 | R14070    | Hs.315369 | Homo sapiens cDNA: FLJ23075 fis, clone L | 4.5 | 10.2 |
| 75 | 432736 | AA788898  | Hs.179902 | transporter-like protein                 | 4.4 | 4.0  |
|    | 421952 | AA300900  | Hs.98849  | ESTs, Moderately similar to AF161511 1 H | 4.4 | 3.2  |
|    | 428963 | AW382682  | Hs.258208 | Homo sapiens, clone MGC:15606, mRNA, com | 4.3 | 3.3  |
|    | 435040 | AI932350  | Hs.152825 | ESTs                                     | 4.3 | 4.7  |
|    | 451301 | AI769514  | Hs.209890 | EST                                      | 4.3 | 4.3  |
| 80 | 452381 | H23329    | Hs.290880 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 4.3 | 4.3  |
|    | 410305 | AF030409  | Hs.62185  | solute carrier family 9 (sodium/hydrogen | 4.3 | 7.8  |
|    | 433109 | N58907    | Hs.162430 | EST                                      | 4.3 | 3.9  |
|    | 431342 | AW971018  | Hs.21659  | ESTs                                     | 4.3 | 8.0  |
|    | 447163 | AW292770  | Hs.5542   | DnaJ (Hsp40) homolog, subfamily C, membe | 4.3 | 3.4  |

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|    |        |           |           |  |     |      |
|----|--------|-----------|-----------|--|-----|------|
|    | 422414 | AW875237  | Hs.13701  | ESTs                                     | 4.2 | 5.3  |
|    | 439274 | AF086092  | Hs.48372  | ESTs                                     | 4.2 | 18.3 |
|    | 423589 | AA328082  | Hs.209569 | ESTs                                     | 4.2 | 4.2  |
|    | 429956 | AI374651  | Hs.22542  | ESTs                                     | 4.2 | 3.2  |
| 5  | 427317 | AB028955  | Hs.175780 | KIAA1032 protein                         | 4.2 | 5.3  |
|    | 426847 | S78723    | Hs.298623 | 5-hydroxytryptamine (serotonin) receptor | 4.1 | 7.9  |
|    | 408206 | AF041853  | Hs.43670  | kinesin family member 3A                 | 4.1 | 4.1  |
|    | 433803 | AI823593  | Hs.27688  | ESTs                                     | 4.1 | 4.1  |
|    | 413024 | AF036268  | Hs.75149  | SH3-domain GRB2-like 2                   | 4.1 | 4.0  |
| 10 | 448117 | H49129    | Hs.172982 | ESTs                                     | 4.1 | 4.1  |
|    | 450600 | BE079478  | Hs.24880  | ESTs                                     | 4.1 | 3.9  |
|    | 429550 | AW293055  | Hs.119357 | ESTs                                     | 4.1 | 6.4  |
|    | 448681 | AL109781  | Hs.21754  | Homo sapiens mRNA full length insert cDN | 4.0 | 7.2  |
|    | 458694 | F12832    | Hs.3610   | ESTs                                     | 4.0 | 4.0  |
| 15 | 452197 | AW023595  | Hs.232048 | ESTs                                     | 4.0 | 4.0  |
|    | 423728 | AW891294  | Hs.132136 | solute carrier family 4, sodium bicarbon | 4.0 | 7.9  |
|    | 429656 | X05608    | Hs.211584 | neurofilament, light polypeptide (68kD)  | 4.0 | 13.1 |
|    | 448583 | NM_015239 | Hs.21542  | KIAA1035 protein                         | 4.0 | 4.0  |
|    | 419863 | AW952691  | Hs.93485  | Homo sapiens mRNA; cDNA DKFZp761D191 (fr | 3.9 | 21.4 |
| 20 | 442412 | R77677    | Hs.346644 | ESTs                                     | 3.9 | 3.9  |
|    | 424001 | W67883    | Hs.137476 | paternally expressed 10                  | 3.9 | 5.4  |
|    | 440293 | AI004193  | Hs.22123  | ESTs                                     | 3.9 | 3.9  |
|    | 422890 | Z43784    |           | ankyrin 3, node of Ranvier (ankyrin G)   | 3.9 | 3.6  |
|    | 426054 | U12431    | Hs.166109 | ELAV (embryonic lethal, abnormal vision, | 3.9 | 3.9  |
| 25 | 412949 | AI471639  | Hs.71913  | ESTs                                     | 3.8 | 3.7  |
|    | 427457 | AW779105  | Hs.164682 | ESTs                                     | 3.8 | 11.1 |
|    | 416530 | U62801    | Hs.79361  | kallikrein 6 (neurosin, zyme)            | 3.8 | 4.4  |
|    | 442676 | AI733585  | Hs.130897 | ESTs                                     | 3.8 | 3.8  |
|    | 434998 | AW975157  | Hs.26037  | ESTs                                     | 3.7 | 3.7  |
| 30 | 424945 | AI221919  |           | hypothetical protein FLJ10582            | 3.7 | 30.5 |
|    | 415257 | F03016    | Hs.27513  | ESTs                                     | 3.7 | 8.6  |
|    | 407886 | AW969688  | Hs.100826 | ESTs                                     | 3.7 | 20.2 |
|    | 400844 |           |           | NM_003105*:Homo sapiens sortilin-related | 3.7 | 3.1  |
|    | 456765 | AI497900  | Hs.33067  | ESTs                                     | 3.7 | 3.7  |
| 35 | 430287 | AW182459  | Hs.125759 | ESTs, Weakly similar to LEU5_HUMAN LEUKE | 3.6 | 7.6  |
|    | 452667 | T87219    | Hs.13219  | ESTs                                     | 3.6 | 3.6  |
|    | 436773 | AW078629  |           | PC4 and SFRS1 interacting protein 1      | 3.6 | 3.6  |
|    | 424120 | T80579    | Hs.290270 | ESTs                                     | 3.6 | 14.7 |
|    | 446574 | AI310135  | Hs.335933 | ESTs                                     | 3.6 | 3.5  |
| 40 | 432453 | AI885537  | Hs.27172  | ESTs, Moderately similar to PC4259 ferri | 3.6 | 3.9  |
|    | 408119 | W26213    | Hs.101672 | ESTs, Weakly similar to T00331 hypotheti | 3.6 | 3.6  |
|    | 449093 | AB035356  | Hs.22998  | neurexin 1                               | 3.6 | 3.6  |
|    | 439239 | AI031540  | Hs.235331 | ESTs                                     | 3.6 | 49.5 |
|    | 451625 | R56793    | Hs.106576 | alanine-glyoxylate aminotransferase 2-li | 3.6 | 4.1  |
| 45 | 435059 | Z45270    | Hs.235873 | hypothetical protein FLJ22672            | 3.6 | 4.8  |
|    | 423346 | AI267677  | Hs.127416 | synaptojanin 1                           | 3.6 | 20.1 |
|    | 442738 | AW002370  | Hs.131055 | ESTs, Weakly similar to NPM_HUMAN NUCLEO | 3.5 | 3.5  |
|    | 442106 | AW205881  | Hs.326728 | ESTs                                     | 3.5 | 3.2  |
|    | 449117 | AW449310  | Hs.210262 | ESTs, Weakly similar to HSS2_HUMAN HEPAR | 3.5 | 3.5  |
| 50 | 405819 |           |           | NM_002578:Homo sapiens p21 (CDKN1A)-acti | 3.5 | 13.5 |
|    | 452311 | AW304029  | Hs.252744 | ESTs                                     | 3.5 | 3.5  |
|    | 448902 | Z45998    | Hs.22543  | Homo sapiens mRNA; cDNA DKFZp7611912 (f  | 3.5 | 21.8 |
|    | 410224 | M55513    | Hs.150208 | potassium voltage-gated channel, shaker- | 3.4 | 3.4  |
|    | 400098 |           |           | Eos Control                              | 3.4 | 3.4  |
| 55 | 428001 | H97428    | Hs.219907 | ESTs, Moderately similar to Transforming | 3.4 | 5.9  |
|    | 437268 | AI754847  | Hs.227571 | regulator of G-protein signalling 4      | 3.4 | 14.0 |
|    | 443682 | AI383061  | Hs.47248  | ESTs, Highly similar to similar to Cdc14 | 3.4 | 3.3  |
|    | 417417 | F05745    | Hs.89512  | ATPase, Ca transporting, plasma membrane | 3.3 | 17.1 |
|    | 419629 | AB020695  | Hs.91662  | KIAA0888 protein                         | 3.3 | 13.4 |
| 60 | 419852 | AW503756  | Hs.286184 | hypothetical protein dJ551D2.5           | 3.3 | 4.1  |
|    | 417063 | N50515    | Hs.45061  | ESTs                                     | 3.3 | 3.3  |
|    | 435071 | D60683    | Hs.35495  | ESTs                                     | 3.3 | 3.3  |
|    | 446377 | AW014022  | Hs.170953 | ESTs                                     | 3.3 | 3.3  |
|    | 412453 | R20205    | Hs.75236  | ESTs                                     | 3.3 | 3.3  |
| 65 | 450561 | R49674    | Hs.25909  | ESTs                                     | 3.3 | 3.3  |
|    | 423829 | R44107    | Hs.240905 | ESTs                                     | 3.3 | 4.4  |
|    | 415527 | F11624    |           | gb:HSC22D101 normalized infant brain cDN | 3.3 | 3.3  |
|    | 427386 | AW836261  | Hs.6727   | ESTs                                     | 3.3 | 3.3  |
|    | 425121 | AI797511  | Hs.154679 | synaptotagmin 1                          | 3.2 | 3.9  |
| 70 | 452856 | AF034799  | Hs.30881  | protein tyrosine phosphatase, receptor t | 3.2 | 10.7 |
|    | 442879 | AF032922  | Hs.8813   | syntaxin binding protein 3               | 3.2 | 3.2  |
|    | 417284 | N62889    | Hs.107242 | Homo sapiens cDNA FLJ12965 fis, clone NT | 3.2 | 3.2  |
|    | 416805 | F13271    | Hs.79981  | Human clone 23560 mRNA sequence          | 3.2 | 6.7  |
|    | 429477 | AI275514  | Hs.6658   | ESTs                                     | 3.2 | 3.2  |
| 75 | 453169 | AB037815  | Hs.32156  | KIAA1394 protein                         | 3.2 | 5.7  |
|    | 408039 | AA131424  | Hs.336636 | ESTs                                     | 3.2 | 3.2  |
|    | 426269 | H15302    | Hs.168950 | Homo sapiens mRNA; cDNA DKFZp566A1046 (f | 3.2 | 22.1 |
|    | 409746 | NM_004794 | Hs.56294  | RAB33A, member RAS oncogene family       | 3.2 | 10.6 |
|    | 416874 | H98752    | Hs.42568  | ESTs                                     | 3.2 | 6.0  |
| 80 | 453919 | AW959912  | Hs.7076   | KIAA1705 protein                         | 3.2 | 3.2  |
|    | 444861 | R46789    | Hs.76118  | ubiquitin carboxyl-terminal esterase L1  | 3.2 | 3.2  |
|    | 433315 | R96754    | Hs.239706 | GRB2-associated binding protein 1        | 3.2 | 3.1  |
|    | 419103 | Z40229    | Hs.96423  | hypothetical protein FLJ23033            | 3.2 | 8.4  |

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|----|--------|-----------|-----------|---|-----|------|
| 5  | 424140 | Z48051    | Hs.141308 | myelin oligodendrocyte glycoprotein       | 3.2 | 56.0 |
|    | 421790 | AW896201  | Hs.22654  | sodium channel, voltage-gated, type I, a  | 3.2 | 4.1  |
|    | 432809 | AA565509  | Hs.131703 | ESTs                                      | 3.1 | 9.9  |
|    | 445225 | AI216555  | Hs.202398 | ESTs                                      | 3.1 | 5.5  |
|    | 424087 | N69333    | Hs.143434 | contactin 1                               | 3.1 | 3.1  |
| 10 | 437924 | AI935344  | Hs.164118 | ESTs, Weakly similar to SL51_HUMAN SODIU  | 3.1 | 3.2  |
|    | 419683 | AA248897  | Hs.48784  | ESTs                                      | 3.1 | 5.9  |
|    | 420173 | AA256151  | Hs.22999  | ESTs                                      | 3.1 | 4.1  |
|    | 411666 | AF106564  | Hs.71346  | neurofilament 3 (150kD medium)            | 3.1 | 6.6  |
|    | 416220 | N49776    | Hs.170994 | hypothetical protein MGC10946             | 3.1 | 4.5  |
| 15 | 425138 | H08849    | Hs.167464 | glutamate receptor, ionotropic, N-methyl  | 3.1 | 4.2  |
|    | 422234 | AF119818  | Hs.113287 | discs, large (Drosophila) homolog-associ  | 3.1 | 3.1  |
|    | 445194 | AI215667  | Hs.175044 | ESTs                                      | 3.1 | 3.1  |
|    | 438054 | AA776626  | Hs.169309 | ESTs                                      | 3.1 | 10.2 |
|    | 432149 | AW614326  | Hs.133483 | ESTs, Weakly similar to T34549 probable   | 3.1 | 12.2 |
| 20 | 445725 | AK000956  | Hs.13209  | hypothetical protein FLJ10094             | 3.0 | 3.0  |
|    | 414245 | BE148072  | Hs.75850  | WAS protein family, member 1              | 3.0 | 11.7 |
|    | 447673 | AI823987  | Hs.182285 | ESTs                                      | 3.0 | 3.0  |
|    | 428392 | H10233    | Hs.2265   | secretory granule, neuroendocrine protei  | 3.0 | 42.3 |
|    | 418410 | AA811441  | Hs.107393 | chromosome 3 open reading frame 4         | 3.0 | 3.9  |
| 25 | 429024 | AI652297  | Hs.119302 | complement-c1q tumor necrosis factor-rel  | 3.0 | 3.7  |
|    | 426919 | AL041228  |           | ELAV (embryonic lethal, abnormal vision,  | 3.0 | 9.0  |
|    | 424724 | T06532    | Hs.287709 | Homo sapiens cDNA: FLJ22674 fis, clone H  | 3.0 | 3.0  |
|    | 410011 | AB020641  | Hs.57856  | PFTAIRES protein kinase 1                 | 3.0 | 10.0 |
|    | 408947 | AL080093  | Hs.49117  | Homo sapiens mRNA; cDNA DKFZp564N1662 (f  | 3.0 | 13.5 |
| 30 | 426325 | D28114    | Hs.169309 | myelin-associated oligodendrocyte basic   | 2.9 | 81.1 |
|    | 429006 | AA443143  | Hs.50929  | hypothetical protein FLJ13642             | 2.9 | 6.6  |
|    | 410711 | AB002316  | Hs.65746  | KIAA0318 protein                          | 2.9 | 6.1  |
|    | 415486 | H12214    | Hs.13284  | ESTs, Weakly similar to 2109260A B cell   | 2.9 | 15.7 |
|    | 424474 | AA308883  | Hs.148580 | calcyon; D1 dopamine receptor-interactin  | 2.9 | 3.6  |
| 35 | 448299 | AA497044  | Hs.20887  | hypothetical protein FLJ10392             | 2.9 | 11.5 |
|    | 419518 | U79289    | Hs.90798  | Human clone 23695 mRNA sequence           | 2.9 | 3.6  |
|    | 426529 | AF090100  | Hs.170241 | Homo sapiens clone IMAGE 23915            | 2.9 | 5.1  |
|    | 430347 | NM_002039 | Hs.239706 | GRB2-associated binding protein 1         | 2.9 | 3.2  |
|    | 429401 | AW296102  | Hs.99272  | ESTs, Weakly similar to S32567 A4 protei  | 2.9 | 6.1  |
| 40 | 450154 | R15891    | Hs.281587 | Human (clone CTG-A4) mRNA sequence        | 2.9 | 5.9  |
|    | 434277 | X77748    | Hs.3786   | glutamate receptor, metabotropic 3        | 2.8 | 28.5 |
|    | 424790 | AL119344  | Hs.13326  | ESTs, Weakly similar to 2004399A chromos  | 2.8 | 23.1 |
|    | 416836 | D54745    | Hs.80247  | cholecystokinin                           | 2.8 | 6.8  |
|    | 449277 | AA001064  | Hs.43670  | ESTs                                      | 2.8 | 8.5  |
| 45 | 451952 | AL120173  | Hs.301663 | ESTs                                      | 2.7 | 19.2 |
|    | 408554 | AA836381  | Hs.315111 | nuclear receptor co-repressor/HDAC3 comp  | 2.7 | 3.7  |
|    | 413408 | R51793    | Hs.1440   | DEAD/H (Asp-Glu-Ala-Asp/His) box polypep  | 2.7 | 3.0  |
|    | 410343 | AA084273  | Hs.76561  | ESTs, Weakly similar to S47072 finger pr  | 2.7 | 3.2  |
|    | 420489 | AA815089  | Hs.193513 | ESTs                                      | 2.7 | 4.1  |
| 50 | 447359 | NM_012093 | Hs.18268  | adenylate kinase 5                        | 2.7 | 17.2 |
|    | 423731 | T08814    |           | gb:EST06706 infant Brain, Bento Soares H  | 2.7 | 4.0  |
|    | 409953 | AA332277  | Hs.57691  | cadherin 18, type 2                       | 2.7 | 5.5  |
|    | 424481 | R19453    | Hs.1787   | proteolipid protein 1 (Pelizaeus-Merzbac  | 2.7 | 11.5 |
|    | 449714 | AB033015  | Hs.23941  | KIAA1189 protein                          | 2.7 | 7.5  |
| 55 | 424922 | BE386547  | Hs.217112 | hypothetical protein MGC10825             | 2.7 | 3.7  |
|    | 432447 | X92681    | Hs.2998   | contactin 2 (axonal)                      | 2.7 | 4.1  |
|    | 420071 | AB028985  | Hs.94806  | ATP-binding cassette, sub-family A (ABC1  | 2.7 | 5.1  |
|    | 438068 | AI927209  | Hs.306210 | Homo sapiens cDNA: FLJ23133 fis, clone L  | 2.6 | 5.1  |
|    | 418512 | AW498974  |           | diacylglycerol kinase, zeta (104kD)       | 2.6 | 7.9  |
| 60 | 447761 | AF061573  | Hs.19492  | protocadherin 8                           | 2.6 | 6.3  |
|    | 448743 | AB032962  | Hs.21896  | KIAA1136 protein                          | 2.6 | 23.2 |
|    | 408547 | AA574291  | Hs.57837  | ESTs                                      | 2.6 | 4.0  |
|    | 426380 | AI291267  | Hs.149990 | ESTs                                      | 2.6 | 6.9  |
|    | 420898 | AB002379  | Hs.100113 | KIAA0381 protein                          | 2.6 | 3.7  |
| 65 | 440357 | AA379353  | Hs.20950  | phospholysine phosphohistidine inorganic  | 2.6 | 3.7  |
|    | 424572 | M19650    |           | 2',3'-cyclic nucleotide 3' phosphodiester | 2.6 | 5.9  |
|    | 418338 | NM_002522 | Hs.84154  | neuronal pentraxin I                      | 2.5 | 6.1  |
|    | 427658 | H61387    | Hs.30868  | nogo receptor                             | 2.5 | 3.0  |
|    | 410359 | R38624    | Hs.106313 | ESTs                                      | 2.5 | 6.3  |
| 70 | 449717 | AB040935  | Hs.23954  | cerebral cell adhesion molecule           | 2.5 | 4.5  |
|    | 424458 | M29273    | Hs.1780   | myelin associated glycoprotein            | 2.5 | 10.1 |
|    | 450133 | AW969769  | Hs.105201 | ESTs                                      | 2.5 | 40.5 |
|    | 428976 | AL037824  | Hs.194695 | ras homolog gene family, member I         | 2.5 | 17.4 |
|    | 454293 | H49739    | Hs.134013 | ESTs, Moderately similar to HK61_HUMAN H  | 2.5 | 9.5  |
| 75 | 408447 | AK002089  | Hs.45080  | Homo sapiens cDNA FLJ11227 fis, clone PL  | 2.5 | 3.9  |
|    | 414683 | S78296    | Hs.76888  | hypothetical protein MGC12702             | 2.5 | 7.1  |
|    | 422927 | AW247388  | Hs.301423 | calcium binding protein 1 (calbrain)      | 2.5 | 3.0  |
|    | 449568 | AL157479  | Hs.23740  | KIAA1598 protein                          | 2.5 | 3.6  |
|    | 454053 | AW023006  | Hs.27172  | ESTs, Moderately similar to PC4259 ferri  | 2.5 | 3.6  |
| 80 | 428495 | NM_013279 | Hs.184640 | hypothetical protein MGC10781             | 2.5 | 3.2  |
|    | 431096 | AA324358  | Hs.249227 | Homo sapiens DNA, cosmid clones TN62 and  | 2.4 | 3.6  |
|    | 452371 | R40990    | Hs.21658  | ESTs                                      | 2.4 | 3.3  |
|    | 424997 | AL138167  | Hs.96920  | ESTs                                      | 2.4 | 6.2  |
|    | 450310 | N62341    | Hs.94116  | ESTs                                      | 2.4 | 3.6  |
|    | 452898 | AA814497  | Hs.78792  | ESTs                                      | 2.4 | 3.9  |
|    | 436734 | AI937612  | Hs.273758 | hypothetical protein FLJ23112             | 2.4 | 4.7  |
|    | 421931 | NM_000814 | Hs.1440   | gamma-aminobutyric acid (GABA) A recepto  | 2.4 | 3.1  |



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|    |        |           |           |   |     |      |
|----|--------|-----------|-----------|---|-----|------|
|    | 439428 | AA835825  | Hs.190490 | ESTs                                      | 2.4 | 3.0  |
|    | 445255 | NM_014841 | Hs.12477  | synaplosomal-associated protein, 91 kDa   | 2.4 | 8.1  |
|    | 436420 | AA443966  | Hs.31595  | ESTs                                      | 2.4 | 3.7  |
| 5  | 408822 | AW500715  | Hs.57079  | Homo sapiens cDNA FLJ13267 fis, clone OV  | 2.4 | 3.0  |
|    | 451407 | AA131376  | Hs.343809 | fibroblast growth factor 12B              | 2.4 | 7.2  |
|    | 419757 | AA773820  | Hs.63970  | ESTs                                      | 2.4 | 3.3  |
|    | 446100 | AW967109  | Hs.13804  | hypothetical protein dJ462O23.2           | 2.4 | 3.6  |
|    | 439199 | R40373    | Hs.26299  | ESTs                                      | 2.3 | 9.5  |
| 10 | 427627 | R87582    | Hs.179915 | guanine nucleotide binding protein (G pr  | 2.3 | 5.6  |
|    | 454048 | H05626    | Hs.6921   | ESTs                                      | 2.3 | 9.9  |
|    | 412675 | AA460716  | Hs.9788   | hypothetical protein MGC10924 similar to  | 2.3 | 3.3  |
|    | 434811 | AW971205  | Hs.114280 | ESTs                                      | 2.3 | 6.7  |
|    | 431677 | AK000496  | Hs.306989 | hypothetical protein FLJ20489             | 2.3 | 3.1  |
| 15 | 451386 | AB029006  | Hs.26334  | spastic paraplegia 4 (autosomal dominant  | 2.3 | 3.1  |
|    | 447028 | AI973128  | Hs.167257 | brain link protein-1                      | 2.3 | 5.6  |
|    | 451050 | AW937420  | Hs.69662  | ESTs                                      | 2.3 | 4.4  |
|    | 437397 | AA349847  | Hs.4221   | hypothetical protein DKFZp761H039         | 2.3 | 4.8  |
|    | 408838 | AI669535  | Hs.40369  | ESTs                                      | 2.3 | 3.0  |
| 20 | 408777 | U71204    | Hs.47626  | Ric (Drosophila)-like, expressed in neur  | 2.3 | 3.8  |
|    | 453924 | R49295    | Hs.24886  | ESTs                                      | 2.3 | 13.4 |
|    | 422709 | AA315331  | Hs.153485 | ESTs                                      | 2.3 | 4.4  |
|    | 438911 | AF085841  | Hs.301920 | ESTs                                      | 2.3 | 3.3  |
|    | 439108 | AW163034  | Hs.6467   | synaptogyrin 3                            | 2.2 | 6.9  |
| 25 | 420297 | AI628272  | Hs.88323  | ESTs, Weakly similar to ALU1_HUMAN ALU S  | 2.2 | 4.1  |
|    | 404819 |           |           | NM_002688*.Homo sapiens peanut (Drosophi  | 2.2 | 5.8  |
|    | 422544 | AB018259  | Hs.118140 | KIAA0716 gene product                     | 2.2 | 11.8 |
|    | 433597 | AA708205  | Hs.100343 | ESTs                                      | 2.2 | 11.0 |
|    | 440152 | AB002376  | Hs.7006   | KIAA0378 protein                          | 2.2 | 14.2 |
| 30 | 418375 | NM_003081 | Hs.84389  | synaplosomal-associated protein, 25kD     | 2.2 | 82.9 |
|    | 409892 | AW956113  | Hs.7149   | gb. EST368183 MAGE resequences, MAGD Homo | 2.2 | 4.2  |
|    | 425287 | R88249    | Hs.155524 | peanut (Drosophila)-like 2                | 2.2 | 6.0  |
|    | 433657 | AI244368  | Hs.8124   | PH domain containing protein in retina 1  | 2.2 | 5.0  |
|    | 438703 | AI803373  | Hs.31599  | ESTs                                      | 2.2 | 6.2  |
| 35 | 428845 | AL157579  | Hs.153610 | KIAA0751 gene product                     | 2.2 | 6.7  |
|    | 417865 | AW086059  | Hs.6529   | ESTs, Weakly similar to I78885 serine/th  | 2.2 | 3.5  |
|    | 425897 | AA935315  | Hs.48965  | Homo sapiens cDNA: FLJ21693 fis, clone C  | 2.2 | 3.2  |
|    | 419271 | N34901    | Hs.238532 | ESTs                                      | 2.2 | 7.5  |
|    | 448548 | R13209    | Hs.21413  | solute carrier family 12, (potassium-chl  | 2.2 | 7.3  |
| 40 | 439415 | F05538    | Hs.4273   | ESTs                                      | 2.2 | 31.3 |
|    | 415170 | R44386    | Hs.164578 | ESTs                                      | 2.2 | 10.9 |
|    | 423641 | AL137256  | Hs.130489 | ATPase, aminophospholipid transporter-li  | 2.1 | 6.2  |
|    | 443728 | AI083876  | Hs.148383 | ESTs                                      | 2.1 | 4.1  |
|    | 452108 | AW135982  | Hs.203013 | hypothetical protein FLJ12748             | 2.1 | 5.7  |
| 45 | 429037 | X81895    | Hs.194765 | H.sapiens GENX-5624 mRNA, 3' UTR          | 2.1 | 7.1  |
|    | 418900 | BE207357  | Hs.3454   | KIAA1821 protein                          | 2.1 | 4.3  |
|    | 421268 | AI126821  | Hs.30514  | ESTs                                      | 2.1 | 4.2  |
|    | 446372 | AB020644  | Hs.14945  | long fatty acyl-CoA synthetase 2 gene     | 2.1 | 15.6 |
|    | 425741 | AF052152  | Hs.159412 | Homo sapiens clone 24628 mRNA sequence    | 2.1 | 6.5  |
| 50 | 450214 | BE439763  | Hs.227571 | regulator of G-protein signalling 4       | 2.1 | 3.3  |
|    | 452738 | AL133800  | Hs.7086   | hypothetical protein MGC12435             | 2.1 | 3.5  |
|    | 447877 | AI435184  | Hs.164252 | ESTs                                      | 2.1 | 5.1  |
|    | 422421 | AA325138  | Hs.235873 | hypothetical protein FLJ22672             | 2.1 | 8.3  |
|    | 432882 | NM_013257 | Hs.279696 | serum/glucocorticoid regulated kinase-li  | 2.1 | 4.2  |
| 55 | 410631 | AA086469  | Hs.47171  | ESTs                                      | 2.1 | 5.8  |
|    | 407808 | AA663559  | Hs.279789 | histone deacetylase 3                     | 2.1 | 5.7  |
|    | 424379 | Z42034    | Hs.93597  | cyclin-dependent kinase 5, regulatory su  | 2.1 | 3.2  |
|    | 448410 | AK000227  | Hs.21126  | hypothetical protein FLJ20220             | 2.1 | 3.0  |
|    | 433932 | AW954599  | Hs.169330 | neuronal protein                          | 2.1 | 6.9  |
| 60 | 425130 | AA448208  | Hs.99163  | ESTs                                      | 2.1 | 3.1  |
|    | 402027 |           |           | Target Exon                               | 2.0 | 3.5  |
|    | 435191 | R15912    | Hs.4817   | Homo sapiens clone 24461 mRNA sequence    | 2.0 | 7.5  |
|    | 420547 | AF155140  | Hs.98738  | gonadotropin-regulated testicular RNA he  | 2.0 | 10.7 |
|    | 404541 |           |           | NM_030795.Homo sapiens stathmin-like 4 (  | 2.0 | 6.0  |
| 65 | 420050 | AL118615  | Hs.94653  | neurochondrin                             | 2.0 | 6.5  |
|    | 417868 | AI078534  | Hs.122592 | ESTs                                      | 2.0 | 5.6  |
|    | 416602 | NM_006159 | Hs.79389  | nel (chicken)-like 2                      | 2.0 | 3.2  |
|    | 436315 | BE390513  | Hs.27935  | hypothetical protein MGC4837              | 2.0 | 4.2  |
|    | 439340 | AB032436  | Hs.6535   | brain-specific Na-dependent inorganic ph  | 2.0 | 6.3  |
| 70 | 429900 | AA460421  | Hs.30875  | ESTs                                      | 2.0 | 4.2  |
|    | 437762 | T78028    | Hs.154679 | synaptotagmin I                           | 2.0 | 4.6  |
|    | 425172 | AA447729  | Hs.12714  | ESTs                                      | 2.0 | 3.1  |
|    | 419587 | S62907    | Hs.91343  | gamma-aminobutyric acid (GABA) A recepto  | 2.0 | 3.1  |
|    | 451734 | NM_006176 | Hs.26944  | neurogranin (protein kinase C substrate,  | 2.0 | 4.9  |
| 75 | 423603 | AB007880  | Hs.129883 | Homo sapiens KIAA0420 mRNA, complete cds  | 2.0 | 4.3  |
|    | 438277 | AL022326  | Hs.6139   | synaptogyrin 1                            | 2.0 | 3.4  |
|    | 423767 | H18283    | Hs.132753 | F-box only protein 2                      | 2.0 | 3.2  |
|    | 434933 | R91095    | Hs.4276   | KIAA1701 protein                          | 2.0 | 6.1  |
|    | 426575 | M74826    | Hs.170808 | glutamate decarboxylase 2 (pancreatic is  | 2.0 | 4.6  |

80

TABLE 18B:

Pkey: Unique Eos probeset identifier number  
 CAT number: Gene cluster number  
 Accession: Genbank accession numbers

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| Pkey   | CAT Number | Accession   |
|--------|------------|---|
| 408065 | 103646_1   | AW954272 AI003154 AA059300 AA046911   |
| 415527 | 1539393_1  | F11624 Z43212 H08936 R56332 H09256 R52303 R13075  |
| 415665 | 1543492_1  | H72693 R08673 H72694 F20990 R08580  |
| 418512 | 176394_1   | AW498974 T09332 R58460 AA350990 T33786 T30936 AA350905 T08592 T09274 AA224297 D54678 T08951 R15346 AW953188 AA350074 AW890649   |
| 418866 | 179788_1   | T65754 AA229857 AA229658  |
| 420111 | 190755_1   | AA255652 AA280911 AW967920 AA262684   |
| 422890 | 222707_1   | Z43784 R13382 AW572911 AA449369 H17037 R19603 AI632555 AW004030 BE502530 Z25032 AA805324 AA449241 AI651825 AI264863 AW196918 AA948267 AI953735 AI263703 AA319159 AW964436 AI903440 AW594171 AI867447 AW204071 AW956110 C15616 D61142 H17038 AW162343 T87230 AI3 |
| 423731 | 231466_1   | T08814 H19198 AL120536 AA330218 AW961552 N47159   |
| 424572 | 24097_1    | M19650 R18810 R18721 AW896146 AW889520 AA192362 AA176814 F12085 BE255264 BE251393 T65248 AA380585 AA380465 BE408684 AA459037 AW498869 AA776107 BE274289 D45269 M61958 AA378818 AW663180 AW672958 H08611 M78164 BE393721 AA348660 R36303 AW498662 AA019090 AA001 |
| 424945 | 245223_1   | AI221919 Z19967 AA348780 AW964077 AW166028 BE540193 N94800 AA452368 N99604 AI341345 AW298800 AA724961 AA931158 AI741227 AI806660 AI982626 D81263 D53937 D52496 AA974487 AW043854 N50483 Z39997 AI492961 AI361526 F04002 AA452141 T23551 AI472655 AI193667 AI341 |
| 426919 | 273507_1   | AL041228 D82004 D61361 AI203314 AI990307 AW900295 AI018308 AW087473 AW183530 AA393346 H50055 AA935601   |
| 433670 | 372721_1   | AA604405 BE062234 AW748386  |
| 433921 | 377350_1   | AA618174 AI114549 R36464 R36465   |
| 433940 | 37787_1    | H05129 N63433 AI651350 AA984734 AI368716 N40915 AI989705 F09042 T03905 R88588 AF112220  |
| 436773 | 426857_1   | AW078629 AI857375 N64357 AA731069   |
| 446692 | 689623_1   | Z44514 AI352097 AI803984 AW235923 AW196558 AI954637 AI336983  |

## TABLE 18C:

|              |   |
|--------------|---|
| Pkey:        | Unique number corresponding to an Eos probeset  |
| Ref:         | Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495. |
| Strand:      | Indicates DNA strand from which exons were predicted.   |
| Nt_position: | Indicates nucleotide positions of predicted exons.  |

| Pkey   | Ref     | Strand | Nt_position   |
|--------|---------|--------|---|
| 400844 | 9188605 | Plus   | 24745-24872,25035-25204   |
| 402027 | 7522350 | Plus   | 51645-51888,52917-53005   |
| 404541 | 8318559 | Plus   | 103456-103664   |
| 404819 | 4678240 | Plus   | 16223-16319,16427-16513,16736-16859,16941-17075,17170-17287,17389-17529,18261-18357,18443-18578 |
| 405560 | 183148  | Plus   | 5495-5655,6077-6241,6495-6692   |
| 405819 | 4007557 | Plus   | 2830-2967   |
| 406311 | 9211559 | Minus  | 137114-139033   |

## TABLE 19A: ABOUT 356 CNS-ENRICHED GENES SIGNIFICANTLY DOWN-REGULATED IN GLIOBLASTOMA COMPARED TO NORMAL ADULT CNS

Table 19A lists about 356 CNS-enriched genes significantly down-regulated in glioblastoma compared to normal adult CNS tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" normal CNS to "average" glioblastoma was greater than or equal to 2. The "average" normal CNS level was set to the 85<sup>th</sup> percentile amongst various normal CNS tissues. The "average" glioblastoma level was set to the 85<sup>th</sup> percentile amongst various tumor samples. To enrich for CNS specific genes, the ratio of "average" CNS to "average" non-CNS normal adult tissues was calculated to be greater than or equal to 3. The "average" CNS level was set to the 85<sup>th</sup> percentile amongst various CNS tissues. The "average" normal non-CNS adult tissue level was set to the 95<sup>th</sup> percentile amongst various non-CNS normal tissues. In order to remove gene-specific background levels of non-specific hybridization, the 10<sup>th</sup> percentile value amongst non-malignant tissues was subtracted from both the numerator and the denominator before the ratios were evaluated.

|                |   |
|----------------|---|
| Pkey:          | Unique Eos probeset identifier number               |
| ExAccn:        | Exemplar Accession number, Genbank accession number |
| UnigenelD:     | Unigene number                                      |
| Unigene Title: | Unigene gene title                                  |
| R1:            | Ratio of CNS to Glioblastoma                        |
| R2:            | Ratio of CNS to NON-CNS NORMAL ADULT TISSUES        |

| Pkey   | ExAccn    | UnigenelD | Unigene Title                            | R1   | R2   |
|--------|-----------|-----------|--|------|------|
| 425489 | M58594    | Hs.1905   | prolactin                                | 24.8 | 10.5 |
| 410330 | AW023630  | Hs.159425 | ESTs                                     | 23.4 | 23.4 |
| 430538 | AB032435  | Hs.242821 | differentiation-associated Na-dependent  | 22.6 | 22.6 |
| 417275 | X63578    | Hs.295449 | parvalbumin                              | 22.4 | 6.0  |
| 428505 | AL035461  | Hs.2281   | chromogranin B (secretogranin 1)         | 21.8 | 21.8 |
| 408040 | AI266496  | Hs.22905  | ESTs, Weakly similar to RHG6_HUMAN RHQ-G | 19.4 | 19.4 |
| 435145 | AI277259  | Hs.116631 | ESTs                                     | 18.5 | 3.8  |
| 407039 | X00368    |           | gb:Human prolactin gene 5' region.       | 18.1 | 18.1 |
| 409263 | AA069573  | Hs.50319  | ESTs                                     | 16.8 | 16.8 |
| 432298 | AL118812  | Hs.274293 | Homo sapiens mRNA; cDNA DKFZp761G1111 (f | 15.1 | 15.1 |
| 424645 | NM_014682 | Hs.151449 | KIAA0535 gene product                    | 15.1 | 15.1 |
| 416018 | AW138239  | Hs.78977  | proprotein convertase subtilisin/kexin t | 14.0 | 14.0 |
| 405560 | AW887701  |           | hypothetical protein FLJ20628            | 13.9 | 8.0  |
| 452022 | AW072330  | Hs.293875 | ESTs                                     | 13.8 | 13.8 |
| 413324 | V00571    | Hs.75294  | corticotropin releasing hormone          | 13.2 | 13.2 |
| 411498 | NM_014210 | Hs.70499  | ecotropic viral integration site 2A      | 12.9 | 19.4 |
| 423449 | AI497900  | Hs.33067  | ESTs                                     | 12.4 | 14.5 |
| 433940 | H05129    |           | cyclic AMP-regulated phosphoprotein, 21  | 12.0 | 12.0 |
| 410657 | AF063228  | Hs.65248  | dynein, cytoplasmic, intermediate polype | 11.5 | 11.5 |
| 449078 | AK001256  | Hs.22975  | KIAA1576 protein                         | 11.0 | 16.1 |
| 410635 | D58863    | Hs.334372 | chorionic somatomammotropin hormone 1 (p | 11.0 | 6.6  |
| 453165 | S74727    | Hs.32042  | aspartoacylase (aminoacylase 2, Canavan  | 10.7 | 10.7 |
| 417167 | AW206437  | Hs.4290   | ESTs                                     | 10.4 | 10.4 |
| 420033 | D59502    | Hs.292590 | ESTs                                     | 10.4 | 10.4 |
| 413293 | AL047483  | Hs.302498 | GTP-binding protein homologous to Saccha | 10.0 | 10.0 |

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|    |        |           |           |  |     |      |
|----|--------|-----------|-----------|--|-----|------|
|    | 418207 | C14685    | Hs.34772  | ESTs                                     | 9.8 | 9.8  |
|    | 417175 | R44558    | Hs.94002  | ESTs                                     | 9.6 | 8.9  |
|    | 444330 | AI597655  | Hs.49265  | ESTs                                     | 9.1 | 9.1  |
| 5  | 427322 | AK002017  | Hs.176227 | hypothetical protein FLJ11155            | 8.9 | 8.9  |
|    | 429096 | AB011106  | Hs.196012 | KIAA0534 protein                         | 8.6 | 8.6  |
|    | 428652 | AA584272  | Hs.336224 | transmembrane protein with EGF-like and  | 8.6 | 8.6  |
|    | 419347 | C15944    | Hs.90005  | superiorcervical ganglia, neural specif  | 8.6 | 22.2 |
|    | 410309 | BE043077  | Hs.278153 | ESTs                                     | 8.5 | 8.5  |
|    | 416851 | AW963951  | Hs.85618  | ESTs                                     | 8.5 | 8.5  |
| 10 | 427061 | AB032971  | Hs.173392 | KIAA1145 protein                         | 8.4 | 8.4  |
|    | 400438 | AF185611  | Hs.115352 | Target                                   | 8.3 | 5.1  |
|    | 440209 | H05049    | Hs.247837 | neurexin 3                               | 8.2 | 18.7 |
|    | 422756 | AA441787  | Hs.119689 | glycoprotein hormones, alpha polypeptide | 8.1 | 5.8  |
|    | 435648 | H24347    | Hs.27524  | ESTs                                     | 8.1 | 8.1  |
| 15 | 429470 | AI878901  | Hs.203862 | guanine nucleotide binding protein (G pr | 8.0 | 8.0  |
|    | 416133 | NM_001683 | Hs.89512  | ATPase, Ca transporting, plasma membrane | 8.0 | 8.0  |
|    | 408814 | N62499    | Hs.176227 | hypothetical protein FLJ11155            | 7.9 | 8.6  |
|    | 430004 | U27768    | Hs.227571 | regulator of G-protein signalling 4      | 7.9 | 15.7 |
|    | 436427 | AI344378  | Hs.143399 | ESTs                                     | 7.8 | 7.8  |
| 20 | 434367 | AB020700  | Hs.3830   | KIAA0893 protein                         | 7.8 | 5.6  |
|    | 429876 | AB028977  | Hs.225974 | KIAA1054 protein                         | 7.8 | 16.8 |
|    | 441005 | Z41305    | Hs.303172 | Homo sapiens mRNA; cDNA DKFZp547G133 (fr | 7.7 | 7.7  |
|    | 442023 | AI187878  | Hs.144549 | ESTs                                     | 7.7 | 5.6  |
| 25 | 429033 | NM_007374 | Hs.194756 | sine oculis homeobox (Drosophila) homolo | 7.6 | 5.5  |
|    | 450642 | R39773    | Hs.7130   | copine IV                                | 7.6 | 5.6  |
|    | 437073 | AI885608  | Hs.94122  | ESTs                                     | 7.5 | 7.5  |
|    | 441264 | AA927170  | Hs.23290  | ESTs                                     | 7.3 | 7.3  |
|    | 424153 | AA451737  | Hs.141496 | MAGE-like 2                              | 7.3 | 5.1  |
| 30 | 450474 | AW872844  | Hs.117494 | ESTs                                     | 7.2 | 7.2  |
|    | 450715 | AI266484  | Hs.31570  | ESTs, Weakly similar to KIAA1324 protein | 7.2 | 7.2  |
|    | 415076 | NM_000857 | Hs.77890  | guanylate cyclase 1, soluble, beta 3     | 7.1 | 4.8  |
|    | 423003 | AL120077  | Hs.122967 | kelch (Drosophila)-like 2 (Mayven)       | 7.0 | 7.0  |
|    | 433921 | AA618174  |           | gb:nq14f01.s1 NCL_CGAP_Thy1 Homo sapiens | 7.0 | 7.0  |
| 35 | 425352 | NM_000939 | Hs.1897   | proopiomelanocortin (adrenocorticotropin | 6.9 | 6.1  |
|    | 457012 | R41480    | Hs.302754 | ESTs                                     | 6.9 | 6.9  |
|    | 445898 | AF070623  | Hs.13423  | Homo sapiens clone 24468 mRNA sequence   | 6.9 | 6.9  |
|    | 433558 | AA833757  | Hs.201769 | ESTs, Weakly similar to T24435 hypotheli | 6.9 | 6.9  |
|    | 409031 | AA376836  | Hs.288856 | ESTs                                     | 6.8 | 6.8  |
| 40 | 453590 | AF150278  | Hs.33578  | KIAA0820 protein                         | 6.6 | 22.3 |
|    | 450181 | H05254    | Hs.201198 | ESTs                                     | 6.6 | 7.2  |
|    | 425580 | L11144    | Hs.1907   | galanin                                  | 6.5 | 3.5  |
|    | 445279 | R41900    | Hs.22245  | ESTs                                     | 6.4 | 6.4  |
|    | 428414 | AL049980  | Hs.184216 | DKFZP564C152 protein                     | 6.4 | 6.4  |
| 45 | 434104 | AF116691  | Hs.116459 | hypothetical protein PROQ2198            | 6.4 | 4.0  |
|    | 443244 | AI457235  | Hs.166479 | ESTs                                     | 6.3 | 3.0  |
|    | 447750 | AI422234  | Hs.143434 | contactin 1                              | 6.2 | 9.8  |
|    | 415114 | D60468    | Hs.94181  | ESTs                                     | 6.0 | 6.0  |
|    | 450600 | BE079478  | Hs.24880  | ESTs                                     | 5.9 | 3.9  |
| 50 | 444458 | BE041526  | Hs.31746  | hypothetical protein DKFZp547F072        | 5.9 | 7.7  |
|    | 448958 | AB020651  | Hs.22653  | KIAA0844 protein                         | 5.9 | 5.9  |
|    | 447138 | AI439112  | Hs.93828  | ESTs, Weakly similar to 2109260A B cell  | 5.8 | 5.8  |
|    | 414545 | AA149287  | Hs.76605  | ESTs                                     | 5.8 | 3.6  |
|    | 410389 | AW954049  | Hs.8177   | ESTs, Weakly similar to PIH0B6 salivary  | 5.6 | 9.6  |
| 55 | 450590 | AI701507  | Hs.273740 | ESTs                                     | 5.6 | 3.8  |
|    | 408428 | NM_014787 | Hs.44896  | DnaJ (Hsp40) homolog, subfamily B, membe | 5.6 | 5.6  |
|    | 442026 | AI243749  | Hs.8074   | brain-specific angiogenesis inhibitor 3  | 5.5 | 6.5  |
|    | 450149 | AW969781  | Hs.132863 | Zic family member 2 (odd-paired Drosophi | 5.4 | 5.4  |
|    | 414699 | AI815523  | Hs.76930  | synuclein, alpha (non A4 component of am | 5.3 | 4.5  |
| 60 | 438202 | AW169287  | Hs.22588  | ESTs                                     | 5.3 | 5.3  |
|    | 448605 | AL109678  | Hs.21597  | Homo sapiens mRNA full length insert cDN | 5.3 | 5.3  |
|    | 418866 | T65754    |           | gb:yc11c07.s1 Stratagene lung (937210) H | 5.3 | 3.8  |
|    | 448786 | BE048842  | Hs.179075 | Homo sapiens cDNA FLJ11881 fis, clone HE | 5.2 | 5.2  |
|    | 406311 |           |           | NM_021979*:Homo sapiens heat shock 70kD  | 5.2 | 11.5 |
| 65 | 443682 | AI383061  | Hs.47248  | ESTs, Highly similar to similar to Cdc14 | 5.2 | 3.3  |
|    | 415666 | H72693    |           | gb:yu03c11.11 Soares fetal liver spleen  | 5.2 | 5.2  |
|    | 416101 | R24854    | Hs.268806 | ESTs                                     | 5.2 | 3.3  |
|    | 428508 | BE252383  | Hs.184668 | SBB131 protein                           | 5.2 | 4.1  |
|    | 419318 | AW969742  | Hs.291005 | ESTs                                     | 5.2 | 3.1  |
| 70 | 439238 | N47305    | Hs.302161 | ESTs                                     | 5.1 | 5.3  |
|    | 446353 | AI290919  | Hs.153661 | ESTs                                     | 5.1 | 5.1  |
|    | 412049 | N53437    | Hs.18268  | adenylate kinase 5                       | 5.1 | 10.7 |
|    | 437331 | AL353933  | Hs.21710  | hypothetical protein DKFZp761G0313       | 5.1 | 5.1  |
|    | 413988 | M81883    | Hs.324784 | glutamate decarboxylase 1 (brain, 67kD)  | 5.1 | 5.1  |
| 75 | 408068 | AW148652  | Hs.167398 | ESTs                                     | 5.0 | 5.0  |
|    | 414631 | AW970130  | Hs.65406  | ESTs                                     | 4.9 | 4.9  |
|    | 418527 | AA450386  | Hs.7149   | Homo sapiens cDNA: FLJ21950 fis, clone H | 4.9 | 4.9  |
|    | 425073 | W39609    | Hs.22003  | solute carrier family 6 (neurotransmitte | 4.9 | 4.9  |
|    | 427224 | AL135554  | Hs.101937 | sine oculis homeobox (Drosophila) homolo | 4.9 | 3.9  |
| 80 | 433516 | AA595302  | Hs.33410  | ESTs, Weakly similar to T17279 hypotheti | 4.8 | 4.8  |
|    | 427287 | NM_014903 | Hs.174188 | KIAA0938 protein                         | 4.8 | 4.8  |
|    | 447252 | R90916    | Hs.12449  | Homo sapiens transmembrane protein HTMP1 | 4.8 | 3.2  |
|    | 424932 | R14070    | Hs.315369 | Homo sapiens cDNA: FLJ23075 fis, clone L | 4.7 | 10.2 |
|    | 419643 | F06066    | Hs.91791  | chromosome 11 open reading frame 25      | 4.7 | 4.7  |

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|    |        |           |           |  |     |      |
|----|--------|-----------|-----------|--|-----|------|
|    | 414949 | C15314    | Hs.323349 | ESTs                                     | 4.7 | 3.8  |
|    | 453534 | NM_014796 | Hs.33187  | KIAA0748 gene product                    | 4.7 | 4.7  |
|    | 430537 | X62692    | Hs.2593   | phosphodiesterase 6B, cGMP-specific, rod | 4.6 | 4.6  |
|    | 453431 | AF094754  | Hs.32973  | glycine receptor, beta                   | 4.6 | 4.6  |
| 5  | 453302 | NM_000838 | Hs.32945  | glutamate receptor, metabotropic 1       | 4.6 | 4.6  |
|    | 447104 | R19085    | Hs.210706 | Homo sapiens cDNA FLJ13182 fis, clone NT | 4.6 | 3.0  |
|    | 418202 | N48521    | Hs.26549  | KIAA1708 protein                         | 4.6 | 5.8  |
|    | 419191 | U17195    | Hs.89666  | A kinase (PRKA) anchor protein 6         | 4.5 | 4.5  |
| 10 | 459080 | AW192083  | Hs.290855 | ESTs                                     | 4.5 | 13.5 |
|    | 451783 | R42554    | Hs.210862 | T-box, brain, 1                          | 4.4 | 11.2 |
|    | 421952 | AA300900  | Hs.98849  | ESTs, Moderately similar to AF161511 1 H | 4.4 | 3.2  |
|    | 451050 | AW937420  | Hs.69662  | ESTs                                     | 4.4 | 4.4  |
|    | 423728 | AW891294  | Hs.132136 | solute carrier family 4, sodium bicarbon | 4.4 | 7.9  |
|    | 447746 | AW015920  | Hs.161359 | ESTs                                     | 4.3 | 9.9  |
| 15 | 451301 | AI769514  | Hs.209890 | EST                                      | 4.3 | 4.3  |
|    | 452381 | H23329    | Hs.290880 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 4.3 | 4.3  |
|    | 433109 | N58907    | Hs.162430 | EST                                      | 4.3 | 3.9  |
|    | 412155 | R38167    | Hs.12449  | Homo sapiens transmembrane protein HTMP1 | 4.3 | 27.9 |
| 20 | 426365 | AA376667  | Hs.10283  | RNA binding motif protein 8B             | 4.3 | 4.1  |
|    | 423589 | AA328082  | Hs.209569 | ESTs                                     | 4.2 | 4.2  |
|    | 432453 | AI885537  | Hs.27172  | ESTs, Moderately similar to PC4259 ferri | 4.2 | 3.9  |
|    | 420489 | AA815089  | Hs.193513 | ESTs                                     | 4.1 | 4.1  |
|    | 427457 | AW779105  | Hs.164682 | ESTs                                     | 4.1 | 11.1 |
| 25 | 408206 | AF041853  | Hs.43670  | kinesin family member 3A                 | 4.1 | 4.1  |
|    | 433803 | AI823593  | Hs.27688  | ESTs                                     | 4.1 | 4.1  |
|    | 407868 | NM_000950 | Hs.40637  | proline-rich Gla (G-carboxyglutamic acid | 4.1 | 3.3  |
|    | 448117 | H49129    | Hs.172982 | ESTs                                     | 4.1 | 4.1  |
|    | 442106 | AW205881  | Hs.326728 | ESTs                                     | 4.1 | 3.2  |
| 30 | 450757 | BE081050  | Hs.31570  | ESTs, Weakly similar to KIAA1324 protein | 4.0 | 3.2  |
|    | 442042 | AI990506  | Hs.8077   | Homo sapiens mRNA; cDNA DKFZp547E184 (fr | 4.0 | 6.2  |
|    | 458694 | F12832    | Hs.3610   | ESTs                                     | 4.0 | 4.0  |
|    | 452197 | AW023595  | Hs.232048 | ESTs                                     | 4.0 | 4.0  |
|    | 448583 | NM_015239 | Hs.21542  | KIAA1035 protein                         | 4.0 | 4.0  |
| 35 | 418940 | H17739    | Hs.288513 | Human DNA sequence from clone RP5-899C14 | 3.9 | 7.0  |
|    | 442412 | R77677    | Hs.346644 | ESTs                                     | 3.9 | 3.9  |
|    | 440293 | AI004193  | Hs.22123  | ESTs                                     | 3.9 | 3.9  |
|    | 433670 | AA604405  |           | gb:nc87h09.s1 NCI_CGAP_AA1 Homo sapiens  | 3.9 | 3.9  |
| 40 | 459697 | AA406062  | Hs.98002  | ESTs                                     | 3.9 | 5.4  |
|    | 429290 | AF203032  | Hs.198760 | neurofilament, heavy polypeptide (200kD) | 3.9 | 3.3  |
|    | 426054 | U12431    | Hs.166109 | ELAV (embryonic lethal, abnormal vision, | 3.9 | 3.9  |
|    | 424001 | W67883    | Hs.137476 | paternally expressed 10                  | 3.8 | 5.4  |
|    | 442676 | AI733585  | Hs.130897 | ESTs                                     | 3.8 | 3.8  |
|    | 410240 | AL157424  | Hs.61289  | synaptojanin 2                           | 3.8 | 4.6  |
| 45 | 409339 | AB020686  | Hs.54037  | ectonucleotide pyrophosphatase/phosphodi | 3.7 | 3.6  |
|    | 434998 | AW975157  | Hs.26037  | ESTs                                     | 3.7 | 3.7  |
|    | 439450 | R51613    | Hs.125304 | ESTs                                     | 3.7 | 8.3  |
|    | 455364 | H72176    | Hs.4273   | hypothetical protein FLJ13159            | 3.7 | 4.9  |
|    | 400844 |           |           | NM_003105*:Homo sapiens sortilin-related | 3.7 | 3.1  |
| 50 | 456765 | AI497900  | Hs.33067  | ESTs                                     | 3.7 | 3.7  |
|    | 452667 | T87219    | Hs.13219  | ESTs                                     | 3.6 | 3.6  |
|    | 436773 | AW078629  |           | PC4 and SFRS1 interacting protein 1      | 3.6 | 3.6  |
|    | 453220 | AB033089  | Hs.32452  | Homo sapiens mRNA for KIAA1263 protein,  | 3.6 | 19.9 |
|    | 432149 | AW614326  | Hs.133483 | ESTs, Weakly similar to T34549 probable  | 3.6 | 12.2 |
| 55 | 408119 | W26213    | Hs.101672 | ESTs, Weakly similar to T00331 hypotheti | 3.6 | 3.6  |
|    | 449093 | AB035356  | Hs.22998  | neurexin 1                               | 3.6 | 3.6  |
|    | 426968 | U07616    | Hs.173034 | amphiphysin (Stiff-Mann syndrome with br | 3.6 | 15.3 |
|    | 410011 | AB020641  | Hs.57856  | PFTAIRE protein kinase 1                 | 3.6 | 10.0 |
|    | 442738 | AW002370  | Hs.131055 | ESTs, Weakly similar to NPM_HUMAN NUCLEO | 3.5 | 3.5  |
| 60 | 451032 | W03692    | Hs.323079 | Homo sapiens mRNA; cDNA DKFZp564P116 (fr | 3.5 | 4.9  |
|    | 449117 | AW449310  | Hs.210262 | ESTs, Weakly similar to HSS2_HUMAN HEPAR | 3.5 | 3.5  |
|    | 416490 | AF090116  | Hs.79348  | regulator of G-protein signalling 7      | 3.5 | 12.5 |
|    | 412266 | N59006    | Hs.26133  | ESTs                                     | 3.5 | 30.9 |
|    | 452311 | AW304029  | Hs.252744 | ESTs                                     | 3.5 | 3.5  |
| 65 | 425649 | U30930    | Hs.158540 | UDP glycosyltransferase 8 (UDP-galactose | 3.5 | 38.6 |
|    | 410224 | M55513    | Hs.150208 | potassium voltage-gated channel, shaker- | 3.4 | 3.4  |
|    | 451516 | AI800515  | Hs.12024  | ESTs                                     | 3.4 | 6.3  |
|    | 400098 |           |           | Eos Control                              | 3.4 | 3.4  |
|    | 424918 | R13982    | Hs.169309 | myelin-associated oligodendrocyte basic  | 3.4 | 5.3  |
| 70 | 452238 | F01811    | Hs.345757 | ESTs                                     | 3.3 | 3.8  |
|    | 417063 | N60515    | Hs.45061  | ESTs                                     | 3.3 | 3.3  |
|    | 443992 | AW022228  | Hs.322922 | ESTs                                     | 3.3 | 13.1 |
|    | 412453 | R20205    | Hs.75236  | ESTs                                     | 3.3 | 3.3  |
|    | 450561 | R49674    | Hs.25909  | ESTs                                     | 3.3 | 3.3  |
| 75 | 415527 | F11624    |           | gb:HSC22D101 normalized infant brain cDN | 3.3 | 3.3  |
|    | 427386 | AW836261  | Hs.6727   | ESTs                                     | 3.3 | 3.3  |
|    | 423346 | AI267677  | Hs.127416 | synaptojanin 1                           | 3.2 | 20.1 |
|    | 431342 | AW971018  | Hs.21659  | ESTs                                     | 3.2 | 8.0  |
|    | 448533 | AL119710  | Hs.21365  | nucleosome assembly protein 1-like 3     | 3.2 | 9.6  |
| 80 | 442879 | AF032922  | Hs.8813   | syntaxin binding protein 3               | 3.2 | 3.2  |
|    | 417284 | N62889    | Hs.107242 | Homo sapiens cDNA FLJ12965 fis, clone NT | 3.2 | 3.2  |
|    | 429477 | AI275514  | Hs.6658   | ESTs                                     | 3.2 | 3.2  |
|    | 410343 | AA084273  | Hs.76561  | ESTs, Weakly similar to S47072 finger pr | 3.2 | 3.2  |
|    | 427317 | AB028955  | Hs.175780 | KIAA1032 protein                         | 3.2 | 5.3  |

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|----|--------|-----------|-----------|--|-----|------|
|    | 408039 | AA131424  | Hs.336636 | ESTs                                     | 3.2 | 3.2  |
|    | 428976 | AL037824  | Hs.194695 | ras homolog gene family, member 1        | 3.2 | 17.4 |
|    | 420297 | AI628272  | Hs.88323  | ESTs, Weakly similar to ALU1_HUMAN ALU S | 3.2 | 4.1  |
| 5  | 453919 | AW959912  | Hs.7076   | KIAA1705 protein                         | 3.2 | 3.2  |
|    | 428963 | AW382682  | Hs.258208 | Homo sapiens, clone MGC:15606, mRNA, com | 3.2 | 3.3  |
|    | 423829 | R44107    | Hs.240905 | ESTs                                     | 3.1 | 4.4  |
|    | 424087 | N69333    | Hs.143434 | contactin 1                              | 3.1 | 3.1  |
|    | 419852 | AW503756  | Hs.286184 | hypothetical protein dJ551D2.5           | 3.1 | 4.1  |
| 10 | 444783 | AK001468  | Hs.62180  | anillin (Drosophila Scraps homolog), act | 3.1 | 43.2 |
|    | 422234 | AF119818  | Hs.113287 | discs, large (Drosophila) homolog-associ | 3.1 | 3.1  |
|    | 446692 | Z44514    |           | Homo sapiens mRNA for KIAA1763 protein,  | 3.1 | 33.0 |
|    | 437117 | AL049256  | Hs.122593 | ESTs                                     | 3.1 | 3.8  |
|    | 405819 |           |           | NM_002578:Homo sapiens p21 (CDKN1A)-acti | 3.1 | 13.5 |
| 15 | 452752 | AW044058  | Hs.33578  | KIAA0820 protein                         | 3.1 | 13.4 |
|    | 416220 | N49776    | Hs.170994 | hypothetical protein MGC10946            | 3.1 | 4.5  |
|    | 437380 | AL359577  | Hs.112198 | Homo sapiens mRNA; cDNA DKFZp547M073 (fr | 3.0 | 3.8  |
|    | 428001 | H97428    | Hs.219907 | ESTs, Moderately similar to Transforming | 3.0 | 5.9  |
|    | 445725 | AK000956  | Hs.13209  | hypothetical protein FLJ10094            | 3.0 | 3.0  |
| 20 | 447673 | AI823987  | Hs.182285 | ESTs                                     | 3.0 | 3.0  |
|    | 427283 | AL119796  | Hs.174185 | ectonucleotide pyrophosphatase/phosphodi | 3.0 | 3.0  |
|    | 424724 | T06532    | Hs.287709 | Homo sapiens cDNA: FLJ22674 fis, clone H | 3.0 | 3.0  |
|    | 408547 | AA574291  | Hs.57837  | ESTs                                     | 3.0 | 4.0  |
|    | 433315 | R96754    | Hs.239706 | GRB2-associated binding protein 1        | 3.0 | 3.1  |
| 25 | 439274 | AF086092  | Hs.48372  | ESTs                                     | 3.0 | 18.3 |
|    | 410765 | AI694972  | Hs.66180  | nucleosome assembly protein 1-like 2     | 3.0 | 8.0  |
|    | 458268 | AA428403  | Hs.106131 | ESTs                                     | 3.0 | 3.9  |
|    | 424641 | AB001106  | Hs.151413 | glia maturation factor, beta             | 3.0 | 5.6  |
|    | 441869 | NM_003947 | Hs.8004   | huntingtin-associated protein interactin | 3.0 | 14.9 |
| 30 | 442593 | R39804    | Hs.31961  | ESTs                                     | 2.9 | 6.7  |
|    | 426380 | AI291267  | Hs.149990 | ESTs                                     | 2.9 | 6.9  |
|    | 428536 | AI143139  | Hs.2288   | visinin-like 1                           | 2.9 | 22.1 |
|    | 417417 | F05745    | Hs.89512  | ATPase, Ca transporting, plasma membrane | 2.9 | 17.1 |
|    | 411379 | AI816344  | Hs.12554  | ESTs, Weakly similar to NPL4_HUMAN NUCLE | 2.9 | 11.2 |
| 35 | 422414 | AW875237  | Hs.13701  | ESTs                                     | 2.9 | 5.3  |
|    | 428186 | AW504300  | Hs.295605 | mannosidase, alpha, class 2A, member 2   | 2.9 | 3.9  |
|    | 419518 | U79289    | Hs.90798  | Human clone 23695 mRNA sequence          | 2.9 | 3.6  |
|    | 426919 | AL041228  |           | ELAV (embryonic lethal, abnormal vision, | 2.9 | 9.0  |
|    | 446544 | AI631932  | Hs.7047   | ESTs, Weakly similar to Unknown [H.sapie | 2.8 | 12.4 |
| 40 | 422411 | AW749443  | Hs.22511  | ESTs                                     | 2.8 | 12.0 |
|    | 416874 | H98752    | Hs.42568  | ESTs                                     | 2.8 | 6.0  |
|    | 448902 | Z45998    | Hs.22543  | Homo sapiens mRNA; cDNA DKFZp76111912 (f | 2.8 | 21.8 |
|    | 430456 | AA314998  | Hs.241503 | hypothetical protein                     | 2.8 | 4.7  |
|    | 429859 | NM_007050 | Hs.225952 | protein tyrosine phosphatase, receptor t | 2.8 | 5.1  |
| 45 | 429656 | X05608    | Hs.211584 | neurofilament, light polypeptide (68kD)  | 2.8 | 13.1 |
|    | 437948 | AA772920  | Hs.303527 | ESTs                                     | 2.8 | 24.8 |
|    | 440105 | AA694010  | Hs.6932   | Homo sapiens clone 23809 mRNA sequence   | 2.8 | 8.2  |
|    | 414931 | AK000342  | Hs.77646  | Homo sapiens mRNA; cDNA DKFZp761M0223 (f | 2.8 | 3.4  |
|    | 416530 | U62801    | Hs.79361  | kalikrein 6 (neurosin, zyme)             | 2.8 | 4.4  |
| 50 | 446574 | AI310135  | Hs.335933 | ESTs                                     | 2.8 | 3.5  |
|    | 422890 | Z43784    |           | ankyrin 3, node of Ranvier (ankyrin G)   | 2.8 | 3.6  |
|    | 410711 | AB002316  | Hs.65746  | KIAA0318 protein                         | 2.7 | 6.1  |
|    | 422980 | N46569    | Hs.76722  | CCAAT/enhancer binding protein (C/EBP),  | 2.7 | 45.2 |
|    | 408554 | AA836381  | Hs.315111 | nuclear receptor co-repressor/HDAC3 comp | 2.7 | 3.7  |
| 55 | 434460 | AA478486  | Hs.3852   | KIAA0368 protein                         | 2.7 | 4.8  |
|    | 431988 | AC002302  | Hs.77202  | protein kinase C, beta 1                 | 2.7 | 10.5 |
|    | 447163 | AW292770  | Hs.5542   | DnaJ (Hsp40) homolog, subfamily C, membe | 2.7 | 3.4  |
|    | 437924 | AI935344  | Hs.164118 | ESTs, Weakly similar to SL51_HUMAN SODIU | 2.6 | 3.2  |
|    | 424945 | AI221919  |           | hypothetical protein FLJ10582            | 2.6 | 30.5 |
| 60 | 425984 | AW836277  | Hs.165636 | hypothetical protein DKFZp761C07121      | 2.6 | 29.3 |
|    | 447761 | AF061573  | Hs.19492  | protocadherin 8                          | 2.6 | 6.3  |
|    | 425138 | H08849    | Hs.167464 | glutamate receptor, ionotropic, N-methyl | 2.6 | 4.2  |
|    | 436568 | H12049    | Hs.91564  | ESTs                                     | 2.6 | 6.8  |
|    | 408065 | AW954272  |           | gb:EST366342 MAGE resequences, MAGC Homo | 2.6 | 5.6  |
| 65 | 430287 | AW182459  | Hs.125759 | ESTs, Weakly similar to LEU5_HUMAN LEUKE | 2.6 | 7.6  |
|    | 408777 | U71204    | Hs.47626  | Ric (Drosophila)-like, expressed in neur | 2.6 | 3.8  |
|    | 420173 | AA256151  | Hs.22999  | ESTs                                     | 2.6 | 4.1  |
|    | 429550 | AW293055  | Hs.119357 | ESTs                                     | 2.6 | 6.4  |
|    | 438068 | AI927209  | Hs.306210 | Homo sapiens cDNA: FLJ23133 fis, clone L | 2.6 | 5.1  |
| 70 | 424264 | D80400    | Hs.239388 | Human DNA sequence from clone RP1-304B14 | 2.6 | 7.3  |
|    | 432809 | AA565509  | Hs.131703 | ESTs                                     | 2.6 | 9.9  |
|    | 407886 | AW969688  | Hs.100826 | ESTs                                     | 2.5 | 20.2 |
|    | 445225 | AI216555  | Hs.202398 | ESTs                                     | 2.5 | 5.5  |
|    | 415257 | F03016    | Hs.27513  | ESTs                                     | 2.5 | 8.6  |
| 75 | 423135 | N67655    | Hs.26411  | ESTs                                     | 2.5 | 8.2  |
|    | 438283 | AI458931  | Hs.37282  | ESTs                                     | 2.5 | 7.5  |
|    | 454053 | AW023006  | Hs.27172  | ESTs, Moderately similar to PC4259 ferri | 2.4 | 3.6  |
|    | 443150 | AI034467  | Hs.34650  | ESTs                                     | 2.4 | 7.6  |
|    | 429956 | AI374651  | Hs.22542  | ESTs                                     | 2.4 | 3.2  |
| 80 | 428392 | H10233    | Hs.2265   | secretory granule, neuroendocrine protei | 2.4 | 42.3 |
|    | 437268 | AI754847  | Hs.227571 | regulator of G-protein signalling 4      | 2.4 | 14.0 |
|    | 426529 | AF090100  | Hs.170241 | Homo sapiens clone IMAGE 23915           | 2.4 | 5.1  |
|    | 430347 | NM_002039 | Hs.239706 | GRB2-associated binding protein 1        | 2.4 | 3.2  |
|    | 422949 | AA319435  |           | gb:EST21657 Adrenal gland tumor Homo sap | 2.4 | 7.4  |

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|----|--------|-----------|-----------|--|-----|------|
| 5  | 451952 | AL120173  | Hs.301663 | ESTs                                     | 2.4 | 19.2 |
|    | 434277 | X77748    | Hs.3786   | glutamate receptor, metabotropic 3       | 2.4 | 28.5 |
|    | 422927 | AW247388  | Hs.301423 | calcium binding protein 1 (calbrain)     | 2.4 | 3.0  |
|    | 425121 | AI797511  | Hs.154679 | synaptotagmin I                          | 2.4 | 3.9  |
|    | 435059 | Z45270    | Hs.235873 | hypothetical protein FLJ22672            | 2.4 | 4.8  |
| 10 | 446377 | AW014022  | Hs.170953 | ESTs                                     | 2.4 | 3.3  |
|    | 452371 | R40990    | Hs.21658  | ESTs                                     | 2.4 | 3.3  |
|    | 419103 | Z40229    | Hs.96423  | hypothetical protein FLJ23033            | 2.4 | 8.4  |
|    | 427658 | H61387    | Hs.30868  | nogo receptor                            | 2.4 | 3.0  |
|    | 446100 | AW967109  | Hs.13804  | hypothetical protein dJ462023.2          | 2.3 | 3.6  |
| 15 | 439607 | BE540565  | Hs.159460 | ESTs                                     | 2.3 | 5.6  |
|    | 412949 | AI471639  | Hs.71913  | ESTs                                     | 2.3 | 3.7  |
|    | 419757 | AA773820  | Hs.63970  | ESTs                                     | 2.3 | 3.3  |
|    | 410037 | AB020725  | Hs.58009  | KIAA0918 protein                         | 2.3 | 12.2 |
|    | 451386 | AB029006  | Hs.26334  | spastic paraplegia 4 (autosomal dominant | 2.3 | 3.1  |
| 20 | 409953 | AA332277  | Hs.57691  | cadherin 18, type 2                      | 2.3 | 5.5  |
|    | 419629 | AB020695  | Hs.91662  | KIAA0888 protein                         | 2.3 | 13.4 |
|    | 434792 | AA649253  | Hs.132458 | ESTs                                     | 2.3 | 3.8  |
|    | 429006 | AA443143  | Hs.50929  | hypothetical protein FLJ13842            | 2.3 | 6.6  |
|    | 445194 | AI215667  | Hs.175044 | ESTs                                     | 2.3 | 3.1  |
| 25 | 422491 | AA338548  | Hs.117546 | neuronatin                               | 2.3 | 3.6  |
|    | 415734 | NM_014747 | Hs.78748  | KIAA0237 gene product                    | 2.3 | 27.4 |
|    | 434933 | R91095    | Hs.4276   | KIAA1701 protein                         | 2.2 | 6.1  |
|    | 424922 | BE386547  | Hs.217112 | hypothetical protein MGC10825            | 2.2 | 3.7  |
|    | 426325 | D28114    | Hs.169309 | myelin-associated oligodendrocyte basic  | 2.2 | 81.1 |
| 30 | 424140 | Z48051    | Hs.141308 | myelin oligodendrocyte glycoprotein      | 2.2 | 56.0 |
|    | 418410 | AA811441  | Hs.107393 | chromosome 3 open reading frame 4        | 2.2 | 3.9  |
|    | 409746 | NM_004794 | Hs.56294  | RAB33A, member RAS oncogene family       | 2.2 | 10.6 |
|    | 439239 | AI031540  | Hs.235331 | ESTs                                     | 2.2 | 49.5 |
|    | 450310 | N62341    | Hs.94116  | ESTs                                     | 2.2 | 3.6  |
| 35 | 453924 | R49295    | Hs.24886  | ESTs                                     | 2.2 | 13.4 |
|    | 411666 | AF106564  | Hs.71346  | neurofilament 3 (150kD medium)           | 2.2 | 6.6  |
|    | 404819 |           |           | NM_002688: Homo sapiens peanut (Drosophi | 2.2 | 5.8  |
|    | 449568 | AL157479  | Hs.23740  | KIAA1598 protein                         | 2.2 | 3.6  |
|    | 419271 | N34901    | Hs.238532 | ESTs                                     | 2.2 | 7.5  |
| 40 | 424474 | AA308883  | Hs.148680 | calcyon; D1 dopamine receptor-interactin | 2.2 | 3.6  |
|    | 438208 | AL041224  | Hs.65379  | ESTs                                     | 2.2 | 5.8  |
|    | 424458 | M29273    | Hs.1780   | myelin associated glycoprotein           | 2.2 | 10.1 |
|    | 421790 | AW896201  | Hs.22654  | sodium channel, voltage-gated, type I, a | 2.2 | 4.1  |
|    | 432882 | NM_013257 | Hs.279696 | serum/glucocorticoid regulated kinase-II | 2.1 | 4.2  |
| 45 | 419863 | AW952691  | Hs.93485  | Homo sapiens mRNA; cDNA DKFZp761D191 (fr | 2.1 | 21.4 |
|    | 449277 | AA001064  | Hs.43670  | ESTs                                     | 2.1 | 8.5  |
|    | 420156 | AW449258  | Hs.6187   | ESTs                                     | 2.1 | 12.5 |
|    | 452738 | AL133800  | Hs.7086   | hypothetical protein MGC12435            | 2.1 | 3.5  |
|    | 410366 | AI267589  | Hs.302689 | hypothetical protein                     | 2.1 | 10.4 |
| 50 | 452106 | AI141031  | Hs.21342  | ESTs                                     | 2.1 | 3.4  |
|    | 413409 | AI638418  | Hs.1440   | DEAD/H (Asp-Glu-Ala-Asp/His) box polypep | 2.1 | 9.4  |
|    | 423641 | AL137256  | Hs.130489 | ATPase, aminophospholipid transporter-II | 2.1 | 6.2  |
|    | 410909 | AW898161  | Hs.53112  | ESTs, Moderately similar to ALU8_HUMAN A | 2.1 | 12.5 |
|    | 410531 | AA086469  | Hs.47171  | ESTs                                     | 2.1 | 5.8  |
| 55 | 412675 | AA460716  | Hs.9788   | hypothetical protein MGC10924 similar to | 2.1 | 3.3  |
|    | 448299 | AA497044  | Hs.20887  | hypothetical protein FLJ10392            | 2.1 | 11.5 |
|    | 444124 | R43097    | Hs.6818   | ESTs                                     | 2.1 | 9.3  |
|    | 408950 | AA707814  | Hs.14945  | long fatty acyl-CoA synthetase 2 gene    | 2.1 | 8.5  |
|    | 432736 | AA788898  | Hs.179902 | transporter-like protein                 | 2.1 | 4.0  |
| 60 | 429024 | AI652297  | Hs.119302 | complement-C1q tumor necrosis factor-rel | 2.1 | 3.7  |
|    | 420071 | AB028985  | Hs.94806  | ATP-binding cassette, sub-family A (ABC1 | 2.1 | 5.1  |
|    | 408822 | AW500715  | Hs.57079  | Homo sapiens cDNA FLJ13267 fis, clone OV | 2.1 | 3.0  |
|    | 424790 | AL119344  | Hs.13326  | ESTs, Weakly similar to 2004399A chromos | 2.1 | 23.1 |
|    | 426814 | AF036943  | Hs.172619 | myelin transcription factor 1-like       | 2.1 | 14.2 |
| 65 | 425130 | AA448208  | Hs.99163  | ESTs                                     | 2.1 | 3.1  |
|    | 449714 | AB033015  | Hs.23941  | KIAA1189 protein                         | 2.0 | 7.5  |
|    | 439108 | AW163034  | Hs.6467   | synaptogyrin 3                           | 2.0 | 6.9  |
|    | 415669 | NM_005025 | Hs.78589  | serine (or cysteine) proteinase inhibito | 2.0 | 10.2 |
|    | 435040 | AI932350  | Hs.152825 | ESTs                                     | 2.0 | 4.7  |
| 70 | 440152 | AB002376  | Hs.7006   | KIAA0378 protein                         | 2.0 | 14.2 |
|    | 445102 | AW204610  | Hs.22270  | ESTs                                     | 2.0 | 19.2 |
|    | 436734 | AI937612  | Hs.273758 | hypothetical protein FLJ23112            | 2.0 | 4.7  |
|    | 437414 | AW894071  | Hs.48448  | hypothetical protein DKFZp547C176        | 2.0 | 6.4  |
|    | 418512 | AW498974  |           | diacylglycerol kinase, zeta (104kD)      | 2.0 | 7.9  |
| 75 | 453169 | AB037815  | Hs.32156  | KIAA1394 protein                         | 2.0 | 5.7  |
|    | 420050 | AL118615  | Hs.94653  | neurochondrin                            | 2.0 | 6.5  |
|    | 429900 | AA460421  | Hs.30875  | ESTs                                     | 2.0 | 4.2  |
|    | 432447 | X92681    | Hs.2998   | contactin 2 (axonal)                     | 2.0 | 4.1  |
|    | 431677 | AK000496  | Hs.306989 | hypothetical protein FLJ20489            | 2.0 | 3.1  |
| 80 | 452856 | AF034799  | Hs.30881  | protein tyrosine phosphatase, receptor t | 2.0 | 10.7 |
|    | 448681 | AL109781  | Hs.21754  | Homo sapiens mRNA full length insert cDN | 2.0 | 7.2  |
|    | 453754 | AW972580  | Hs.172753 | ESTs                                     | 2.0 | 3.4  |
|    | 422544 | AB018259  | Hs.118140 | KIAA0716 gene product                    | 2.0 | 11.8 |
|    | 416836 | D54745    | Hs.80247  | cholecystokinin                          | 2.0 | 6.8  |
|    | 454048 | H05626    | Hs.6921   | ESTs                                     | 2.0 | 9.9  |
|    | 425741 | AF052152  | Hs.159412 | Homo sapiens clone 24628 mRNA sequence   | 2.0 | 6.5  |

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TABLE 19B:

Pkey: Unique Eos probeset identifier number  
 CAT number: Gene cluster number  
 Accession: Genbank accession numbers

| Pkey   | CAT Number | Accession  |
|--------|------------|--|
| 408065 | 103646_1   | AW954272 AI003154 AA059300 AA046911  |
| 415527 | 1539393_1  | F11624 Z43212 H08936 R56332 H09256 R52303 R13075   |
| 415666 | 1543492_1  | H72693 R08673 H72694 F20990 R08580   |
| 418512 | 176394_1   | AW498974 T09332 R58460 AA350990 T33786 T30936 AA350905 T08592 T09274 AA224297 D54678 T08951 R15346 AW953188 AA350074         |
|        |            | AW890649   |
| 418866 | 179788_1   | T65754 AA229857 AA229658   |
| 422890 | 222707_1   | Z43784 R13382 AW572911 AA449369 H17037 R19603 AI632565 AW004030 BE502530 Z25032 AA805324 AA449241 AI651825 AI264863 AW196918 |
|        |            | AA948267 AI953735 AI263703 AA319159 AW964436 AI903440 AW594171 AI867447 AW204071 AW956110 C15616 D81142 H17038 AW162343      |
|        |            | T87230 AI3   |
| 422949 | 223184_1   | AA319435 N56456 AA319377 AW961532 T48452 AA894424  |
| 424945 | 245223_1   | AI221919 Z19957 AA348780 AW964077 AW166028 BE540193 N94800 AA452368 N99604 AI341345 AW298800 AA724961 AA931158 AI741227      |
|        |            | AI806660 AI982626 D81263 D53937 D52496 AA974487 AW043854 N50483 Z39997 AI492961 AI361526 F04002 AA452141 T23551 AI472655     |
|        |            | AI193667 AI341   |
| 426919 | 273507_1   | AL041228 D82004 D61361 AI203314 AI990307 AW900295 AI018308 AW087473 AW183530 AA393346 H50055 AA935601                        |
| 433670 | 372721_1   | AA604405 BE062234 AW748386   |
| 433921 | 377350_1   | AA618174 AI114549 R36464 R36465  |
| 433940 | 37787_1    | H05129 N63433 AI651350 AA984734 AI368716 N40915 AI989705 F09042 T03905 R88588 AF112220                                       |
| 436773 | 426587_1   | AW078629 AI857375 N64357 AA731069  |
| 446692 | 689623_1   | Z44514 AI352097 AI803984 AW235923 AW196558 AI954637 AI336983   |

TABLE 19C:

Pkey: Unique number corresponding to an Eos probeset  
 Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.  
 Strand: Indicates DNA strand from which exons were predicted.  
 Nt\_position: Indicates nucleotide positions of predicted exons.

| Pkey   | Ref     | Strand | Nt_position   |
|--------|---------|--------|---|
| 400844 | 9188605 | Plus   | 24746-24872,25035-25204   |
| 404819 | 4678240 | Plus   | 16223-16319,16427-16513,16736-16859,16941-17075,17170-17287,17389-17529,18261-18357,18443-18578 |
| 405560 | 183148  | Plus   | 5495-5655,6077-6241,6495-6692   |
| 405819 | 4007557 | Plus   | 2830-2967   |
| 405311 | 9211559 | Minus  | 137114-139033   |

TABLE 20A: ABOUT 328 CNS-ENRICHED GENES SIGNIFICANTLY DOWN-REGULATED IN LOWER GRADE GLIOBLASTOMA COMPARED TO NORMAL ADULT CNS

Table 20A lists about 328 CNS-enriched genes significantly down-regulated in lower grade glioblastoma (LGG) compared to normal adult CNS tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" normal CNS to "average" LGG was greater than or equal to 2. The "average" normal CNS level was set to the 85<sup>th</sup> percentile amongst various normal CNS tissues. The "average" LGG level was set to the 85<sup>th</sup> percentile amongst various tumor samples. To enrich for CNS specific genes, the ratio of "average" CNS to "average" non-CNS normal adult tissues was calculated to be greater than or equal to 3. The "average" CNS level was set to the 85<sup>th</sup> percentile amongst various CNS tissues. The "average" normal non-CNS adult tissue level was set to the 95<sup>th</sup> percentile amongst various non-CNS normal tissues. In order to remove gene-specific background levels of non-specific hybridization, the 10<sup>th</sup> percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratios were evaluated.

Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 R1: Ratio of CNS compared to LOWER GRADE GLIOBLASTOMA  
 R2: Ratio of CNS compared to NON-CNS NORMAL ADULT TISSUE

| Pkey   | ExAccn    | UnigenelD | Unigene Title                                 | R1   | R2   |
|--------|-----------|-----------|---|------|------|
| 425580 | L11144    | Hs.1907   | galanin                                       | 33.1 | 3.5  |
| 425489 | M58594    | Hs.1905   | prolactin                                     | 24.7 | 10.5 |
| 430538 | AB032435  | Hs.242821 | differentiation-associated Na-dependent       | 22.6 | 22.6 |
| 417275 | X63578    | Hs.295449 | parvalbumin                                   | 22.4 | 6.0  |
| 428505 | AL035461  | Hs.2281   | chromogranin B (secretogranin 1)              | 21.8 | 21.8 |
| 408040 | AI266496  | Hs.22905  | ESTs, Weakly similar to RHG6_HUMAN RHO-G      | 19.4 | 19.4 |
| 435145 | AI277259  | Hs.116631 | ESTs  | 18.5 | 3.8  |
| 407039 | X00368    |           | gb:Human prolactin gene 5' region.            | 18.1 | 18.1 |
| 428976 | AL037824  | Hs.194695 | ras homolog gene family, member I             | 17.4 | 17.4 |
| 409263 | AA069573  | Hs.50319  | ESTs  | 16.8 | 16.8 |
| 424645 | NM_014682 | Hs.151449 | KIAA0535 gene product                         | 15.1 | 15.1 |
| 416018 | AW138239  | Hs.78977  | proprotein convertase subtilisin/kexin 1      | 14.0 | 14.0 |
| 405560 | AW887701  |           | hypothetical protein FLJ20628                 | 13.9 | 8.0  |
| 452022 | AW072330  | Hs.293875 | ESTs  | 13.8 | 13.8 |
| 433940 | H05129    |           | cyclic AMP-regulated phosphoprotein, 21       | 12.0 | 12.0 |
| 413324 | V00571    | Hs.75294  | corticotropin releasing hormone               | 12.0 | 13.2 |
| 410657 | AF063228  | Hs.65248  | dynein, cytoplasmic, intermediate polypeptide | 11.5 | 11.5 |
| 410330 | AW023630  | Hs.159425 | ESTs  | 11.1 | 23.4 |
| 453165 | S74727    | Hs.32042  | aspartoacylase (aminoacylase 2, Canavan       | 10.7 | 10.7 |
| 420297 | AI628272  | Hs.88323  | ESTs, Weakly similar to ALU1_HUMAN ALU S      | 10.5 | 4.1  |
| 417167 | AW206437  | Hs.4290   | ESTs  | 10.4 | 10.4 |
| 420033 | D59502    | Hs.292590 | ESTs  | 10.4 | 10.4 |
| 413293 | AL047483  | Hs.302498 | GTP-binding protein homologous to Saccha      | 10.0 | 10.0 |
| 426380 | AI291267  | Hs.149990 | ESTs  | 9.8  | 6.9  |
| 410635 | D58863    | Hs.334372 | chorionic somatomammotropin hormone 1 (p      | 9.5  | 6.6  |
| 422756 | AA441787  | Hs.119689 | glycoprotein hormones, alpha polypeptide      | 9.1  | 5.8  |

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|    |        |           |           |   |     |      |
|----|--------|-----------|-----------|---|-----|------|
|    | 444330 | AI597655  | Hs.49265  | ESTs                                      | 9.1 | 9.1  |
|    | 427322 | AK002017  | Hs.176227 | hypothetical protein FLJ11155             | 8.9 | 8.9  |
|    | 421633 | AF121860  | Hs.106260 | sorting nexin 10                          | 8.6 | 6.7  |
|    | 429096 | AB011106  | Hs.196012 | KIAA0534 protein                          | 8.6 | 8.6  |
| 5  | 428652 | AA584272  | Hs.336224 | transmembrane protein with EGF-like and   | 8.6 | 8.6  |
|    | 410309 | BE043077  | Hs.278153 | ESTs                                      | 8.5 | 8.5  |
|    | 424932 | R14070    | Hs.315369 | Homo sapiens cDNA: FLJ23075 fis, clone L  | 8.5 | 10.2 |
|    | 417175 | R44558    | Hs.94002  | ESTs                                      | 8.4 | 8.9  |
|    | 427061 | AB032971  | Hs.173392 | KIAA1145 protein                          | 8.4 | 8.4  |
| 10 | 400438 | AF185611  | Hs.115352 | Target                                    | 8.3 | 5.1  |
|    | 418207 | C14685    | Hs.34772  | ESTs                                      | 8.2 | 9.8  |
|    | 440209 | H05049    | Hs.247837 | neurexin 3                                | 8.1 | 18.7 |
|    | 429876 | AB028977  | Hs.225974 | KIAA1054 protein                          | 8.1 | 16.8 |
|    | 429470 | AI878901  | Hs.203862 | guanine nucleotide binding protein (G pr  | 8.0 | 8.0  |
| 15 | 430004 | U27768    | Hs.227571 | regulator of G-protein signalling 4       | 7.9 | 15.7 |
|    | 436427 | AI344378  | Hs.143399 | ESTs                                      | 7.8 | 7.8  |
|    | 408814 | N62499    | Hs.176227 | hypothetical protein FLJ11155             | 7.8 | 8.6  |
|    | 434367 | AB020700  | Hs.3830   | KIAA0893 protein                          | 7.7 | 5.6  |
|    | 441005 | Z41305    | Hs.303172 | Homo sapiens mRNA; cDNA DKFZp547G133 (fr  | 7.7 | 7.7  |
| 20 | 416851 | AW963951  | Hs.85618  | ESTs                                      | 7.7 | 8.5  |
|    | 429033 | NM_007374 | Hs.194756 | sine oculis homeobox (Drosophila) homolo  | 7.6 | 5.5  |
|    | 437073 | AI885608  | Hs.94122  | ESTs                                      | 7.5 | 7.5  |
|    | 441264 | AA927170  | Hs.23290  | ESTs                                      | 7.3 | 7.3  |
|    | 450715 | AI266484  | Hs.31570  | ESTs, Weakly similar to KIAA1324 protein  | 7.2 | 7.2  |
| 25 | 415076 | NM_000857 | Hs.77890  | guanylate cyclase 1, soluble, beta 3      | 7.1 | 4.8  |
|    | 410011 | AB020641  | Hs.57856  | PFTAIRE protein kinase 1                  | 7.1 | 10.0 |
|    | 423003 | AL120077  | Hs.122967 | kelch (Drosophila)-like 2 (Mayven)        | 7.0 | 7.0  |
|    | 433921 | AA618174  |           | gb:ng14f01.s1 NCI_CGAP_Thy1 Homo sapiens  | 7.0 | 7.0  |
| 30 | 457012 | R41480    | Hs.302754 | ESTs                                      | 6.9 | 6.9  |
|    | 445898 | AF070623  | Hs.13423  | Homo sapiens clone 24458 mRNA sequence    | 6.9 | 6.9  |
|    | 425352 | NM_000939 | Hs.1897   | proopiomelanocortin (adrenocorticotropin  | 6.9 | 6.1  |
|    | 433558 | AA833757  | Hs.201769 | ESTs, Weakly similar to T24435 hypotheti  | 6.9 | 6.9  |
|    | 409031 | AA376836  | Hs.288856 | ESTs                                      | 6.8 | 6.8  |
| 35 | 419347 | C15944    | Hs.90005  | superiorcervical ganglia, neural specifi  | 6.5 | 22.2 |
|    | 445279 | R41900    | Hs.22245  | ESTs                                      | 6.4 | 6.4  |
|    | 437414 | AW894071  | Hs.48448  | hypothetical protein DKFZp547C176         | 6.4 | 6.4  |
|    | 428414 | AL049980  | Hs.184216 | DKFZP564C152 protein                      | 6.4 | 6.4  |
|    | 434104 | AF116691  | Hs.116459 | hypothetical protein PRO2198              | 6.4 | 4.0  |
| 40 | 443244 | AI457235  | Hs.166479 | ESTs                                      | 6.3 | 3.0  |
|    | 447761 | AF061573  | Hs.19492  | protocadherin 8                           | 6.3 | 6.3  |
|    | 450600 | BE079478  | Hs.24880  | ESTs                                      | 6.2 | 3.9  |
|    | 427457 | AW779105  | Hs.164682 | ESTs                                      | 6.2 | 11.1 |
|    | 416133 | NM_001683 | Hs.89512  | ATPase, Ca transporting, plasma membrane  | 6.1 | 8.0  |
| 45 | 432453 | AI885537  | Hs.27172  | ESTs, Moderately similar to PC4259 ferri  | 6.0 | 3.9  |
|    | 432298 | AL118812  | Hs.274293 | Homo sapiens mRNA; cDNA DKFZp761G1111 (f  | 6.0 | 15.1 |
|    | 415114 | D60468    | Hs.94181  | ESTs                                      | 6.0 | 6.0  |
|    | 416101 | R24854    | Hs.268806 | ESTs                                      | 5.9 | 3.3  |
|    | 448958 | AB020651  | Hs.22653  | KIAA0844 protein                          | 5.9 | 5.9  |
| 50 | 447138 | AI439112  | Hs.93828  | ESTs, Weakly similar to 2109260A B cell   | 5.8 | 5.8  |
|    | 414545 | AA149287  | Hs.76605  | ESTs                                      | 5.8 | 3.6  |
|    | 424153 | AA451737  | Hs.141496 | MAGE-like 2                               | 5.7 | 5.1  |
|    | 424641 | AB001106  | Hs.151413 | glia maturation factor, beta              | 5.6 | 5.6  |
|    | 410389 | AW954049  | Hs.8177   | ESTs, Weakly similar to PIHUB6 salivary   | 5.6 | 9.6  |
| 55 | 432149 | AW614326  | Hs.133483 | ESTs, Weakly similar to T34549 probable   | 5.6 | 12.2 |
|    | 408428 | NM_014787 | Hs.44896  | DnaJ (Hsp40) homolog, subfamily B, membe  | 5.6 | 5.6  |
|    | 443912 | R37257    | Hs.184780 | ESTs                                      | 5.5 | 6.1  |
|    | 442023 | AI187878  | Hs.144549 | ESTs                                      | 5.5 | 5.6  |
|    | 450642 | R39773    | Hs.7130   | copine IV                                 | 5.4 | 5.6  |
| 60 | 439772 | AL365406  | Hs.10268  | Homo sapiens mRNA full length insert cDN  | 5.4 | 9.8  |
|    | 450149 | AW969781  | Hs.132863 | Zic family member 2 (odd-paired Drosophi  | 5.4 | 5.4  |
|    | 438202 | AW169287  | Hs.22588  | ESTs                                      | 5.3 | 5.3  |
|    | 448605 | AL109678  | Hs.21597  | Homo sapiens mRNA full length insert cDN  | 5.3 | 5.3  |
|    | 418866 | T65754    |           | gb:yc11c07.s1 Stratagene lung (937210) H. | 5.3 | 3.8  |
| 65 | 448786 | BE048842  | Hs.179075 | Homo sapiens cDNA FLJ11881 fis, clone HE  | 5.2 | 5.2  |
|    | 443682 | AI383061  | Hs.47248  | ESTs, Highly similar to similar to Cdc14  | 5.2 | 3.3  |
|    | 415666 | H72693    |           | gb:yu03c11.r1 Soares fetal liver spleen   | 5.2 | 5.2  |
|    | 428508 | BE252383  | Hs.184668 | SBB131 protein                            | 5.2 | 4.1  |
|    | 446353 | AI290919  | Hs.153661 | ESTs                                      | 5.1 | 5.1  |
| 70 | 442106 | AW205881  | Hs.326728 | ESTs                                      | 5.1 | 3.2  |
|    | 437331 | AL353933  | Hs.21710  | hypothetical protein DKFZp761G0313        | 5.1 | 5.1  |
|    | 419318 | AW969742  | Hs.291005 | ESTs                                      | 5.0 | 3.1  |
|    | 408068 | AW148652  | Hs.167398 | ESTs                                      | 5.0 | 5.0  |
|    | 434149 | Z43829    | Hs.244624 | hypothetical protein MGC5469              | 5.0 | 5.0  |
| 75 | 439238 | N47305    | Hs.302161 | ESTs                                      | 4.9 | 5.3  |
|    | 414631 | AW970130  | Hs.65406  | ESTs                                      | 4.9 | 4.9  |
|    | 447104 | R19085    | Hs.210706 | Homo sapiens cDNA FLJ13182 fis, clone NT  | 4.9 | 3.0  |
|    | 418527 | AA450386  | Hs.7149   | Homo sapiens cDNA: FLJ21950 fis, clone H  | 4.9 | 4.9  |
|    | 425073 | W39609    | Hs.22003  | solute carrier family 6 (neurotransmitte  | 4.9 | 4.9  |
| 80 | 433516 | AA595802  | Hs.33410  | ESTs, Weakly similar to T17279 hypotheti  | 4.8 | 4.8  |
|    | 427287 | NM_014903 | Hs.174188 | KIAA0938 protein                          | 4.8 | 4.8  |
|    | 447252 | R90916    | Hs.12449  | Homo sapiens transmembrane protein HTMP1  | 4.8 | 3.2  |
|    | 419643 | F06066    | Hs.91791  | chromosome 11 open reading frame 25       | 4.7 | 4.7  |
|    | 414949 | C15314    | Hs.323349 | ESTs                                      | 4.7 | 3.8  |



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|    |        |           |           |  |     |      |
|----|--------|-----------|-----------|--|-----|------|
|    | 429900 | AA460421  | Hs.30875  | ESTs                                     | 4.7 | 4.2  |
|    | 422949 | AA319435  |           | gb:EST21657 Adrenal gland tumor Homo sap | 4.7 | 7.4  |
|    | 430537 | X62692    | Hs.2593   | phosphodiesterase 6B, cGMP-specific, rod | 4.6 | 4.6  |
|    | 419191 | U17195    | Hs.89666  | A kinase (PRKA) anchor protein 6         | 4.5 | 4.5  |
| 5  | 421952 | AA300900  | Hs.98849  | ESTs, Moderately similar to AF161511.1 H | 4.4 | 3.2  |
|    | 406311 |           |           | NM_021979*:Homo sapiens heat shock 70kD  | 4.4 | 11.5 |
|    | 451050 | AW937420  | Hs.69662  | ESTs                                     | 4.4 | 4.4  |
|    | 423728 | AW891294  | Hs.132136 | solute carrier family 4, sodium bicarbon | 4.4 | 7.9  |
|    | 411498 | NM_014210 | Hs.70499  | ecotropic viral integration site 2A      | 4.3 | 19.4 |
| 10 | 451301 | AI769514  | Hs.209890 | EST                                      | 4.3 | 4.3  |
|    | 452381 | H23329    | Hs.290880 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 4.3 | 4.3  |
|    | 433109 | N58907    | Hs.162430 | EST                                      | 4.3 | 3.9  |
|    | 423589 | AA328082  | Hs.209569 | ESTs                                     | 4.2 | 4.2  |
|    | 427224 | AL135554  | Hs.101937 | sine oculis homeobox (Drosophila) homolo | 4.2 | 3.9  |
| 15 | 420489 | AA815089  | Hs.193513 | ESTs                                     | 4.1 | 4.1  |
|    | 408206 | AF041853  | Hs.43670  | kinesin family member 3A                 | 4.1 | 4.1  |
|    | 418202 | N48521    | Hs.26549  | KIAA1708 protein                         | 4.1 | 5.8  |
|    | 448117 | H49129    | Hs.172982 | ESTs                                     | 4.1 | 4.1  |
|    | 412155 | R38167    | Hs.12449  | Homo sapiens transmembrane protein HTMP1 | 4.0 | 27.9 |
| 20 | 458694 | F12832    | Hs.3610   | ESTs                                     | 4.0 | 4.0  |
|    | 452197 | AW023595  | Hs.232048 | ESTs                                     | 4.0 | 4.0  |
|    | 408547 | AA574291  | Hs.57837  | ESTs                                     | 4.0 | 4.0  |
|    | 433447 | U29195    | Hs.3281   | neuronal pentraxin II                    | 4.0 | 3.7  |
|    | 448583 | NM_015239 | Hs.21542  | KIAA1035 protein                         | 4.0 | 4.0  |
| 25 | 442412 | R77677    | Hs.346644 | ESTs                                     | 3.9 | 3.9  |
|    | 440293 | AI004193  | Hs.22123  | ESTs                                     | 3.9 | 3.9  |
|    | 426365 | AA376667  | Hs.10283  | RNA binding motif protein 8B             | 3.9 | 4.1  |
|    | 400844 |           |           | NM_003105*:Homo sapiens sortilin-related | 3.9 | 3.1  |
| 30 | 426054 | U12431    | Hs.166109 | ELAV (embryonic lethal, abnormal vision, | 3.9 | 3.9  |
|    | 429290 | AF203032  | Hs.198760 | neurofilament, heavy polypeptide (200kD) | 3.8 | 3.3  |
|    | 408777 | U71204    | Hs.47626  | Ric (Drosophila)-like, expressed in neur | 3.8 | 3.8  |
|    | 442576 | AI733585  | Hs.130897 | ESTs                                     | 3.8 | 3.8  |
|    | 414699 | AI815523  | Hs.76930  | synuclein, alpha (non A4 component of am | 3.8 | 4.5  |
| 35 | 436476 | AA326108  | Hs.33829  | bHLH protein DEC2                        | 3.8 | 3.3  |
|    | 434998 | AW975157  | Hs.26037  | ESTs                                     | 3.7 | 3.7  |
|    | 412049 | N53437    | Hs.18268  | adenylate kinase 5                       | 3.7 | 10.7 |
|    | 416220 | N49776    | Hs.170994 | hypothetical protein MGC10946            | 3.7 | 4.5  |
|    | 459697 | AA406062  | Hs.98002  | ESTs                                     | 3.7 | 5.4  |
|    | 435648 | H24347    | Hs.27524  | ESTs                                     | 3.7 | 8.1  |
| 40 | 442042 | AI990506  | Hs.8077   | Homo sapiens mRNA; cDNA DKFZp547E184 (fr | 3.7 | 6.2  |
|    | 456765 | AI497900  | Hs.33067  | ESTs                                     | 3.7 | 3.7  |
|    | 434933 | R91095    | Hs.4276   | KIAA1701 protein                         | 3.6 | 6.1  |
|    | 419518 | U79289    | Hs.90798  | Human clone 23695 mRNA sequence          | 3.6 | 3.6  |
|    | 452667 | T87219    | Hs.13219  | ESTs                                     | 3.6 | 3.6  |
| 45 | 436773 | AW078629  |           | PC4 and SFRS1 interacting protein 1      | 3.6 | 3.6  |
|    | 408119 | W26213    | Hs.101672 | ESTs, Weakly similar to T00331 hypotheti | 3.6 | 3.6  |
|    | 453534 | NM_014796 | Hs.33187  | KIAA0748 gene product                    | 3.6 | 4.7  |
|    | 449093 | AB035356  | Hs.22998  | neurexin 1                               | 3.6 | 3.6  |
| 50 | 442738 | AW002370  | Hs.131055 | ESTs, Weakly similar to NPM_HUMAN NUCLEO | 3.5 | 3.5  |
|    | 447746 | AW015920  | Hs.161359 | ESTs                                     | 3.5 | 9.9  |
|    | 449117 | AW449310  | Hs.210262 | ESTs, Weakly similar to HSS2_HUMAN HEPAR | 3.5 | 3.5  |
|    | 447750 | AI422234  | Hs.143434 | contactin 1                              | 3.5 | 9.8  |
|    | 453590 | AF150278  | Hs.33578  | KIAA0820 protein                         | 3.5 | 22.3 |
| 55 | 409339 | AB020686  | Hs.54037  | ectonucleotide pyrophosphatase/phosphodi | 3.5 | 3.6  |
|    | 410240 | AL157424  | Hs.61289  | synaptotagmin 2                          | 3.5 | 4.6  |
|    | 410224 | M55513    | Hs.150208 | potassium voltage-gated channel, shaker- | 3.4 | 3.4  |
|    | 400098 |           |           | Eos Control                              | 3.4 | 3.4  |
|    | 450181 | H05254    | Hs.201198 | ESTs                                     | 3.4 | 7.2  |
| 60 | 459080 | AW192083  | Hs.290855 | ESTs                                     | 3.4 | 13.5 |
|    | 417063 | N50515    | Hs.45061  | ESTs                                     | 3.3 | 3.3  |
|    | 424918 | R13982    | Hs.169309 | myelin-associated oligodendrocyte basic  | 3.3 | 5.3  |
|    | 453431 | AF094754  | Hs.32973  | glycine receptor, beta                   | 3.3 | 4.6  |
|    | 412453 | R20205    | Hs.75236  | ESTs                                     | 3.3 | 3.3  |
|    | 450561 | R49674    | Hs.25909  | ESTs                                     | 3.3 | 3.3  |
| 65 | 415527 | F11624    |           | gb:HSC2ZD101 normalized infant brain cDN | 3.3 | 3.3  |
|    | 426968 | U07616    | Hs.173034 | amphiphysin (Stiff-Mann syndrome with br | 3.3 | 15.3 |
|    | 427386 | AW836261  | Hs.6727   | ESTs                                     | 3.3 | 3.3  |
|    | 424001 | W67883    | Hs.137476 | paternally expressed 10                  | 3.2 | 5.4  |
| 70 | 439450 | R51613    | Hs.125304 | ESTs                                     | 3.2 | 8.3  |
|    | 442879 | AF032922  | Hs.8813   | syntaxin binding protein 3               | 3.2 | 3.2  |
|    | 417284 | N62889    | Hs.107242 | Homo sapiens cDNA FLJ12965 fis, clone NT | 3.2 | 3.2  |
|    | 410343 | AA084273  | Hs.76561  | ESTs, Weakly similar to S47072 finger pr | 3.2 | 3.2  |
|    | 410909 | AW898161  | Hs.53112  | ESTs, Moderately similar to ALU8_HUMAN A | 3.2 | 12.5 |
| 75 | 453919 | AW959912  | Hs.7076   | KIAA1705 protein                         | 3.2 | 3.2  |
|    | 424087 | N69333    | Hs.143434 | contactin 1                              | 3.1 | 3.1  |
|    | 428963 | AW382682  | Hs.258208 | Homo sapiens, clone MGC:15606, mRNA, com | 3.1 | 3.3  |
|    | 419852 | AW503756  | Hs.286184 | hypothetical protein dJ551D2.5           | 3.1 | 4.1  |
|    | 422234 | AF119818  | Hs.113287 | discs, large (Drosophila) homolog-associ | 3.1 | 3.1  |
| 80 | 423829 | R44107    | Hs.240905 | ESTs                                     | 3.1 | 4.4  |
|    | 443297 | AI049864  | Hs.133029 | ESTs                                     | 3.1 | 3.1  |
|    | 453302 | NM_000838 | Hs.32945  | glutamate receptor, metabotropic 1       | 3.1 | 4.6  |
|    | 405819 |           |           | NM_002578:Homo sapiens p21 (CDKN1A)-acti | 3.1 | 13.5 |
|    | 445725 | AK000956  | Hs.13209  | hypothetical protein FLJ10094            | 3.0 | 3.0  |

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|    |        |           |           |  |     |      |
|----|--------|-----------|-----------|--|-----|------|
|    | 447673 | AI823987  | Hs.182285 | ESTs                                     | 3.0 | 3.0  |
|    | 433670 | AA604405  |           | gb:nc087h09.s1 NCI_CGAP_AA1 Homo sapiens | 3.0 | 3.9  |
|    | 450757 | BE081050  | Hs.31570  | ESTs, Weakly similar to KIAA1324 protein | 3.0 | 3.2  |
| 5  | 424724 | T06532    | Hs.287709 | Homo sapiens cDNA: FLJ22674 fis, clone H | 3.0 | 3.0  |
|    | 433315 | R96754    | Hs.235706 | GRB2-associated binding protein 1        | 3.0 | 3.1  |
|    | 451032 | W03692    | Hs.323079 | Homo sapiens mRNA; cDNA DKFZp564P116 (fr | 3.0 | 4.9  |
|    | 423346 | AI267677  | Hs.127416 | synaptotagmin 1                          | 3.0 | 20.1 |
|    | 439274 | AF086092  | Hs.48372  | ESTs                                     | 3.0 | 18.3 |
| 10 | 425649 | U30930    | Hs.158540 | UDP glycosyltransferase 8 (UDP-galactose | 2.9 | 38.6 |
|    | 441869 | NM_003947 | Hs.8004   | huntingtin-associated protein interactin | 2.9 | 14.9 |
|    | 407868 | NM_000950 | Hs.40637  | proline-rich Gla (G-carboxyglutamic acid | 2.9 | 3.3  |
|    | 410765 | AI694972  | Hs.66180  | nucleosome assembly protein 1-like 2     | 2.9 | 8.0  |
|    | 428001 | H97428    | Hs.219907 | ESTs, Moderately similar to Transforming | 2.8 | 5.9  |
| 15 | 448533 | AL119710  | Hs.21365  | nucleosome assembly protein 1-like 3     | 2.8 | 9.6  |
|    | 425130 | AA448208  | Hs.99163  | ESTs                                     | 2.8 | 3.1  |
|    | 408554 | AA836381  | Hs.315111 | nuclear receptor co-repressor/HDAC3 comp | 2.8 | 3.7  |
|    | 452238 | F01811    | Hs.345757 | ESTs                                     | 2.8 | 3.8  |
|    | 446544 | AI631932  | Hs.7047   | ESTs, Weakly similar to Unknown [H.sapie | 2.8 | 12.4 |
| 20 | 433803 | AI823593  | Hs.27688  | ESTs                                     | 2.8 | 4.1  |
|    | 407728 | AW071502  | Hs.175931 | ESTs                                     | 2.7 | 10.2 |
|    | 414831 | AK000342  | Hs.77646  | Homo sapiens mRNA; cDNA DKFZp761M0223 (f | 2.7 | 3.4  |
|    | 410711 | AB002316  | Hs.65746  | KIAA0318 protein                         | 2.7 | 6.1  |
|    | 452738 | AL133800  | Hs.7086   | hypothetical protein MGC12435            | 2.7 | 3.5  |
| 25 | 451516 | AI800515  | Hs.12024  | ESTs                                     | 2.7 | 6.3  |
|    | 454053 | AW023006  | Hs.27172  | ESTs, Moderately similar to PC4259 ferri | 2.7 | 3.6  |
|    | 450474 | AW672844  | Hs.117494 | ESTs                                     | 2.7 | 7.2  |
|    | 422414 | AW875237  | Hs.13701  | ESTs                                     | 2.7 | 5.3  |
|    | 428186 | AW504300  | Hs.295605 | mannosidase, alpha, class 2A, member 2   | 2.7 | 3.9  |
| 30 | 431342 | AW971018  | Hs.21659  | ESTs                                     | 2.7 | 8.0  |
|    | 423449 | AI497900  | Hs.33067  | ESTs                                     | 2.6 | 14.5 |
|    | 427283 | AL119796  | Hs.174185 | ectonucleotide pyrophosphatase/phosphodi | 2.6 | 3.0  |
|    | 426919 | AL041228  |           | ELAV (embryonic lethal, abnormal vision, | 2.6 | 9.0  |
|    | 437117 | AL049256  | Hs.122593 | ESTs                                     | 2.6 | 3.8  |
| 35 | 422491 | AA338548  | Hs.117546 | neuronatin                               | 2.6 | 3.6  |
|    | 438068 | AI927209  | Hs.306210 | Homo sapiens cDNA: FLJ23133 fis, clone L | 2.6 | 5.1  |
|    | 432809 | AA565509  | Hs.131703 | ESTs                                     | 2.5 | 9.9  |
|    | 433551 | AI985544  | Hs.12450  | protocadherin 9                          | 2.5 | 18.1 |
| 40 | 444783 | AK001468  | Hs.62180  | anillin (Drosophila Scraps homolog), act | 2.5 | 43.2 |
|    | 417417 | F05745    | Hs.89512  | ATPase, Ca transporting, plasma membrane | 2.5 | 17.1 |
|    | 413554 | AA319146  | Hs.75426  | secretogranin II (chromogranin C)        | 2.5 | 5.7  |
|    | 448902 | Z45998    | Hs.22543  | Homo sapiens mRNA; cDNA DKFZp761I1912 (f | 2.5 | 21.8 |
|    | 442910 | AI365130  | Hs.11307  | ESTs, Weakly similar to T19326 hypotheti | 2.5 | 14.5 |
|    | 423135 | N67655    | Hs.26411  | ESTs                                     | 2.5 | 8.2  |
| 45 | 452311 | AW304029  | Hs.252744 | ESTs                                     | 2.5 | 3.5  |
|    | 418940 | H17739    | Hs.288513 | Human DNA sequence from clone RP5-899C14 | 2.5 | 7.0  |
|    | 432882 | NM_013257 | Hs.279696 | serum/glucocorticoid regulated kinase-li | 2.5 | 4.2  |
|    | 422411 | AW749443  | Hs.22511  | ESTs                                     | 2.5 | 12.0 |
|    | 451386 | AB029006  | Hs.26334  | spastic paraplegia 4 (autosomal dominant | 2.4 | 3.1  |
| 50 | 404819 |           |           | NM_002688":Homo sapiens peanut (Drosophi | 2.4 | 5.8  |
|    | 429656 | X05608    | Hs.211584 | neurofilament, light polypeptide (68kD)  | 2.4 | 13.1 |
|    | 431988 | AC002302  | Hs.77202  | protein kinase C, beta 1                 | 2.4 | 10.5 |
|    | 411379 | AI816344  | Hs.12554  | ESTs, Weakly similar to NPL4_HUMAN NUCLE | 2.4 | 11.2 |
|    | 422980 | N46569    | Hs.76722  | CCAAT/enhancer binding protein (C/EBP),  | 2.4 | 45.2 |
| 55 | 429859 | NM_007050 | Hs.225952 | protein tyrosine phosphatase, receptor 1 | 2.4 | 5.1  |
|    | 430287 | AW182459  | Hs.125759 | ESTs, Weakly similar to LEU5_HUMAN LEUKE | 2.4 | 7.6  |
|    | 422890 | Z43784    |           | ankyrin 3, node of Ranvier (ankyrin G)   | 2.4 | 3.6  |
|    | 427658 | H61387    | Hs.30868  | nogo receptor                            | 2.4 | 3.0  |
|    | 446100 | AW967109  | Hs.13804  | hypothetical protein dJ462O23.2          | 2.3 | 3.6  |
| 60 | 412266 | N59006    | Hs.26133  | ESTs                                     | 2.3 | 30.9 |
|    | 435059 | Z45270    | Hs.235873 | hypothetical protein FLJ22672            | 2.3 | 4.8  |
|    | 420173 | AA256151  | Hs.22999  | ESTs                                     | 2.3 | 4.1  |
|    | 452371 | R40990    | Hs.21658  | ESTs                                     | 2.3 | 3.3  |
|    | 430456 | AA314998  | Hs.241503 | hypothetical protein                     | 2.3 | 4.7  |
| 65 | 409953 | AA332277  | Hs.57691  | cadherin 18, type 2                      | 2.3 | 5.5  |
|    | 429006 | AA443143  | Hs.50929  | hypothetical protein FLJ13842            | 2.3 | 6.6  |
|    | 445194 | AI215667  | Hs.175044 | ESTs                                     | 2.3 | 3.1  |
|    | 428392 | H10233    | Hs.2265   | secretory granule, neuroendocrine protei | 2.3 | 42.3 |
|    | 434460 | AA478486  | Hs.3852   | KIAA0368 protein                         | 2.3 | 4.8  |
| 70 | 416490 | AF090116  | Hs.79348  | regulator of G-protein signalling 7      | 2.3 | 12.5 |
|    | 437924 | AI935344  | Hs.164118 | ESTs, Weakly similar to SL51_HUMAN SODIU | 2.3 | 3.2  |
|    | 418738 | AW388633  | Hs.6682   | solute carrier family 7, (cationic amino | 2.2 | 16.9 |
|    | 424945 | AI221919  |           | hypothetical protein FLJ10582            | 2.2 | 30.5 |
|    | 416530 | U62801    | Hs.79361  | kallikrein 6 (neurosin, zyme)            | 2.2 | 4.4  |
| 75 | 422927 | AW247388  | Hs.301423 | calcium binding protein 1 (calbrain)     | 2.2 | 3.0  |
|    | 438831 | BE263273  | Hs.6439   | synapsin II                              | 2.2 | 3.4  |
|    | 449078 | AK001256  | Hs.22975  | KIAA1576 protein                         | 2.2 | 16.1 |
|    | 410631 | AA086469  | Hs.47171  | ESTs                                     | 2.2 | 5.8  |
|    | 419271 | N34901    | Hs.238532 | ESTs                                     | 2.2 | 7.5  |
| 80 | 452752 | AW044058  | Hs.33578  | KIAA0820 protein                         | 2.2 | 13.4 |
|    | 446574 | AI310135  | Hs.335933 | ESTs                                     | 2.2 | 3.5  |
|    | 452106 | AI141031  | Hs.21342  | ESTs                                     | 2.2 | 3.4  |
|    | 415910 | U20350    | Hs.78913  | chemokine (C-X3-C) receptor 1            | 2.2 | 28.9 |
|    | 444458 | BE041526  | Hs.31746  | hypothetical protein DKFZp547F072        | 2.2 | 7.7  |

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|    |              |   |  |     |      |
|----|--------------|---|--|-----|------|
|    | 446692       | Z44514  | Homo sapiens mRNA for KIAA1763 protein,  | 2.2 | 33.0 |
|    | 412788       | AA120960  | Hs.198416 ESTs   | 2.2 | 8.5  |
|    | 419103       | Z40229  | Hs.96423 hypothetical protein FLJ23033   | 2.2 | 8.4  |
|    | 424474       | AA308883  | Hs.148680 calcyon; D1 dopamine receptor-interactin   | 2.2 | 3.6  |
| 5  | 451783       | R42554  | Hs.210862 T-box, brain, 1  | 2.1 | 11.2 |
|    | 434792       | AA649253  | Hs.132458 ESTs   | 2.1 | 3.8  |
|    | 424922       | BE386547  | Hs.217112 hypothetical protein MGC10825  | 2.1 | 3.7  |
|    | 455364       | H72176  | Hs.4273 hypothetical protein FLJ13159  | 2.1 | 4.9  |
|    | 413988       | M61883  | Hs.324784 glutamate decarboxylase 1 (brain, 67kD)  | 2.1 | 5.1  |
| 10 | 452744       | AI267652  | Hs.245107 Homo sapiens mRNA; cDNA DKFZp434E082 (fr   | 2.1 | 3.6  |
|    | 443150       | AI034467  | Hs.34650 ESTs  | 2.1 | 7.6  |
|    | 453220       | AB033089  | Hs.32452 Homo sapiens mRNA for KIAA1263 protein,   | 2.1 | 19.9 |
|    | 420050       | AL118615  | Hs.94653 neurochondrin   | 2.1 | 6.5  |
|    | 408449       | NM_004408   | Hs.166161 dynamin 1  | 2.1 | 5.1  |
| 15 | 423641       | AL137256  | Hs.130489 ATPase, aminophospholipid transporter-II   | 2.1 | 6.2  |
|    | 430347       | NM_002039   | Hs.239705 GRB2-associated binding protein 1  | 2.1 | 3.2  |
|    | 449568       | AL157479  | Hs.23740 KIAA1598 protein  | 2.1 | 3.6  |
|    | 412675       | AA460716  | Hs.9788 hypothetical protein MGC10924 similar to   | 2.1 | 3.3  |
|    | 429550       | AW293055  | Hs.119357 ESTs   | 2.1 | 6.4  |
| 20 | 446782       | AI653048  | Hs.144006 ESTs   | 2.1 | 9.0  |
|    | 453924       | R49295  | Hs.24886 ESTs  | 2.1 | 13.4 |
|    | 437948       | AA772920  | Hs.303527 ESTs   | 2.1 | 24.8 |
|    | 451952       | AL120173  | Hs.301663 ESTs   | 2.0 | 19.2 |
|    | 453754       | AW972580  | Hs.172753 ESTs   | 2.0 | 3.4  |
| 25 | 448755       | R15337  | Hs.21958 Homo sapiens mRNA; cDNA DKFZp547D086 (fr  | 2.0 | 3.9  |
|    | 447163       | AW292770  | Hs.5542 DnaJ (Hsp40) homolog, subfamily C, membe   | 2.0 | 3.4  |
|    | 448299       | AA497044  | Hs.20887 hypothetical protein FLJ10392   | 2.0 | 11.5 |
|    | 411656       | AF106564  | Hs.71346 neurofilament 3 (150kD medium)  | 2.0 | 6.6  |
|    | 424458       | M29273  | Hs.1780 myelin associated glycoprotein   | 2.0 | 10.1 |
| 30 | 434277       | X77748  | Hs.3786 glutamate receptor, metabotropic 3   | 2.0 | 28.5 |
|    | 440152       | AB002376  | Hs.7006 KIAA0378 protein   | 2.0 | 14.2 |
|    | 429956       | AI374651  | Hs.22542 ESTs  | 2.0 | 3.2  |
|    | 450590       | AI701507  | Hs.273740 ESTs   | 2.0 | 3.8  |
| 35 | 429024       | AI652297  | Hs.119302 complement C1q tumor necrosis factor-rel   | 2.0 | 3.7  |
|    | 430643       | AW970065  | Hs.287425 MEGF10 protein   | 2.0 | 4.1  |
|    | 415734       | NM_014747   | Hs.78748 KIAA0237 gene product   | 2.0 | 27.4 |
|    | 419757       | AA773820  | Hs.63970 ESTs  | 2.0 | 3.3  |
|    | 421264       | AL039123  | Hs.103042 microtubule-associated protein 1B  | 2.0 | 23.8 |
| 40 | 439607       | BE540565  | Hs.159460 ESTs   | 2.0 | 5.6  |
|    | 435624       | AF218942  | Hs.24889 fomin 2   | 2.0 | 12.2 |
|    | 425121       | AI797511  | Hs.154679 synaptotagmin I  | 2.0 | 3.9  |
|    | 431677       | AK000496  | Hs.306989 hypothetical protein FLJ20489  | 2.0 | 3.1  |
|    | 442593       | R39804  | Hs.31961 ESTs  | 2.0 | 6.7  |
| 45 | 410366       | AI267589  | Hs.302689 hypothetical protein   | 2.0 | 10.4 |
|    | 426575       | M74826  | Hs.170808 glutamate decarboxylase 2 (pancreatic is   | 2.0 | 4.6  |
|    | 452856       | AF034799  | Hs.30881 protein tyrosine phosphatase, receptor t  | 2.0 | 10.7 |
|    | 437380       | AL359577  | Hs.112198 Homo sapiens mRNA; cDNA DKFZp547M073 (fr   | 2.0 | 3.8  |
|    | 424893       | AW295112  | Hs.153648 Homo sapiens cDNA FLJ13303 fis, clone OV   | 2.0 | 3.8  |
|    | 436734       | AI937612  | Hs.273758 hypothetical protein FLJ23112  | 2.0 | 4.7  |
| 50 | 422544       | AB018259  | Hs.118140 KIAA0716 gene product  | 2.0 | 11.8 |
|    | 440105       | AA694010  | Hs.6932 Homo sapiens clone Z3809 mRNA sequence   | 2.0 | 8.2  |
|    | 425741       | AF052152  | Hs.159412 Homo sapiens clone Z4628 mRNA sequence   | 2.0 | 6.5  |
|    | 450310       | N62341  | Hs.94116 ESTs  | 2.0 | 3.6  |
| 55 | TABLE 20B:   |   |  |     |      |
|    | Pkey:        | Unique Eos probeset identifier number   |  |     |      |
|    | CAT number:  | Gene cluster number   |  |     |      |
|    | Accession:   | Genbank accession numbers   |  |     |      |
| 60 | Pkey         | CAT Number  | Accession  |     |      |
|    | 415527       | 1539393_1   | F11624 Z43212 H08936 R56332 H09256 R52303 R13075   |     |      |
|    | 415666       | 1543492_1   | H72693 R08673 H72694 F20990 R08580   |     |      |
|    | 418866       | 179788_1  | T65754 AA229857 AA229658   |     |      |
| 65 | 422890       | 222707_1  | Z43784 R13382 AW572911 AA449369 H17037 R19603 AI632565 AW004030 BE502530 Z25032 AA805324 AA449241 AI651825 AI264863 AW196918 |     |      |
|    |              |   | AA948267 AI953735 AI263703 AA319159 AW964436 AI903440 AW594171 AI867447 AW204071 AW956110 C15616 D81142 H17038 AW162343      |     |      |
|    |              |   | T87230 AI3   |     |      |
|    | 422949       | 223184_1  | AA319435 N56456 AA319377 AW961532 T48452 AA894424  |     |      |
|    | 424945       | 245223_1  | AI221919 Z19967 AA348780 AW964077 AW166028 BE540193 N94800 AA452368 N99604 AI341345 AW298800 AA724961 AA931158 AI741227      |     |      |
| 70 |              |   | AI806660 AI982626 D81263 D53937 D52496 AA974487 AW043854 N50483 Z39997 AI492961 AI361526 F04002 AA452141 Z23551 AI472655     |     |      |
|    |              |   | AI193667 AI341   |     |      |
|    | 426919       | 273507_1  | AL041228 D82004 D61361 AI203314 AI990307 AW900295 AI018308 AW087473 AW183530 AA393346 H50055 AA935601                        |     |      |
|    | 433670       | 372721_1  | AA604405 BE062234 AW748386   |     |      |
|    | 433921       | 377350_1  | AA618174 AI114549 R36464 R36465  |     |      |
|    | 433940       | 37787_1   | H05129 N63433 AI651350 AA984734 AI368716 N40915 AI989705 F09042 T03905 R88588 AF112220                                       |     |      |
| 75 | 436773       | 426857_1  | AW078629 AI857375 N64357 AA731069  |     |      |
|    | 446692       | 689623_1  | Z44514 AI352097 AI803984 AW235923 AW196558 AI954637 AI336983   |     |      |
| 80 | TABLE 20C:   |   |  |     |      |
|    | Pkey:        | Unique number corresponding to an Eos probeset  |  |     |      |
|    | Ref:         | Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <u>Nature</u> 402:489-495. |  |     |      |
|    | Strand:      | Indicates DNA strand from which exons were predicted.   |  |     |      |
|    | NI_position: | Indicates nucleotide positions of predicted exons.  |  |     |      |

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|   |        |         |        |   |
|---|--------|---------|--------|---|
|   | Pkey   | Ref     | Strand | Nt_position   |
|   | 400844 | 9188605 | Plus   | 24746-24872,25035-25204   |
| 5 | 404819 | 4678240 | Plus   | 16223-16319,16427-16513,16736-16859,16941-17075,17170-17287,17389-17529,18261-18357,18443-18578 |
|   | 405560 | 183148  | Plus   | 5495-5655,6077-6241,6495-6692   |
|   | 405819 | 4007557 | Plus   | 2830-2967   |
|   | 406311 | 9211559 | Minus  | 137114-139033   |

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TABLE 21A: ABOUT 410 GENES SIGNIFICANTLY DOWN-REGULATED IN GLIOBLASTOMA MULTIFORMA COMPARED TO NORMAL ADULT CNS

Table 21A lists about 410 genes significantly down-regulated in glioblastoma multiforma (GBM) compared to normal adult CNS tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" normal CNS to "average" GBM was greater than or equal to 2. The "average" normal CNS level was set to the 75<sup>th</sup> percentile amongst various normal CNS tissues. The "average" GBM level was set to the 95<sup>th</sup> percentile amongst various tumor samples. In order to remove gene-specific background levels of non-specific hybridization, the 10<sup>th</sup> percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

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Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 R1: Ratio of CNS to GLIOBLASTOMA MULTIFORMA

20

|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | Pkey   | ExAccn    | UnigenelD | Unigene Title                            | R1   |
|    | 417275 | X63578    | Hs.295449 | parvalbumin                              | 18.6 |
| 25 | 428505 | AL035461  | Hs.2281   | chromogranin B (secretogranin 1)         | 13.8 |
|    | 415672 | N53097    | Hs.193579 | ESTs                                     | 13.5 |
|    | 459080 | AW192083  | Hs.290855 | ESTs                                     | 12.9 |
|    | 432298 | AL118812  | Hs.274293 | Homo sapiens mRNA; cDNA DKFZp761G1111 (f | 11.7 |
|    | 400302 | N48056    | Hs.1915   | folate hydrolase (prostate-specific memb | 10.9 |
| 30 | 418318 | U47732    | Hs.84072  | transmembrane 4 superfamily member 3     | 10.1 |
|    | 424645 | NM_014682 | Hs.151449 | KIAA0535 gene product                    | 8.2  |
|    | 415274 | AF001548  | Hs.78344  | myosin, heavy polypeptide 11, smooth mus | 7.5  |
|    | 413324 | V00571    | Hs.75294  | corticotropin releasing hormone          | 7.5  |
|    | 417167 | AW206437  | Hs.4290   | ESTs                                     | 7.3  |
| 35 | 422728 | AW937826  | Hs.103262 | ESTs, Weakly similar to ZN91_HUMAN ZINC  | 6.8  |
|    | 410330 | AW023630  | Hs.159425 | ESTs                                     | 6.5  |
|    | 450590 | AI701507  | Hs.273740 | ESTs                                     | 6.5  |
|    | 453165 | S74727    | Hs.32042  | aspartoacylase (aminoacylase 2, Canavan  | 6.5  |
|    | 454076 | AW204712  | Hs.61957  | ESTs                                     | 6.3  |
| 40 | 419956 | AL137939  | Hs.40096  | ESTs                                     | 6.3  |
|    | 416851 | AW963951  | Hs.85618  | ESTs                                     | 6.2  |
|    | 428874 | W32133    | Hs.194366 | transferrin (prealbumin, amyloidosis t   | 6.0  |
|    | 409743 | N48721    | Hs.183506 | hypothetical protein FLJ14213            | 5.9  |
|    | 449078 | AK001256  | Hs.22975  | KIAA1576 protein                         | 5.6  |
|    | 448072 | AI459306  | Hs.24908  | ESTs                                     | 5.6  |
| 45 | 412622 | AW664708  | Hs.171959 | ESTs                                     | 5.6  |
|    | 428414 | AL049980  | Hs.184216 | DKFZP564C152 protein                     | 5.5  |
|    | 427322 | AK002017  | Hs.176227 | hypothetical protein FLJ11155            | 5.5  |
|    | 411498 | NM_014210 | Hs.70499  | ecotropic viral integration site 2A      | 5.4  |
| 50 | 453344 | BE349075  | Hs.44571  | ESTs                                     | 5.4  |
|    | 441790 | AW294909  | Hs.132208 | ESTs                                     | 5.3  |
|    | 443037 | AW500305  | Hs.8906   | syntaxin 7                               | 5.3  |
|    | 445529 | H14421    | Hs.180513 | ATP-binding cassette, sub-family A (ABC1 | 5.2  |
|    | 447750 | AI422234  | Hs.143434 | contactin 1                              | 5.2  |
| 55 | 444409 | AI792140  | Hs.49265  | ESTs                                     | 5.2  |
|    | 409031 | AA376836  | Hs.288856 | ESTs                                     | 5.1  |
|    | 453220 | AB033089  | Hs.32452  | Homo sapiens mRNA for KIAA1263 protein,  | 5.0  |
|    | 452022 | AW072330  | Hs.293875 | ESTs                                     | 4.9  |
|    | 408428 | NM_014787 | Hs.44896  | DnaJ (Hsp40) homolog, subfamily B, membe | 4.8  |
| 60 | 444922 | AI921750  | Hs.144871 | Homo sapiens cDNA FLJ13752 fis, clone PL | 4.8  |
|    | 443622 | AI911527  | Hs.11805  | ESTs                                     | 4.8  |
|    | 442023 | AI187878  | Hs.144549 | ESTs                                     | 4.7  |
|    | 445618 | H79667    | Hs.237642 | Homo sapiens cDNA FLJ12052 fis, clone HE | 4.6  |
|    | 429611 | AI889077  | Hs.211388 | Homo sapiens BAC clone CTB-60N22 from 7q | 4.5  |
| 65 | 414290 | AI568801  | Hs.71721  | ESTs                                     | 4.4  |
|    | 450715 | AI266484  | Hs.31570  | ESTs, Weakly similar to KIAA1324 protein | 4.4  |
|    | 428508 | BE252383  | Hs.184668 | SBBI31 protein                           | 4.4  |
|    | 425649 | U30930    | Hs.158540 | UDP glycosyltransferase 8 (UDP-galactose | 4.3  |
|    | 459247 | N46243    | Hs.110373 | ESTs, Highly similar to T42626 secreted  | 4.3  |
| 70 | 434064 | AL049045  | Hs.180758 | hypothetical protein PRO0082             | 4.3  |
|    | 414602 | AW630088  | Hs.76550  | Homo sapiens mRNA; cDNA DKFZp564B1264 (f | 4.3  |
|    | 416133 | NM_001683 | Hs.89512  | ATPase, Ca transporting, plasma membrane | 4.3  |
|    | 426471 | M22440    | Hs.170009 | transforming growth factor, alpha        | 4.2  |
|    | 409231 | AA446644  | Hs.692    | GA733-2 antigen; epithelial glycoprotein | 4.2  |
| 75 | 448958 | AB020651  | Hs.22653  | KIAA0844 protein                         | 4.2  |
|    | 410657 | AF063228  | Hs.65248  | dynein, cytoplasmic, intermediate polype | 4.1  |
|    | 447138 | AI439112  | Hs.93828  | ESTs, Weakly similar to 2109260A B cell  | 4.1  |
|    | 440736 | D58919    | Hs.265848 | myomegalin                               | 4.1  |
|    | 407245 | X90568    | Hs.172004 | titin                                    | 4.1  |
| 80 | 441976 | AA428403  | Hs.106131 | ESTs                                     | 4.1  |
|    | 450642 | R39773    | Hs.7130   | copine IV                                | 4.1  |
|    | 432799 | NM_016161 | Hs.278960 | alpha-1,4-N-acetylglucosaminyltransferas | 4.0  |
|    | 428465 | AW970976  | Hs.293653 | ESTs                                     | 4.0  |
|    | 407868 | NM_000950 | Hs.40637  | proline-rich Glu (G-carboxyglutamic acid | 4.0  |

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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
|    | 433558 | AA833757  | Hs.201769 | ESTs, Weakly similar to T24435 hypotheti | 4.0 |
|    | 429470 | AI878901  | Hs.203862 | guanine nucleotide binding protein (G pr | 4.0 |
|    | 415666 | H72693    |           | gb:yu03c11.r1 Soares fetal liver spleen  | 3.9 |
| 5  | 407988 | N47760    | Hs.285107 | hypothetical protein FLJ13397            | 3.9 |
|    | 427061 | AB032971  | Hs.173392 | KIAA1145 protein                         | 3.9 |
|    | 430261 | AA305127  | Hs.237225 | hypothetical protein HT023               | 3.9 |
|    | 440624 | AF017987  | Hs.7306   | secreted frizzled-related protein 1      | 3.8 |
|    | 431668 | AW969610  | Hs.151179 | ESTs                                     | 3.8 |
|    | 446692 | Z44514    |           | Homo sapiens mRNA for KIAA1763 protein,  | 3.8 |
| 10 | 408739 | W01556    | Hs.238797 | ESTs, Moderately similar to I38022 hypot | 3.8 |
|    | 426716 | NM_006379 | Hs.171921 | sema domain, immunoglobulin domain (Ig), | 3.8 |
|    | 450103 | R08665    | Hs.17244  | hypothetical protein FLJ13605            | 3.7 |
|    | 426775 | AA384564  | Hs.3628   | ESTs                                     | 3.7 |
|    | 403469 |           |           | Target Exon                              | 3.7 |
| 15 | 450181 | H05254    | Hs.201198 | ESTs                                     | 3.7 |
|    | 438202 | AW169287  | Hs.22588  | ESTs                                     | 3.7 |
|    | 445279 | R41900    | Hs.22245  | ESTs                                     | 3.7 |
|    | 422546 | AB007969  | Hs.301478 | KIAA0500 protein                         | 3.7 |
| 20 | 435712 | AA694607  | Hs.176956 | ESTs                                     | 3.6 |
|    | 417620 | R02530    | Hs.191198 | ESTs                                     | 3.6 |
|    | 421952 | AA300900  | Hs.98849  | ESTs, Moderately similar to AF161511 1 H | 3.6 |
|    | 453655 | AW960427  | Hs.342874 | transforming growth factor, beta recepto | 3.6 |
|    | 426365 | AA376667  | Hs.10283  | RNA binding motif protein 8B             | 3.6 |
| 25 | 416982 | J05401    | Hs.80691  | creatine kinase, mitochondrial 2 (sarcom | 3.6 |
|    | 438086 | AA336519  | Hs.83623  | nuclear receptor subfamily 1, group I, m | 3.6 |
|    | 424704 | AI263293  | Hs.152096 | cytochrome P450, subfamily I/J (arachido | 3.6 |
|    | 414631 | AW970130  | Hs.65406  | ESTs                                     | 3.6 |
|    | 453698 | AA037615  | Hs.42746  | ESTs                                     | 3.6 |
| 30 | 438704 | AI435060  | Hs.32825  | ESTs                                     | 3.5 |
|    | 437073 | AI885608  | Hs.94122  | ESTs                                     | 3.5 |
|    | 434460 | AA478486  | Hs.3852   | KIAA0368 protein                         | 3.5 |
|    | 414541 | BE293116  | Hs.76392  | aldehyde dehydrogenase 1 family, member  | 3.5 |
|    | 423665 | BE167153  | Hs.24380  | ESTs                                     | 3.5 |
| 35 | 446390 | AA233393  | Hs.14992  | hypothetical protein FLJ11151            | 3.5 |
|    | 441264 | AA927170  | Hs.23290  | ESTs                                     | 3.5 |
|    | 433629 | R13140    | Hs.13359  | ESTs                                     | 3.5 |
|    | 411811 | AW864370  |           | gb:PM4-SN0016-100500-004-h09 SN0016 Homo | 3.5 |
|    | 410140 | AL134435  | Hs.247837 | neurexin 3                               | 3.4 |
| 40 | 415114 | D60468    | Hs.94181  | ESTs                                     | 3.4 |
|    | 455649 | BE065051  |           | gb:RC1-BT0313-110500-017-c04 BT0313 Homo | 3.4 |
|    | 433670 | AA604405  |           | gb:no87h09.s1 NCI_CGAP_AA1 Homo sapiens  | 3.4 |
|    | 417175 | R44558    | Hs.94002  | ESTs                                     | 3.4 |
|    | 427176 | AW381569  | Hs.40334  | ESTs                                     | 3.4 |
| 45 | 448519 | AW175665  | Hs.278695 | Homo sapiens protein mRNA, complete cds  | 3.4 |
|    | 457012 | R41480    | Hs.302754 | ESTs                                     | 3.3 |
|    | 405354 |           |           | CX000321:gi 6671579 ref NP_031518.1  ari | 3.3 |
|    | 445872 | AI681573  | Hs.288671 | Homo sapiens cDNA FLJ11997 fis, clone HE | 3.3 |
|    | 433803 | AI823593  | Hs.27688  | ESTs                                     | 3.3 |
| 50 | 449017 | AW002425  | Hs.224142 | ESTs                                     | 3.3 |
|    | 414545 | AA149287  | Hs.75605  | ESTs                                     | 3.3 |
|    | 409010 | AI648675  | Hs.103441 | Homo sapiens, Similar to RIKEN cDNA 1700 | 3.3 |
|    | 426158 | NM_001982 | Hs.199067 | v-erb-b2 avian erythroblastic leukemia v | 3.3 |
|    | 422411 | AW749443  | Hs.22511  | ESTs                                     | 3.3 |
| 55 | 428850 | AA934975  | Hs.185076 | ESTs                                     | 3.3 |
|    | 406922 | S70284    | Hs.119597 | gb:stearoyl-CoA desaturase [human, adipo | 3.2 |
|    | 429556 | AW139399  | Hs.98988  | ESTs                                     | 3.2 |
|    | 434104 | AF116691  | Hs.116459 | hypothetical protein PRO2198             | 3.2 |
|    | 427229 | AI799751  | Hs.5635   | ESTs                                     | 3.2 |
| 60 | 444458 | BE041526  | Hs.31746  | hypothetical protein DKFZp547F072        | 3.2 |
|    | 433328 | AW298159  | Hs.23644  | ESTs, Weakly similar to S65824 reverse t | 3.2 |
|    | 412786 | AW900654  | Hs.285729 | ESTs, Weakly similar to unnamed protein  | 3.2 |
|    | 440808 | AK001339  | Hs.7432   | hypothetical protein FLJ10477            | 3.2 |
|    | 442117 | AW664964  | Hs.128899 | ESTs; hypothetical protein for IMAGE:447 | 3.1 |
|    | 429876 | AB028977  | Hs.225974 | KIAA1054 protein                         | 3.1 |
| 65 | 450757 | BE081050  | Hs.31570  | ESTs, Weakly similar to KIAA1324 protein | 3.1 |
|    | 414327 | BE408145  | Hs.185254 | ESTs, Weakly similar to T24435 hypotheti | 3.1 |
|    | 459399 | BE407712  | Hs.153998 | creatine kinase, mitochondrial 1 (ubiqui | 3.1 |
|    | 433582 | BE548749  | Hs.148016 | ESTs                                     | 3.1 |
| 70 | 452752 | AW044058  | Hs.33578  | KIAA0820 protein                         | 3.0 |
|    | 439165 | AA029517  | Hs.95162  | KCNQ1 overlapping transcript 1           | 3.0 |
|    | 409403 | AA668224  | Hs.6634   | Homo sapiens cDNA: FLJ22547 fis, clone H | 3.0 |
|    | 422414 | AW875237  | Hs.13701  | ESTs                                     | 3.0 |
|    | 407173 | T64349    |           | gb:yc10d08.s1 Stratagene lung (937210) H | 3.0 |
| 75 | 448583 | NM_015239 | Hs.21542  | KIAA1035 protein                         | 3.0 |
|    | 429043 | AI824977  | Hs.145319 | ESTs                                     | 3.0 |
|    | 452990 | AA867428  | Hs.246970 | mitogen-activated protein kinase kinase  | 3.0 |
|    | 412258 | AA376768  | Hs.324841 | hypothetical protein FLJ22622            | 3.0 |
|    | 429968 | AA322503  | Hs.227011 | G-substrate                              | 3.0 |
| 80 | 434348 | BE393191  | Hs.181795 | putative b,b-carotene-9',10'-dioxygenase | 2.9 |
|    | 427115 | AW972853  | Hs.112237 | ESTs                                     | 2.9 |
|    | 430538 | AB032435  | Hs.242821 | differentiation-associated Na-dependent  | 2.9 |
|    | 449561 | AI022240  | Hs.17924  | ESTs, Moderately similar to ALU1_HUMAN A | 2.9 |
|    | 405403 |           |           | Target Exon                              | 2.9 |

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|    |        |          |           |  |     |
|----|--------|----------|-----------|--|-----|
|    | 452197 | AW023595 | Hs.232048 | ESTs                                     | 2.9 |
|    | 437357 | AL359559 | Hs.331666 | Homo sapiens mRNA; cDNA DKFZp762O2215 (f | 2.9 |
|    | 436427 | AI344378 | Hs.143399 | ESTs                                     | 2.9 |
|    | 417787 | R14948   | Hs.23883  | ESTs                                     | 2.9 |
| 5  | 439272 | AA832474 | Hs.25851  | ESTs                                     | 2.9 |
|    | 454247 | AJ243950 | Hs.46735  | deafness locus associated putative guani | 2.9 |
|    | 415839 | R40611   | Hs.94694  | ESTs                                     | 2.9 |
|    | 408814 | N62499   | Hs.176227 | hypothetical protein FLJ11155            | 2.9 |
| 10 | 408468 | AI909712 | Hs.93837  | phosphatidylinositol transfer protein, m | 2.9 |
|    | 431304 | BE157283 |           | gb:RC4-HT0373-130200-011-a03 HT0373 Homo | 2.9 |
|    | 410240 | AL157424 | Hs.61289  | synaptojanin 2                           | 2.9 |
|    | 444783 | AK001468 | Hs.62180  | anillin (Drosophila Scraps homolog), act | 2.8 |
|    | 408438 | AB011180 | Hs.100960 | KIAA0608 protein                         | 2.8 |
|    | 458793 | N80159   | Hs.121849 | microtubule-associated proteins 1A/1B li | 2.8 |
| 15 | 429788 | U87791   | Hs.221040 | HBS1 (S. cerevisiae)-like                | 2.8 |
|    | 424264 | D80400   | Hs.239388 | Human DNA sequence from clone RP1-304B14 | 2.8 |
|    | 433109 | N58907   | Hs.162430 | EST                                      | 2.8 |
|    | 427974 | BE093023 | Hs.188767 | ESTs                                     | 2.8 |
|    | 432266 | AK000385 | Hs.274222 | hypothetical protein FLJ20378            | 2.8 |
| 20 | 414764 | AW013887 | Hs.31522  | ESTs                                     | 2.8 |
|    | 411918 | AW876354 |           | gb:PM4-PT0019-141299-009-F08 PT0019 Homo | 2.8 |
|    | 404563 |          |           | Target Exon                              | 2.8 |
|    | 446468 | AI765890 | Hs.16341  | MAWD binding protein                     | 2.8 |
|    | 444755 | AA431791 | Hs.113823 | CipX (caseinolytic protease X, E. coli)  | 2.8 |
| 25 | 445898 | AF070623 | Hs.13423  | Homo sapiens clone 24468 mRNA sequence   | 2.7 |
|    | 427283 | AL119796 | Hs.174185 | ectonucleotide pyrophosphatase/phosphodi | 2.7 |
|    | 400138 |          |           | Eos Control                              | 2.7 |
|    | 458676 | AI692464 | Hs.202263 | ESTs                                     | 2.7 |
|    | 459697 | AA406062 | Hs.98002  | ESTs                                     | 2.7 |
| 30 | 444420 | AI148157 | Hs.146766 | ESTs                                     | 2.7 |
|    | 430371 | D87466   | Hs.240112 | KIAA0276 protein                         | 2.7 |
|    | 449117 | AW449310 | Hs.210262 | ESTs, Weakly similar to HSS2_HUMAN HEPAR | 2.7 |
|    | 424994 | AW954525 |           | gb:EST366595 MAGE resequences, MAGC Homo | 2.7 |
|    | 400339 | X57131   | Hs.248209 | H2A histone family, member F, pseudogene | 2.7 |
| 35 | 417494 | AI369494 | Hs.222137 | ESTs                                     | 2.7 |
|    | 427166 | AA431576 | Hs.99154  | ESTs                                     | 2.7 |
|    | 404746 |          |           | CX000138:g 7512767 pir T12477 hypothe    | 2.7 |
|    | 411361 | AW839073 |           | gb:CM2-LT0066-030100-109-d06 LT0066 Homo | 2.7 |
| 40 | 428358 | AA993222 | Hs.101915 | Stargardt disease 3 (autosomal dominant) | 2.7 |
|    | 406625 | Y13647   | Hs.119597 | stearoyl-CoA desaturase (delta-9-desatur | 2.7 |
|    | 416101 | R24854   | Hs.268906 | ESTs                                     | 2.7 |
|    | 404606 |          |           | Target Exon                              | 2.7 |
|    | 433921 | AA618174 |           | gb:nq14f01.s1 NCI_CGAP_Thy1 Homo sapiens | 2.7 |
|    | 414272 | AI651603 | Hs.46988  | ESTs                                     | 2.7 |
| 45 | 418047 | R37633   | Hs.4847   | ESTs                                     | 2.7 |
|    | 421089 | AB037771 | Hs.101799 | KIAA1350 protein                         | 2.7 |
|    | 412244 | AW948175 |           | gb:RC0-MT0013-280300-021-c10 MT0013 Homo | 2.7 |
|    | 432434 | AL161977 | Hs.2994   | PCTAIRE protein kinase 3                 | 2.6 |
| 50 | 424153 | AA451737 | Hs.141496 | MAGE-like 2                              | 2.6 |
|    | 427189 | H82453   | Hs.5635   | ESTs                                     | 2.6 |
|    | 454454 | AW612264 | Hs.131705 | ESTs                                     | 2.6 |
|    | 426747 | AA535210 | Hs.171995 | kallikrein 3, (prostate specific antigen | 2.6 |
|    | 456791 | H05202   | Hs.133968 | FGF receptor activating protein 1        | 2.6 |
| 55 | 405715 |          |           | ENSP00000005198*:Mixed lineage kinase ML | 2.6 |
|    | 425494 | N55540   | Hs.78026  | ESTs, Weakly similar to similar to ankyr | 2.6 |
|    | 430865 | AI073424 | Hs.5232   | HSPC125 protein                          | 2.6 |
|    | 435767 | H73505   | Hs.117874 | ESTs                                     | 2.6 |
|    | 410119 | F07841   | Hs.13926  | ESTs                                     | 2.6 |
| 60 | 432146 | AW081072 | Hs.115960 | KIAA0939 protein                         | 2.6 |
|    | 448871 | BE616709 | Hs.159265 | kruppel-related zinc finger protein hckr | 2.6 |
|    | 414516 | AI307802 | Hs.135560 | ESTs, Weakly similar to T43458 hypothe   | 2.6 |
|    | 429477 | AI275514 | Hs.6658   | ESTs                                     | 2.6 |
|    | 400269 |          |           | Eos Control                              | 2.5 |
|    | 443992 | AW022228 | Hs.322922 | ESTs                                     | 2.5 |
| 65 | 451926 | AW134519 | Hs.96125  | Homo sapiens, Similar to clone FLB3816,  | 2.5 |
|    | 435145 | AI277259 | Hs.116631 | ESTs                                     | 2.5 |
|    | 420309 | AW043637 | Hs.21766  | ESTs, Weakly similar to ALU5_HUMAN ALU S | 2.5 |
|    | 449709 | BE410592 | Hs.23918  | hypothetical protein PP5395              | 2.5 |
| 70 | 416530 | U62801   | Hs.79361  | kallikrein 6 (neurosin, zyme)            | 2.5 |
|    | 411678 | AI907114 | Hs.71465  | squalene epoxidase                       | 2.5 |
|    | 408119 | W26213   | Hs.101672 | ESTs, Weakly similar to T00331 hypothe   | 2.5 |
|    | 436624 | T64297   |           | fatty acid binding protein 1, liver      | 2.5 |
|    | 458268 | AA428403 | Hs.106131 | ESTs                                     | 2.5 |
|    | 451336 | AI264643 | Hs.3610   | ESTs                                     | 2.5 |
| 75 | 456924 | AI631510 | Hs.196956 | ESTs, Highly similar to match to EST AA3 | 2.5 |
|    | 455040 | AW852286 |           | gb:QV0-CT0225-100400-187-d08 CT0225 Homo | 2.5 |
|    | 420033 | D59502   | Hs.292590 | ESTs                                     | 2.5 |
|    | 448785 | BE048842 | Hs.179075 | Homo sapiens cDNA FLJ11881 fis, clone HE | 2.5 |
| 80 | 432251 | AW972983 | Hs.232165 | polycythemia rubra vera 1; cell surface  | 2.5 |
|    | 408206 | AF041853 | Hs.43670  | kinesin family member 3A                 | 2.5 |
|    | 440205 | T86950   | Hs.105448 | ESTs, Weakly similar to B34087 hypothe   | 2.5 |
|    | 442138 | AA445973 | Hs.13303  | Homo sapiens cDNA: FLJ21784 fis, clone H | 2.5 |
|    | 420912 | AW853156 | Hs.90787  | ESTs                                     | 2.4 |

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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
|    | 439180 | AI393742  | Hs.199067 | v-erb-b2 avian erythroblastic leukemia v | 2.4 |
|    | 421025 | AW958975  | Hs.29397  | Homo sapiens cDNA FLJ13226 fis, clone OV | 2.4 |
|    | 439973 | AI733308  | Hs.124663 | ESTs                                     | 2.4 |
|    | 445847 | T51454    | Hs.82845  | Homo sapiens cDNA: FLJ21930 fis, clone H | 2.4 |
| 5  | 414572 | AI218038  | Hs.48504  | ESTs, Moderately similar to ALU5_HUMAN A | 2.4 |
|    | 451522 | BE565817  | Hs.26498  | hypothetical protein FLJ21657            | 2.4 |
|    | 433068 | NM_006456 | Hs.288215 | sialyltransferase                        | 2.4 |
|    | 446620 | AA128808  | Hs.179902 | transporter-like protein                 | 2.4 |
|    | 423803 | NM_005709 | Hs.132945 | PDZ-73 protein                           | 2.4 |
| 10 | 407978 | AW385129  | Hs.41717  | phosphodiesterase 1A, calmodulin-depende | 2.4 |
|    | 425907 | AA365752  | Hs.155965 | ESTs                                     | 2.4 |
|    | 433819 | AW511097  | Hs.112765 | ESTs                                     | 2.4 |
|    | 446066 | AI343931  | Hs.149383 | ESTs                                     | 2.4 |
| 15 | 430573 | AA744550  | Hs.136345 | ESTs                                     | 2.4 |
|    | 444992 | R37658    | Hs.21375  | ESTs                                     | 2.4 |
|    | 434975 | AA657884  | Hs.314413 | ESTs                                     | 2.4 |
|    | 458227 | Z40670    | Hs.181340 | ESTs                                     | 2.4 |
|    | 443244 | AI457235  | Hs.166479 | ESTs                                     | 2.4 |
|    | 432408 | N39127    |           | ESTs, Weakly similar to A46010 X-linked  | 2.4 |
| 20 | 401600 | BE247275  |           | U5 snRNP-specific protein, 116 kD        | 2.3 |
|    | 419066 | Z98492    | Hs.6975   | PRO1073 protein                          | 2.3 |
|    | 424823 | NM_006226 | Hs.153322 | phospholipase C, epsilon                 | 2.3 |
|    | 402124 |           |           | NM_031891:Homo sapiens cadherin 20, type | 2.3 |
| 25 | 416678 | N80448    | Hs.269106 | ESTs                                     | 2.3 |
|    | 444897 | AW137088  | Hs.144857 | ESTs                                     | 2.3 |
|    | 425111 | BE018485  | Hs.30977  | ESTs, Weakly similar to B34087 hypotheti | 2.3 |
|    | 400536 |           |           | NM_000681*:Homo sapiens adrenergic, alph | 2.3 |
|    | 427544 | AI767152  | Hs.181400 | ESTs, Weakly similar to I78885 serine/th | 2.3 |
| 30 | 459511 | AI142379  |           | gb:qg64c01.r1 Soares_testis_NHT Homo sap | 2.3 |
|    | 415111 | R39039    | Hs.279041 | EST                                      | 2.3 |
|    | 433331 | AI738815  | Hs.117323 | ESTs                                     | 2.3 |
|    | 440293 | AI004193  | Hs.22123  | ESTs                                     | 2.3 |
|    | 411770 | NM_014278 | Hs.71992  | heat shock protein (hsp110 family)       | 2.3 |
| 35 | 416964 | D87467    | Hs.80620  | guanine nucleotide exchange factor for R | 2.3 |
|    | 419386 | AA236867  |           | ESTs, Weakly similar to I38022 hypotheti | 2.3 |
|    | 402493 | AI743260  |           | mannosidase, alpha, class 1A, member 1   | 2.3 |
|    | 401783 |           |           | NM_003771*:Homo sapiens keratin, hair, a | 2.3 |
|    | 420548 | AA278246  | Hs.920    | ESTs                                     | 2.3 |
| 40 | 419763 | AI039691  | Hs.127486 | ESTs                                     | 2.3 |
|    | 421750 | AK000768  | Hs.107872 | hypothetical protein FLJ20761            | 2.3 |
|    | 406023 |           |           | Target Exon                              | 2.3 |
|    | 454024 | AA993527  | Hs.293907 | hypothetical protein FLJ23403            | 2.3 |
|    | 401586 |           |           | Target Exon                              | 2.3 |
|    | 404091 |           |           | Target Exon                              | 2.3 |
| 45 | 456773 | AI038192  | Hs.129764 | EGF-like repeats and discoidin I-like do | 2.3 |
|    | 414106 | BE300325  | Hs.77135  | RNA binding protein                      | 2.3 |
|    | 454288 | BE222648  | Hs.241432 | ESTs, Highly similar to c380A1.1b [H.sap | 2.3 |
|    | 441879 | AI521936  | Hs.107149 | novel protein similar to archaeal, yeast | 2.3 |
| 50 | 424724 | T06532    | Hs.287709 | Homo sapiens cDNA: FLJ22674 fis, clone H | 2.3 |
|    | 415692 | N51935    | Hs.47374  | Homo sapiens cDNA FLJ13561 fis, clone PL | 2.3 |
|    | 416282 | R86654    | Hs.167257 | brain link protein-1                     | 2.2 |
|    | 404659 |           |           | ENSP00000239999*:HYPOTHETICAL 34.7 kDa P | 2.2 |
|    | 429956 | AI374651  | Hs.22542  | ESTs                                     | 2.2 |
| 55 | 429670 | L01087    | Hs.211593 | protein kinase C, theta                  | 2.2 |
|    | 429655 | U48959    | Hs.211582 | myosin, light polypeptide kinase         | 2.2 |
|    | 458921 | AI682088  | Hs.79375  | holocarboxylase synthetase (biotin-[prop | 2.2 |
|    | 436463 | H06502    | Hs.6656   | ESTs                                     | 2.2 |
|    | 408994 | AW299520  | Hs.43052  | ESTs                                     | 2.2 |
| 60 | 413303 | AW836130  | Hs.75277  | hypothetical protein FLJ13910            | 2.2 |
|    | 418154 | BE165866  |           | nuclear receptor subfamily 1, group 1, m | 2.2 |
|    | 418407 | AL044818  | Hs.84928  | nuclear transcription factor Y, beta     | 2.2 |
|    | 422907 | AI879263  | Hs.77273  | Human glucose transporter pseudogene     | 2.2 |
|    | 446377 | AW014022  | Hs.170953 | ESTs                                     | 2.2 |
| 65 | 429290 | AF203032  | Hs.198760 | neurofilament, heavy polypeptide (200kD) | 2.2 |
|    | 449714 | AB033015  | Hs.23941  | KIAA1189 protein                         | 2.2 |
|    | 408480 | AI350337  | Hs.164568 | fibroblast growth factor 7 (keratinocyte | 2.2 |
|    | 410066 | AL117664  | Hs.58419  | DKFZP586L2024 protein                    | 2.2 |
|    | 410912 | AW810224  |           | gb:MR4-ST0125-021199-017-e07 ST0125 Homo | 2.2 |
| 70 | 447163 | AW292770  | Hs.5542   | DnaJ (Hsp40) homolog, subfamily C, membe | 2.2 |
|    | 421709 | AA159394  | Hs.107056 | CED-6 protein                            | 2.2 |
|    | 403728 |           |           | Target Exon                              | 2.2 |
|    | 453359 | AA448787  | Hs.24872  | ESTs                                     | 2.2 |
|    | 411379 | AI816344  | Hs.12554  | ESTs, Weakly similar to NPL4_HUMAN NUCLE | 2.2 |
| 75 | 413427 | U31120    | Hs.845    | interleukin 13                           | 2.2 |
|    | 409028 | AB014513  | Hs.49998  | Z-band alternatively spliced PDZ-motif   | 2.2 |
|    | 413924 | AL119964  | Hs.75616  | seladin-1                                | 2.2 |
|    | 403463 |           |           | Target Exon                              | 2.2 |
|    | 408068 | AW148652  | Hs.167398 | ESTs                                     | 2.2 |
| 80 | 407819 | R42185    | Hs.102720 | ESTs                                     | 2.2 |
|    | 414203 | BE262170  | Hs.78629  | ATPase, Na? transporting, beta 1 polypep | 2.2 |
|    | 448045 | AJ297436  | Hs.20166  | prostate stem cell antigen               | 2.2 |
|    | 449835 | AW979300  | Hs.293813 | ESTs                                     | 2.2 |
|    | 458547 | AW204314  | Hs.170784 | ESTs                                     | 2.2 |

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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
|    | 414276 | BE297862  |           | gb:601174780F1 NIH_MGC_17 Homo sapiens c | 2.2 |
|    | 427493 | H09037    |           | Target CAT                               | 2.2 |
|    | 458441 | AW842283  | Hs.288232 | cyclin I                                 | 2.1 |
|    | 410705 | BE004107  |           | gb:CM0-BN0102-150300-288-f12 BN0102 Homo | 2.1 |
| 5  | 444647 | H14718    | Hs.11506  | Human clone 23589 mRNA sequence          | 2.1 |
|    | 405502 |           |           | C7000609*.gi 628012 pir A53933 myosin I  | 2.1 |
|    | 400818 |           |           | Target Exon                              | 2.1 |
|    | 435059 | Z45270    | Hs.235873 | hypothetical protein FLJ22672            | 2.1 |
| 10 | 426559 | AB001914  | Hs.170414 | paired basic amino acid cleaving system  | 2.1 |
|    | 445200 | AA084460  | Hs.12409  | somatostatin                             | 2.1 |
|    | 453396 | AW162768  | Hs.22620  | ESTs                                     | 2.1 |
|    | 443819 | AB033076  | Hs.9873   | likely homolog of rat kinase D-interacti | 2.1 |
|    | 401929 |           |           | C17001690.gij6005701 ref NP_009099.1  AT | 2.1 |
| 15 | 451032 | W03692    | Hs.323079 | Homo sapiens mRNA; cDNA DKFZp564P116 (fr | 2.1 |
|    | 433862 | D86960    | Hs.3610   | KIAA0205 gene product                    | 2.1 |
|    | 458694 | F12832    | Hs.3610   | ESTs                                     | 2.1 |
|    | 417063 | N50515    | Hs.45061  | ESTs                                     | 2.1 |
|    | 416935 | AA190712  |           | gb:zp87f09.r1 Stratagene HeLa cell s3 93 | 2.1 |
| 20 | 414446 | AA147534  | Hs.142019 | ESTs, Weakly similar to 1207289A reverse | 2.1 |
|    | 434681 | AA642402  | Hs.59142  | ESTs                                     | 2.1 |
|    | 413835 | AI272727  | Hs.249163 | fatty acid hydroxylase                   | 2.1 |
|    | 426137 | AL040683  | Hs.167031 | DKFZP566D133 protein                     | 2.1 |
|    | 424481 | R19453    | Hs.1787   | proteolipid protein 1 (Pelizaeus-Merzbac | 2.1 |
| 25 | 454339 | AW381980  |           | gb:QV4-HT0316-091199-028-d05 HT0316 Homo | 2.1 |
|    | 407786 | AA687538  | Hs.38972  | tetraspan 1                              | 2.1 |
|    | 421296 | NM_002666 | Hs.103253 | perilipin                                | 2.1 |
|    | 444200 | AA327113  | Hs.149057 | ESTs                                     | 2.1 |
|    | 409339 | AB020686  | Hs.54037  | ectonucleotide pyrophosphatase/phosphodi | 2.1 |
| 30 | 418410 | AA811441  | Hs.107393 | chromosome 3 open reading frame 4        | 2.1 |
|    | 414759 | AW295157  | Hs.47587  | ESTs                                     | 2.1 |
|    | 449511 | AI436187  | Hs.296261 | guanine nucleotide binding protein (G pr | 2.1 |
|    | 451606 | AA018791  | Hs.7945   | AIE-75 binding protein protein           | 2.1 |
|    | 437924 | AI935344  | Hs.164118 | ESTs, Weakly similar to SLS1_HUMAN SODIU | 2.1 |
| 35 | 449119 | AI631195  | Hs.232193 | ESTs                                     | 2.1 |
|    | 431568 | AW972316  | Hs.283703 | ESTs                                     | 2.1 |
|    | 447932 | AA837474  | Hs.20021  | vesicle-associated membrane protein 1 (s | 2.1 |
|    | 433516 | AA595802  | Hs.33410  | ESTs, Weakly similar to T17279 hypotheti | 2.1 |
|    | 441987 | AW452234  | Hs.128293 | ESTs                                     | 2.1 |
| 40 | 414055 | AW818687  | Hs.5366   | hypothetical protein FLJ21522            | 2.1 |
|    | 445066 | BE178734  | Hs.197422 | ESTs                                     | 2.1 |
|    | 455546 | AW994075  |           | gb:RC3-BN0036-090200-011-g06 BN0036 Homo | 2.1 |
|    | 413607 | T64741    |           | gb:yc48f11.r1 Stratagene liver (937224)  | 2.1 |
|    | 456401 | W28146    |           | gb:43f11 Human retina cDNA randomly prim | 2.0 |
| 45 | 407341 | AA918886  | Hs.204918 | ESTs, Weakly similar to ALU8_HUMAN ALU S | 2.0 |
|    | 425055 | AW961959  | Hs.96940  | ESTs                                     | 2.0 |
|    | 426917 | AA913814  | Hs.172854 | DKFZP586B0923 protein                    | 2.0 |
|    | 419647 | AA348947  | Hs.91816  | hypothetical protein                     | 2.0 |
|    | 412266 | N59006    | Hs.26133  | ESTs                                     | 2.0 |
| 50 | 449658 | AI964033  | Hs.195730 | ESTs, Weakly similar to CTXN RAT CORTEXI | 2.0 |
|    | 424505 | AA446131  | Hs.124918 | KIAA1795 protein                         | 2.0 |
|    | 438219 | AI916151  | Hs.257194 | ESTs                                     | 2.0 |
|    | 425068 | AL048716  | Hs.154387 | KIAA0103 gene product                    | 2.0 |
|    | 412949 | AI471639  | Hs.71913  | ESTs                                     | 2.0 |
| 55 | 418866 | T65754    |           | gb:yc11c07.s1 Stratagene lung (937210) H | 2.0 |
|    | 445071 | AI280246  | Hs.149504 | ESTs                                     | 2.0 |
|    | 456529 | AF014643  | Hs.100072 | connexin46.6                             | 2.0 |
|    | 406475 |           |           | C15000508*.gi 2558825 gb AAC53387.1  (AF | 2.0 |
|    | 429656 | X05608    | Hs.211584 | neurofilament, light polypeptide (68kD)  | 2.0 |
| 60 | 431542 | H63010    | Hs.5740   | ESTs                                     | 2.0 |
|    | 452625 | AA724771  | Hs.61425  | ESTs                                     | 2.0 |
|    | 410378 | R23324    | Hs.41693  | DnaJ (Hsp40) homolog, subfamily B, membe | 2.0 |
|    | 409767 | AW501470  |           | gb:UI-HF-BPQp-ajd-b-03-O-UI.r1 NIH_MGC_5 | 2.0 |
|    | 446873 | AI554439  | Hs.30724  | ESTs                                     | 2.0 |
| 65 | 453938 | AF082569  | Hs.36794  | D-type cyclin-interacting protein 1      | 2.0 |
|    | 423605 | AF047826  | Hs.129887 | cadherin 19, type 2                      | 2.0 |
|    | 420061 | AW024937  | Hs.29410  | ESTs                                     | 2.0 |
|    | 439559 | AW364675  | Hs.173921 | ESTs, Weakly similar to 2109260A B cell  | 2.0 |
|    | 449901 | AI674072  |           | gb:wd15h01.x1 Soares_NFL_T_GBC_S1 Homo s | 2.0 |
| 70 | 428304 | AI743177  | Hs.98422  | ESTs                                     | 2.0 |
|    | 432278 | AL137506  | Hs.274256 | hypothetical protein FLJ23563            | 2.0 |
|    | 458480 | AI792298  |           | p30 DBC protein                          | 2.0 |
|    | 404559 |           |           | Target Exon                              | 2.0 |
|    | 445831 | NM_006055 | Hs.13351  | LanC (bacterial lantibiotic synthetase c | 2.0 |
| 75 | 427523 | BE242779  | Hs.179526 | upregulated by 1,25-dihydroxyvitamin D-3 | 2.0 |
|    | 413055 | AV655701  | Hs.75183  | cytochrome P450, subfamily IIE (ethanol- | 2.0 |
|    | 444904 | AW452054  | Hs.161139 | ESTs                                     | 2.0 |
|    | 443713 | AI082810  | Hs.204934 | ESTs                                     | 2.0 |
|    | 448743 | AB032962  | Hs.21896  | KIAA1136 protein                         | 2.0 |
| 80 | 428186 | AW504300  | Hs.295605 | mannosidase, alpha, class 2A, member 2   | 2.0 |
|    | 448770 | AA326683  | Hs.21992  | likely ortholog of mouse variant polyade | 2.0 |
|    | 453994 | BE180964  | Hs.165590 | ribosomal protein S13                    | 2.0 |
|    | 420290 | AW977318  | Hs.194480 | ESTs                                     | 2.0 |
|    | 431467 | N71831    | Hs.256398 | Homo sapiens mRNA; cDNA DKFZp434E0528 (f | 2.0 |



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|    |        |          |           |  |     |
|----|--------|----------|-----------|--|-----|
| 5  | 447965 | AW292577 | Hs.94445  | ESTs                                     | 2.0 |
|    | 423073 | BE252922 | Hs.123119 | MAD (mothers against decapentaplegic, Dr | 2.0 |
|    | 459256 | AW967468 | Hs.99821  | hypothetical protein FLJ14547            | 2.0 |
|    | 411906 | AW875765 |           | gb:QV2-PT0012-020500-186-a08 PT0012 Homo | 2.0 |
|    | 441984 | AB037763 | Hs.8059   | synaptotagmin IV                         | 2.0 |
| 10 | 437900 | AI763301 | Hs.107331 | ESTs                                     | 2.0 |
|    | 436092 | AI345995 | Hs.127383 | ESTs                                     | 2.0 |
|    | 416529 | AW009370 | Hs.115772 | ESTs                                     | 2.0 |
|    | 414320 | U13616   | Hs.75893  | ankyrin 3, node of Ranvier (ankyrin G)   | 2.0 |
|    | 444749 | AI190672 | Hs.65926  | ESTs                                     | 2.0 |
| 15 | 446277 | AI284218 | Hs.159204 | ESTs                                     | 2.0 |
|    | 452550 | AA026735 | Hs.326048 | Homo sapiens mRNA; cDNA DKFZp434M0420 (f | 2.0 |
|    | 445725 | AK000956 | Hs.13209  | hypothetical protein FLJ10094            | 2.0 |
|    | 409265 | T78737   | Hs.321062 | ESTs                                     | 2.0 |
|    | 426736 | AA431615 | Hs.130722 | ESTs                                     | 2.0 |
|    | 447098 | AI939409 | Hs.157803 | ESTs                                     | 2.0 |
|    | 403582 |          |           | Target Exon                              | 2.0 |

## TABLE 21B:

|             |                                       |
|-------------|---------------------------------------|
| Pkey:       | Unique Eos probeset identifier number |
| CAT number: | Gene cluster number                   |
| Accession:  | Genbank accession numbers             |

|    |        |            |   |
|----|--------|------------|---|
| 25 | Pkey   | CAT Number | Accession   |
|    | 409757 | 1154015_1  | AW501470 AW502931 AW499500  |
|    | 410705 | 1217235_1  | BE004107 BE004105 AW901093 AW797879 AW901094 AW797881 AW797880 BE004108   |
|    | 410912 | 1226543_1  | AW810224 AW810337 AW810295 AW810333 AW810335 AW810296 AW816053  |
|    | 411361 | 1240611_1  | AW839073 AW839234 AW839230 AW878302 AW839109 AW843897   |
| 30 | 411811 | 1259427_1  | AW864370 AW864319 AW864504  |
|    | 411906 | 1265204_1  | AW875765 H50294 AW875444  |
|    | 411918 | 1265807_1  | AW876354 AW876179 AW876318 AW876290 AW876234 AW876125 AW876199 AW876198   |
|    | 412244 | 1284692_1  | AW948175 AW947637 AW902869 AW947537 AW947531 AW947532 AW947530  |
|    | 413607 | 1379911_1  | T64741 BE156393 BE152805  |
| 35 | 414276 | 1432115_1  | BE297862  |
|    | 415666 | 1543492_1  | H72693 R08673 H72694 F20990 R08580  |
|    | 416935 | 163179_1   | AA190712 AA190665 AA252564  |
|    | 418154 | 17249_1    | BE165866 BE165832 AA319621 AA401166 AI811901 H78857 X56199 R93797 AW896675 AA401072 AW374411 H52942 AW896685 AA348138         |
|    |        |            | AI399764 AA010244 W90159 N90874 AA339496 AW967136 W38705 AA029093 AW444647 BE175700 AV651656 AV651847 AA332039 AV649227       |
| 40 |        |            | AV649164 AV649491 N87956 AA332262 BE001561 H75493 BE218742 AA333298 AA095633 AA091968 M78602 T05342 W17094 AA126501           |
|    |        |            | AW374665 AI452905 AW316900 AI185080 AI202928 AI651843 AA693541 AI681019 AV658257 AV658133 BE045335 BE089546 AA300830 AA361376 |
|    |        |            | BE218739 AW207622 AA765340 AW612733 BE348741 AI806054 AI871563 AA808652 AI500693 AW342032 AA147066                            |
|    | 418866 | 179788_1   | T65754 AA229857 AA229658  |
|    | 419386 | 184356_1   | AA236867 AA237066 AA354236 AW957759 H08961  |
| 45 | 424994 | 245786_1   | AW954525 AI372685 AA349501 AI372687 H10554  |
|    | 427493 | 279541_2   | H09037 AW974937 AA657521 H86138 H86513 H09016 AA404410 AA404454   |
|    | 431304 | 331286_1   | BE157283 BE157287 AA502438  |
|    | 432408 | 346286_2   | N39127 F20776 AI082691 AA865520 F36964 F33894   |
|    | 433670 | 372721_1   | AA604405 BE062234 AW748386  |
| 50 | 433921 | 377350_1   | AA618174 AI114549 R36464 R36465   |
|    | 436624 | 4237_5     | T64297 AA894931 NM_001443 M10050 AW843109 AI698516 T53219 T48785 T64166 AA706930 R29613 T55913 T56518 T64679 R29666 M10617    |
|    |        |            | AI768596 AA101894 W90338 AI742193 AW752206 AA099433 T53220 AW082135 AW272775 T29562 T55862 AI343047 AI345671 T68235 T68121    |
|    |        |            | AW842284  |
|    | 446692 | 689623_1   | Z44514 AI352097 AI803984 AW235923 AW196558 AI954637 AI336983  |
| 55 | 449901 | 818599_1   | AI674072 BE268487   |
|    | 454339 | 1122972_1  | AW381980 BE152244 BE152235 BE152238 BE152232  |
|    | 455040 | 1250028_1  | AW852286 AW851934 AW852096 AW852274   |
|    | 455546 | 1324614_1  | AW994075 AW994386   |
|    | 455649 | 1348708_1  | BE065051 BE155165 BE064764 BE155231 BE064648 BE064671 BE064636  |
| 60 | 456401 | 1844649_2  | W26146 W28187   |
|    | 458480 | 59843_1    | AI792298 H14121 AI375113 AA960851 AA744592 AV648739 AI298360 AW293609   |

## TABLE 21C:

|              |   |
|--------------|---|
| Pkey:        | Unique number corresponding to an Eos probeset  |
| Ref:         | Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <u>Nature</u> 402:489-495. |
| Strand:      | Indicates DNA strand from which exons were predicted.   |
| Nt_position: | Indicates nucleotide positions of predicted exons.  |

|    |        |         |        |   |
|----|--------|---------|--------|---|
| 70 | Pkey   | Ref     | Strand | Nt_position   |
|    | 400536 | 9797380 | Minus  | 170994-172025   |
|    | 400818 | 8569994 | Plus   | 172644-172765,173085-173200   |
|    | 401586 | 9838242 | Minus  | 93974-94099   |
|    | 401600 | 4388746 | Minus  | 27363-27518,28727-28891,29526-29731   |
| 75 | 401783 | 7249190 | Plus   | 139369-139827,140509-140591,140834-140990,141496-141657,141757-141882,142063-142283 |
|    | 401929 | 3810670 | Minus  | 3167-3286,4216-4310   |
|    | 402124 | 4033680 | Plus   | 164206-164459   |
|    | 402493 | 9797670 | Minus  | 205146-205240,205428-205542   |
|    | 403463 | 9929538 | Plus   | 102596-102879   |
| 80 | 403469 | 9929739 | Minus  | 4831-7707   |
|    | 403582 | 8101186 | Plus   | 18308-18458   |
|    | 403728 | 7534291 | Minus  | 34481-34671   |
|    | 404091 | 7684554 | Minus  | 82121-83229   |
|    | 404559 | 8748893 | Minus  | 73499-73651,89575-89739   |

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|    |        |         |       |                             |
|----|--------|---------|-------|-----------------------------|
| 5  | 404563 | 9838310 | Plus  | 100136-100343               |
|    | 404606 | 9212936 | Minus | 22310-23269                 |
|    | 404659 | 9797068 | Minus | 66026-67930                 |
|    | 404746 | 7219894 | Minus | 32643-32834                 |
|    | 405354 | 2642452 | Plus  | 52213-53089                 |
| 10 | 405403 | 6850244 | Minus | 37491-37670.40951-41031     |
|    | 405502 | 9211311 | Minus | 50360-50584                 |
|    | 405715 | 4156209 | Plus  | 26293-26706                 |
|    | 406023 | 8272661 | Plus  | 205623-205936               |
|    | 406475 | 9797684 | Plus  | 125417-125563,128052-128180 |

TABLE 22A: ABOUT 301 GENES SIGNIFICANTLY DOWN-REGULATED IN GLIOBLASTOMA COMPARED TO NORMAL ADULT CNS

Table 22A lists about 301 genes significantly down-regulated in glioblastoma compared to normal adult CNS tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" normal CNS to "average" glioblastoma was greater than or equal to 2. The "average" normal CNS level was set to the 75<sup>th</sup> percentile amongst various normal CNS tissues. The "average" glioblastoma level was set to the 95<sup>th</sup> percentile amongst various tumor samples. In order to remove gene-specific background levels of non-specific hybridization, the 10<sup>th</sup> percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 R1: Ratio of CNS to GLIOBLASTOMA

|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
| 25 | Pkey   | ExAccn    | UnigenelD | Unigene Title                            | R1   |
|    | 418318 | U47732    | Hs.84072  | transmembrane 4 superfamily member 3     | 10.1 |
|    | 445529 | H14421    | Hs.180513 | ATP-binding cassette, sub-family A (ABC1 | 9.4  |
|    | 415274 | AF001548  | Hs.78344  | myosin, heavy polypeptide 11, smooth mus | 7.5  |
|    | 417167 | AW206437  | Hs.4290   | ESTs                                     | 7.3  |
| 30 | 453165 | S74727    | Hs.32042  | aspartoacylase (aminoacylase 2, Canavan  | 6.5  |
|    | 454076 | AW204712  | Hs.61967  | ESTs                                     | 6.3  |
|    | 417275 | X63578    | Hs.295449 | parvalbumin                              | 6.2  |
|    | 412636 | NM_004415 |           | desmoplakin (DPI, DPII)                  | 6.0  |
|    | 409743 | N48721    | Hs.183506 | hypothetical protein FLJ14213            | 5.9  |
| 35 | 424645 | NM_014682 | Hs.151449 | KIAA0535 gene product                    | 5.6  |
|    | 427322 | AK002017  | Hs.176227 | hypothetical protein FLJ11155            | 5.5  |
|    | 446390 | AA233393  | Hs.14992  | hypothetical protein FLJ11151            | 5.2  |
|    | 444409 | AI792140  | Hs.49265  | ESTs                                     | 5.2  |
|    | 409031 | AA376836  | Hs.288856 | ESTs                                     | 5.1  |
| 40 | 408428 | NM_014787 | Hs.44896  | DnaJ (Hsp40) homolog, subfamily B, membe | 4.8  |
|    | 428414 | AL049980  | Hs.184216 | DKFZP564C152 protein                     | 4.8  |
|    | 428874 | W32133    | Hs.194366 | transferrin (prealbumin, amyloidosis t   | 4.6  |
|    | 420605 | BE391491  | Hs.99291  | HSPC156 protein                          | 4.6  |
|    | 445618 | H79667    | Hs.237642 | Homo sapiens cDNA FLJ12052 fis, clone HE | 4.6  |
| 45 | 450715 | AI266484  | Hs.31570  | ESTs, Weakly similar to KIAA1324 protein | 4.4  |
|    | 428508 | BE252383  | Hs.184668 | SBBI31 protein                           | 4.4  |
|    | 434064 | AL049045  | Hs.180758 | hypothetical protein PRO0082             | 4.3  |
|    | 410330 | AW023630  | Hs.159425 | ESTs                                     | 4.2  |
|    | 426471 | M22440    | Hs.170009 | transforming growth factor, alpha        | 4.2  |
| 50 | 409231 | AA446644  | Hs.692    | GA733-2 antigen; epithelial glycoprotein | 4.2  |
|    | 448958 | AB020651  | Hs.22653  | KIAA0844 protein                         | 4.2  |
|    | 428465 | AW970976  | Hs.293653 | ESTs                                     | 4.0  |
|    | 429470 | AI878901  | Hs.203862 | guanine nucleotide binding protein (G pr | 4.0  |
|    | 432298 | AL118812  | Hs.274293 | Homo sapiens mRNA; cDNA DKFZp761G1111 (f | 3.9  |
| 55 | 427061 | AB032971  | Hs.173392 | KIAA1145 protein                         | 3.9  |
|    | 430261 | AA305127  | Hs.237225 | hypothetical protein HT023               | 3.9  |
|    | 435145 | AI277259  | Hs.116631 | ESTs                                     | 3.8  |
|    | 416101 | R24854    | Hs.268806 | ESTs                                     | 3.8  |
|    | 426716 | NM_006379 | Hs.171921 | sema domain, immunoglobulin domain (lg), | 3.8  |
| 60 | 438202 | AW169287  | Hs.22588  | ESTs                                     | 3.8  |
|    | 433558 | AA833757  | Hs.201769 | ESTs, Weakly similar to T24435 hypotheti | 3.7  |
|    | 419956 | AL137939  | Hs.40096  | ESTs                                     | 3.7  |
|    | 430573 | AA744550  | Hs.136345 | ESTs                                     | 3.7  |
|    | 422546 | AB007969  | Hs.301478 | KIAA0500 protein                         | 3.7  |
| 65 | 453344 | BE349075  | Hs.44571  | ESTs                                     | 3.6  |
|    | 417620 | R02530    | Hs.191198 | ESTs                                     | 3.6  |
|    | 421952 | AA300900  | Hs.98849  | ESTs, Moderately similar to AF161511 1 H | 3.6  |
|    | 414631 | AW970130  | Hs.65406  | ESTs                                     | 3.6  |
|    | 437073 | AI885608  | Hs.94122  | ESTs                                     | 3.5  |
| 70 | 441264 | AA927170  | Hs.23290  | ESTs                                     | 3.5  |
|    | 433629 | R13140    | Hs.13359  | ESTs                                     | 3.5  |
|    | 415114 | D60468    | Hs.94181  | ESTs                                     | 3.4  |
|    | 411770 | NM_014278 | Hs.71992  | heat shock protein (hsp110 family)       | 3.4  |
|    | 416666 | H72693    |           | gb:yu03c11.r1 Soares fetal liver spleen  | 3.4  |
| 75 | 416851 | AW963951  | Hs.85618  | ESTs                                     | 3.4  |
|    | 443037 | AW500305  | Hs.8906   | syntaxin 7                               | 3.4  |
|    | 449511 | AI436187  | Hs.296261 | guanine nucleotide binding protein (G pr | 3.4  |
|    | 427176 | AW381569  | Hs.40334  | ESTs                                     | 3.4  |
|    | 438704 | AI435060  | Hs.32825  | ESTs                                     | 3.3  |
| 80 | 417175 | R44558    | Hs.94002  | ESTs                                     | 3.3  |
|    | 430865 | AI073424  | Hs.5232   | HSPC125 protein                          | 3.3  |
|    | 457012 | R41480    | Hs.302754 | ESTs                                     | 3.3  |
|    | 405354 |           |           | CX000321:gil6671579[ref]NP_031518.1) ari | 3.3  |
|    | 432799 | NM_016161 | Hs.278960 | alpha-1,4-N-acetylglucosaminyltransferas | 3.3  |

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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
|    | 429876 | AB028977  | Hs.225974 | KIAA1054 protein                         | 3.3 |
|    | 434348 | BE393191  | Hs.181795 | putative b,b-carotene-9',10'-dioxygenase | 3.3 |
|    | 441071 | D79550    | Hs.7149   | Homo sapiens cDNA: FLJ21950 fis, clone H | 3.3 |
|    | 445279 | R41900    | Hs.22245  | ESTs                                     | 3.2 |
| 5  | 414541 | BE293116  | Hs.76392  | aldehyde dehydrogenase 1 family, member  | 3.2 |
|    | 448072 | AI459306  | Hs.24908  | ESTs                                     | 3.2 |
|    | 402429 |           |           | Target Exon                              | 3.2 |
|    | 433328 | AW298159  | Hs.23644  | ESTs, Weakly similar to S65824 reverse t | 3.2 |
|    | 400138 |           |           | Eos Control                              | 3.1 |
| 10 | 414327 | BE408145  | Hs.185254 | ESTs, Weakly similar to T24435 hypotheti | 3.1 |
|    | 459399 | BE407712  | Hs.153998 | creatine kinase, mitochondrial 1 (ubiqui | 3.1 |
|    | 433582 | BE548749  | Hs.148016 | ESTs                                     | 3.1 |
|    | 434104 | AF116691  | Hs.116459 | hypothetical protein PRO2198             | 3.0 |
|    | 404606 |           |           | Target Exon                              | 3.0 |
| 15 | 407173 | T64349    |           | gb:yc10608.s1 Stratagene lung (937210) H | 3.0 |
|    | 415672 | N53097    | Hs.193579 | ESTs                                     | 3.0 |
|    | 448583 | NM_015239 | Hs.21542  | KIAA1035 protein                         | 3.0 |
|    | 429043 | AI824977  | Hs.145319 | ESTs                                     | 3.0 |
| 20 | 439165 | AA029517  | Hs.95162  | KCNQ1 overlapping transcript 1           | 2.9 |
|    | 449561 | AI022240  | Hs.17924  | ESTs, Moderately similar to ALU1_HUMAN A | 2.9 |
|    | 436427 | AI344378  | Hs.143399 | ESTs                                     | 2.9 |
|    | 405407 |           |           | Target Exon                              | 2.9 |
|    | 452197 | AW023595  | Hs.232048 | ESTs                                     | 2.9 |
| 25 | 437357 | AL359559  | Hs.331666 | Homo sapiens mRNA: cDNA DKFZp762O2215 (f | 2.9 |
|    | 439272 | AA832474  | Hs.25851  | ESTs                                     | 2.9 |
|    | 415839 | R40611    | Hs.94694  | ESTs                                     | 2.9 |
|    | 411906 | AW875765  |           | gb:QV2-PT0012-020500-186-a08 PT0012 Homo | 2.9 |
|    | 409403 | AA668224  | Hs.6634   | Homo sapiens cDNA: FLJ22547 fis, clone H | 2.9 |
| 30 | 412258 | AA376768  | Hs.324841 | hypothetical protein FLJ22622            | 2.8 |
|    | 435836 | AW292532  | Hs.343667 | homolog of yeast long chain polyunsatura | 2.8 |
|    | 433109 | N58907    | Hs.162430 | EST                                      | 2.8 |
|    | 404563 |           |           | Target Exon                              | 2.8 |
|    | 427974 | BE093023  | Hs.188767 | ESTs                                     | 2.8 |
| 35 | 413324 | V00571    | Hs.75294  | corticotropin releasing hormone          | 2.7 |
|    | 409263 | AA069573  | Hs.50319  | ESTs                                     | 2.7 |
|    | 454247 | AJ243950  | Hs.46735  | deafness locus associated putative guani | 2.7 |
|    | 449180 | AI633836  | Hs.195649 | ESTs                                     | 2.7 |
|    | 416004 | D11880    | Hs.299254 | Homo sapiens cDNA: FLJ23597 fis, clone L | 2.7 |
| 40 | 424994 | AW954525  |           | gb:EST366595 MAGE resequences, MAGC Homo | 2.7 |
|    | 430371 | D67466    | Hs.240112 | KIAA0276 protein                         | 2.7 |
|    | 449117 | AW449310  | Hs.210262 | ESTs, Weakly similar to HSS2_HUMAN HEPAR | 2.7 |
|    | 451007 | H38108    | Hs.32759  | ESTs                                     | 2.7 |
|    | 414502 | AL133721  | Hs.224680 | ESTs                                     | 2.7 |
| 45 | 458793 | N80159    | Hs.121849 | microtubule-associated proteins 1A/1B li | 2.7 |
|    | 459053 | AI807052  | Hs.210361 | ESTs                                     | 2.7 |
|    | 427229 | AI799751  | Hs.5635   | ESTs                                     | 2.7 |
|    | 425649 | U30930    | Hs.158540 | UDP glycosyltransferase 8 (UDP-galactose | 2.7 |
|    | 444922 | AI921750  | Hs.144871 | Homo sapiens cDNA FLJ13752 fis, clone PL | 2.7 |
| 50 | 433921 | AA618174  |           | gb:nq14f01.s1 NCL_CGAP_Thy1 Homo sapiens | 2.7 |
|    | 414272 | AI651603  | Hs.46988  | ESTs                                     | 2.7 |
|    | 418047 | R37633    | Hs.4847   | ESTs                                     | 2.7 |
|    | 421089 | AB037771  | Hs.101799 | KIAA1350 protein                         | 2.7 |
|    | 416498 | U33632    | Hs.79351  | potassium channel, subfamily K, member 1 | 2.6 |
| 55 | 414290 | AI568801  | Hs.71721  | ESTs                                     | 2.6 |
|    | 433703 | AA210863  | Hs.3532   | nemo-like kinase                         | 2.6 |
|    | 408739 | W01556    | Hs.238797 | ESTs, Moderately similar to I38022 hypot | 2.6 |
|    | 414602 | AW630088  | Hs.76550  | Homo sapiens mRNA: cDNA DKFZp564B1264 (f | 2.6 |
|    | 422137 | AJ236885  | Hs.112180 | zinc finger protein 148 (pH2-52)         | 2.6 |
| 60 | 442023 | AI187878  | Hs.144549 | ESTs                                     | 2.6 |
|    | 421709 | AA159394  | Hs.107056 | CED-6 protein                            | 2.6 |
|    | 426747 | AA535210  | Hs.171995 | kalikrein 3, (prostate specific antigen  | 2.6 |
|    | 412244 | AW948175  |           | gb:RCO-MT0013-280300-021-c10 MT0013 Homo | 2.6 |
|    | 419386 | AA236867  |           | ESTs, Weakly similar to I38022 hypotheti | 2.6 |
| 65 | 423655 | BE167153  | Hs.24380  | ESTs                                     | 2.6 |
|    | 430320 | BE245290  | Hs.239218 | uncharacterized hypothalamus protein HCD | 2.6 |
|    | 408468 | AI909712  | Hs.93837  | phosphatidylinositol transfer protein, m | 2.6 |
|    | 410657 | AF063228  | Hs.65248  | dynein, cytoplasmic, intermediate polype | 2.6 |
|    | 448871 | BE516709  | Hs.159265 | kruppel-related zinc finger protein hckr | 2.6 |
| 70 | 414516 | AI307802  | Hs.135560 | ESTs, Weakly similar to T43458 hypotheti | 2.6 |
|    | 459080 | AW192083  | Hs.290855 | ESTs                                     | 2.5 |
|    | 455040 | AW852286  |           | gb:QV0-CT0225-100400-187-d08 CT0225 Homo | 2.5 |
|    | 435712 | AA694607  | Hs.176956 | ESTs                                     | 2.5 |
|    | 431662 | AA513406  | Hs.152307 | ESTs                                     | 2.5 |
| 75 | 435902 | AA701867  | Hs.297726 | ESTs                                     | 2.5 |
|    | 436624 | T64297    |           | fatty acid binding protein 1, liver      | 2.5 |
|    | 443155 | R54485    | Hs.23772  | ESTs                                     | 2.5 |
|    | 439183 | AW970600  | Hs.303261 | ESTs                                     | 2.5 |
|    | 426365 | AA376667  | Hs.10283  | RNA binding motif protein 8B             | 2.5 |
| 80 | 420033 | D59502    | Hs.292590 | ESTs                                     | 2.5 |
|    | 408438 | AB011180  | Hs.100960 | KIAA0608 protein                         | 2.5 |
|    | 440205 | T86950    | Hs.105448 | ESTs, Weakly similar to B34087 hypotheti | 2.5 |
|    | 448786 | BE048842  | Hs.179075 | Homo sapiens cDNA FLJ11881 fis, clone HE | 2.5 |
|    | 432251 | AW972983  | Hs.232165 | polycythemia rubra vera 1; cell surface  | 2.5 |

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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
|    | 427115 | AW972853  | Hs.112237 | ESTs   | 2.4 |
|    | 433670 | AA604405  |           | gb:nc87h09.s1 NCI_CGAP_AA1 Homo sapiens              | 2.4 |
|    | 452022 | AW072330  | Hs.293875 | ESTs   | 2.4 |
| 5  | 408814 | N62499    | Hs.176227 | hypothetical protein FLJ11155                        | 2.4 |
|    | 403469 |           |           | Target Exon  | 2.4 |
|    | 450374 | AA397540  | Hs.60293  | Homo sapiens clone 122482 unknown mRNA               | 2.4 |
|    | 451926 | AW134519  | Hs.96125  | Homo sapiens, Similar to clone FLB3816,              | 2.4 |
|    | 443622 | AI911527  | Hs.11805  | ESTs   | 2.4 |
| 10 | 456791 | H05202    | Hs.133968 | FGF receptor activating protein 1                    | 2.4 |
|    | 414672 | AI218038  | Hs.48504  | ESTs, Moderately similar to ALU5_HUMAN A             | 2.4 |
|    | 451522 | BE565817  | Hs.26498  | hypothetical protein FLJ21657                        | 2.4 |
|    | 422414 | AW875237  | Hs.13701  | ESTs   | 2.4 |
|    | 425383 | D83407    | Hs.156007 | Down syndrome critical region gene 1-lik             | 2.4 |
| 15 | 438086 | AA336519  | Hs.83623  | nuclear receptor subfamily 1, group I, m             | 2.4 |
|    | 410240 | AL157424  | Hs.61289  | synaptotagmin 2                                      | 2.4 |
|    | 432408 | N39127    |           | ESTs, Weakly similar to A46010 X-linked              | 2.4 |
|    | 458227 | Z40670    | Hs.181340 | ESTs   | 2.4 |
|    | 431325 | AW026751  | Hs.5794   | ESTs, Weakly similar to 2109260A B cell              | 2.4 |
| 20 | 401600 | BE247275  |           | U5 snRNP-specific protein, 116 kD                    | 2.3 |
|    | 422963 | M79141    | Hs.13234  | ESTs   | 2.3 |
|    | 444897 | AW137088  | Hs.144857 | ESTs   | 2.3 |
|    | 418207 | C14685    | Hs.34772  | ESTs   | 2.3 |
|    | 445071 | AI280246  | Hs.149504 | ESTs   | 2.3 |
| 25 | 407868 | NM_000950 | Hs.40637  | proline-rich Gla (G-carboxyglutamic acid             | 2.3 |
|    | 433331 | AI738815  | Hs.117323 | ESTs   | 2.3 |
|    | 440293 | AI004193  | Hs.22123  | ESTs   | 2.3 |
|    | 428850 | AA934975  | Hs.185076 | ESTs   | 2.3 |
|    | 401783 |           |           | NM_003771*:Homo sapiens keratin, hair, a             | 2.3 |
| 30 | 419763 | AI039691  | Hs.127486 | ESTs   | 2.3 |
|    | 416018 | AW138239  | Hs.78977  | proprotein convertase subtilisin/kexin 1             | 2.3 |
|    | 420912 | AW853156  | Hs.90787  | ESTs   | 2.3 |
|    | 442097 | AW015799  | Hs.128474 | ESTs   | 2.3 |
|    | 425907 | AA365752  | Hs.155965 | ESTs   | 2.3 |
| 35 | 404091 |           |           | Target Exon  | 2.3 |
|    | 414106 | BE300325  | Hs.77135  | RNA binding protein                                  | 2.3 |
|    | 454288 | BE222648  | Hs.241432 | ESTs, Highly similar to c380A1.1b [H.sap             | 2.3 |
|    | 441040 | AW449782  | Hs.178803 | ESTs   | 2.3 |
| 40 | 424724 | T06532    | Hs.287709 | Homo sapiens cDNA: FLJ22674 fis, clone H             | 2.3 |
|    | 441879 | AI521936  | Hs.107149 | novel protein similar to archaeal, yeast             | 2.3 |
|    | 407988 | N47760    | Hs.285107 | hypothetical protein FLJ13397                        | 2.2 |
|    | 452420 | BE564871  | Hs.29463  | centrin, EF-hand protein, 3 [CDC31 yeast             | 2.2 |
|    | 458676 | AI692464  | Hs.202263 | ESTs   | 2.2 |
|    | 418407 | AL044818  | Hs.84928  | nuclear transcription factor Y, beta                 | 2.2 |
| 45 | 453938 | AF082569  | Hs.36794  | D-type cyclin-interacting protein 1                  | 2.2 |
|    | 407978 | AW385129  | Hs.41717  | phosphodiesterase 1A, calmodulin-depende             | 2.2 |
|    | 420548 | AA278246  | Hs.920    | ESTs   | 2.2 |
|    | 422907 | AI879263  | Hs.77273  | Human glucose transporter pseudogene                 | 2.2 |
|    | 446351 | AW444551  | Hs.35380  | x G01 protein  | 2.2 |
| 50 | 442117 | AW664964  | Hs.128899 | ESTs; hypothetical protein for IMAGE:447             | 2.2 |
|    | 429598 | AA811257  | Hs.269710 | ESTs   | 2.2 |
|    | 408480 | AI350337  | Hs.164568 | fibroblast growth factor 7 (keratinocyte             | 2.2 |
|    | 411361 | AW839073  |           | gb:CM2-LT0066-030100-109-d06 LT0066 Homo             | 2.2 |
|    | 459697 | AA406062  | Hs.98002  | ESTs   | 2.2 |
| 55 | 409856 | AW502082  |           | gb:U1-HF-BR0p-ajq-g-04-0-U1.r1 NIH_MGC_5             | 2.2 |
|    | 444760 | AI796296  | Hs.208062 | ESTs   | 2.2 |
|    | 443258 | AF169301  | Hs.9098   | sulfate transporter 1                                | 2.2 |
|    | 428206 | AB020643  | Hs.183006 | KIAA0836 protein                                     | 2.2 |
|    | 410119 | F07841    | Hs.13926  | ESTs   | 2.2 |
| 60 | 413427 | U31120    | Hs.845    | interleukin 13                                       | 2.2 |
|    | 438021 | AV653790  | Hs.324275 | WW domain-containing protein 1                       | 2.2 |
|    | 428652 | AA584272  | Hs.336224 | transmembrane protein with EGF-like and              | 2.2 |
|    | 429655 | U48959    | Hs.211582 | myosin, light polypeptide kinase                     | 2.2 |
|    | 424153 | AA451737  | Hs.141495 | MAGE-like 2  | 2.2 |
| 65 | 413303 | AW836130  | Hs.75277  | hypothetical protein FLJ13910                        | 2.2 |
|    | 427287 | NM_014903 | Hs.174188 | KIAA0938 protein                                     | 2.2 |
|    | 449658 | AI964033  | Hs.195730 | ESTs, Weakly similar to CTXN RAT CORTEXI             | 2.2 |
|    | 441984 | AB037763  | Hs.8059   | synaptotagmin IV                                     | 2.2 |
|    | 449709 | BE410592  | Hs.23918  | hypothetical protein PP5395                          | 2.2 |
| 70 | 408068 | AW148652  | Hs.167398 | ESTs   | 2.2 |
|    | 407819 | R42185    | Hs.102720 | ESTs   | 2.2 |
|    | 414203 | BE262170  | Hs.78629  | ATPase, Na <sup>+</sup> transporting, beta 1 polypep | 2.2 |
|    | 454339 | AW381980  |           | gb:QV4-HT0316-091199-028-d05 HT0316 Homo             | 2.2 |
|    | 448045 | AJ297436  | Hs.20166  | prostate stem cell antigen                           | 2.2 |
| 75 | 458480 | AI792298  |           | p30 DBC protein                                      | 2.2 |
|    | 449835 | AW979300  | Hs.293813 | ESTs   | 2.2 |
|    | 458547 | AW204314  | Hs.170784 | ESTs   | 2.2 |
|    | 411678 | AI907114  | Hs.71465  | squalene epoxidase                                   | 2.1 |
|    | 444783 | AK001468  | Hs.62180  | anillin (Drosophila Scraps homolog), act             | 2.1 |
| 80 | 424632 | AB014523  | Hs.151406 | KIAA0623 gene product                                | 2.1 |
|    | 449901 | AI674072  |           | gb:wd15h01.x1 Soares_NFL_T_GBC_S1 Homo s             | 2.1 |
|    | 431583 | AL042613  | Hs.262476 | S-adenosylmethionine decarboxylase 1                 | 2.1 |
|    | 410538 | AW753115  |           | gb:PM0-CT0248-131099-001-h12 CT0248 Homo             | 2.1 |
|    | 426775 | AA384564  | Hs.3628   | ESTs   | 2.1 |

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|    |        |           |           |   |     |
|----|--------|-----------|-----------|---|-----|
|    | 433862 | D86960    | Hs.3610   | KIAA0205 gene product                     | 2.1 |
|    | 458694 | F12832    | Hs.3610   | ESTs                                      | 2.1 |
|    | 417063 | N50515    | Hs.45061  | ESTs                                      | 2.1 |
| 5  | 416935 | AA190712  |           | gb:zp87f09.r1 Stratagene HeLa cell s3 93  | 2.1 |
|    | 436489 | AJ272269  | Hs.121429 | zinc-binding protein Rbcc728              | 2.1 |
|    | 431128 | AI203545  | Hs.296169 | S-phase response (cyclin-related)         | 2.1 |
|    | 442310 | AF033199  | Hs.8198   | zinc finger protein 204                   | 2.1 |
|    | 432434 | AL161977  | Hs.2994   | PCTAIRE protein kinase 3                  | 2.1 |
| 10 | 400339 | X57131    | Hs.248209 | H2A histone family, member F, pseudogene  | 2.1 |
|    | 432266 | AK000385  | Hs.274222 | hypothetical protein FLJ20378             | 2.1 |
|    | 414759 | AW295157  | Hs.47587  | ESTs                                      | 2.1 |
|    | 438219 | AI916151  | Hs.257194 | ESTs                                      | 2.1 |
|    | 451336 | AI264643  | Hs.3610   | ESTs                                      | 2.1 |
| 15 | 430538 | AB032435  | Hs.242821 | differentiation-associated Na-dependent   | 2.1 |
|    | 413493 | BE144444  |           | gb:MRC-HT0168-141199-002-#09 HT0168 Homo  | 2.1 |
|    | 428501 | AL041162  | Hs.98587  | ESTs                                      | 2.1 |
|    | 431568 | AW972316  | Hs.283703 | ESTs                                      | 2.1 |
|    | 456177 | NM_012391 | Hs.79414  | prostate epithelium-specific Ets transcr  | 2.1 |
| 20 | 441976 | AA428403  | Hs.106131 | ESTs                                      | 2.1 |
|    | 421311 | N71848    | Hs.283609 | hypothetical protein PRO2032              | 2.1 |
|    | 428358 | AA993222  | Hs.101915 | Stargardt disease 3 (autosomal dominant)  | 2.1 |
|    | 439973 | AI733308  | Hs.124663 | ESTs                                      | 2.1 |
|    | 446185 | AI279191  | Hs.149454 | ESTs, Weakly similar to DSR6_HUMAN DOWN   | 2.1 |
| 25 | 451606 | AA018791  | Hs.7945   | AIE-75 binding protein protein            | 2.1 |
|    | 433516 | AA595802  | Hs.33410  | ESTs, Weakly similar to T17279 hypotheti  | 2.1 |
|    | 441987 | AW452234  | Hs.128293 | ESTs                                      | 2.1 |
|    | 457140 | AI279960  | Hs.178140 | ESTs                                      | 2.1 |
|    | 414055 | AW818687  | Hs.5366   | hypothetical protein FLJ21522             | 2.1 |
| 30 | 445066 | BE178734  | Hs.197422 | ESTs                                      | 2.1 |
|    | 459265 | AJ003616  |           | gb:AJ003616 Selected chromosome 21 cDNA   | 2.0 |
|    | 425337 | AA355442  | Hs.169054 | ESTs                                      | 2.0 |
|    | 409339 | AB020686  | Hs.54037  | ectonucleotide pyrophosphatase/phosphodi  | 2.0 |
|    | 453023 | AW028733  | Hs.31439  | serine protease inhibitor, Kunitz type,   | 2.0 |
| 35 | 425055 | AW961959  | Hs.96940  | ESTs                                      | 2.0 |
|    | 425068 | AL048716  | Hs.154387 | KIAA0103 gene product                     | 2.0 |
|    | 444700 | NM_003645 | Hs.11729  | fatty acid-Coenzyme A ligase, very long-  | 2.0 |
|    | 424823 | NM_006226 | Hs.153322 | phospholipase C, epsilon                  | 2.0 |
|    | 450103 | R08665    | Hs.17244  | hypothetical protein FLJ13605             | 2.0 |
| 40 | 448519 | AW175665  | Hs.278695 | Homo sapiens protein mRNA, complete cds   | 2.0 |
|    | 440808 | AK001339  | Hs.7432   | hypothetical protein FLJ10477             | 2.0 |
|    | 429968 | AA322503  | Hs.227011 | G-substrate                               | 2.0 |
|    | 429290 | AF203032  | Hs.198760 | neurofilament, heavy polypeptide (200kD)  | 2.0 |
|    | 433068 | NM_006456 | Hs.288215 | sialyltransferase                         | 2.0 |
| 45 | 416982 | J05401    | Hs.80691  | creatine kinase, mitochondrial 2 (sarcom  | 2.0 |
|    | 423479 | NM_014326 | Hs.129208 | death-associated protein kinase 2         | 2.0 |
|    | 407341 | AA918886  | Hs.204918 | ESTs, Weakly similar to ALU8_HUMAN ALU S  | 2.0 |
|    | 452625 | AA724771  | Hs.61425  | ESTs                                      | 2.0 |
|    | 410378 | R23324    | Hs.41693  | DnaJ (Hsp40) homolog, subfamily B, member | 2.0 |
| 50 | 409767 | AW501470  |           | gb:U1-HF-BP0p-ajd-b-03-0-U1.r1 NIH_MGC_5  | 2.0 |
|    | 415625 | H09474    | Hs.202341 | Homo sapiens cDNA: FLJ23573 fis, clone L  | 2.0 |
|    | 405670 |           |           | C20006277.gij12034653 gb AAG45951.1 AF22  | 2.0 |
|    | 408206 | AF041853  | Hs.43670  | kinesin family member 3A                  | 2.0 |
|    | 458660 | AI299739  | Hs.99601  | hypothetical protein FLJ12553             | 2.0 |
| 55 | 432278 | AL137506  | Hs.274256 | hypothetical protein FLJ23563             | 2.0 |
|    | 404559 |           |           | Target Exon                               | 2.0 |
|    | 403728 |           |           | Target Exon                               | 2.0 |
|    | 413055 | AV655701  | Hs.75183  | cytochrome P450, subfamily IIE (ethanol-  | 2.0 |
|    | 407786 | AA687538  | Hs.38972  | tetraspan 1                               | 2.0 |
| 60 | 413266 | BE300352  |           | gb:600944231F1 NIH_MGC_17 Homo sapiens c  | 2.0 |
|    | 453994 | BE180964  | Hs.165590 | ribosomal protein S13                     | 2.0 |
|    | 451583 | AI653797  | Hs.24133  | ESTs                                      | 2.0 |
|    | 443244 | AI457235  | Hs.166479 | ESTs                                      | 2.0 |
|    | 453396 | AW162768  | Hs.22620  | ESTs                                      | 2.0 |
| 65 | 415694 | AW194301  | Hs.339283 | Human DNA sequence from clone RP1-187J11  | 2.0 |
|    | 459511 | AI142379  |           | gb:cg64c01.r1 Soares_testis_NHT Homo sap  | 2.0 |
|    | 450757 | BE081050  | Hs.31570  | ESTs, Weakly similar to KIAA1324 protein  | 2.0 |
|    | 451032 | W03692    | Hs.323079 | Homo sapiens mRNA: cDNA DKFZp564P116 (fr  | 2.0 |
|    | 440509 | BE410132  | Hs.134202 | ESTs, Weakly similar to T17279 hypotheti  | 2.0 |
| 70 | 444647 | H14718    | Hs.11506  | Human clone Z3589 mRNA sequence           | 2.0 |
|    | 447932 | AA837474  | Hs.20021  | vesicle-associated membrane protein 1 (s  | 2.0 |
|    | 444749 | AI190672  | Hs.65926  | ESTs                                      | 2.0 |
|    | 446277 | AI284218  | Hs.159204 | ESTs                                      | 2.0 |
|    | 452550 | AA026735  | Hs.326048 | Homo sapiens mRNA; cDNA DKFZp434M0420 (f  | 2.0 |
| 75 | 453843 | D25215    | Hs.35804  | hecl domain and RLD 3                     | 2.0 |
|    | 445725 | AK000956  | Hs.13209  | hypothetical protein FLJ10094             | 2.0 |
|    | 409265 | T78737    | Hs.321062 | ESTs                                      | 2.0 |

TABLE 22B:

Pkey: Unique Eos probeset identifier number  
CAT number: Gene cluster number  
Accession: Genbank accession numbers

| Pkey | CAT Number | Accession |
|------|------------|-----------|
|------|------------|-----------|

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|        |           |   |
|--------|-----------|---|
| 409767 | 1154015_1 | AW501470 AW502931 AW499500  |
| 409856 | 1156268_1 | AW502082 AW502979 AW502807 AW501876   |
| 410538 | 1207341_1 | AW753115 AW753113 R45779  |
| 411361 | 1240611_1 | AW839073 AW839234 AW839230 AW878302 AW839109 AW843897   |
| 411906 | 1265204_1 | AW875765 H50294 AW875444  |
| 412244 | 1284692_1 | AW948175 AW947637 AW902869 AW947537 AW947531 AW947532 AW947530  |
| 412636 | 13165_1   | NM_004415 AL031058 M77830 BE149760 AW752599 AW848723 AW376697 AW376817 AW376699 AW848371 AW376782 AW848789 AW361413           |
|        |           | AW849074 AW997139 AW799304 AW799309 BE077020 BE077017 BE185187 AW997196 BE156621 BE179915 BE006561 BE143155 AW890985          |
|        |           | BE002107 AW103521 AA857316 AW383133 BE011378 AW170253 BE185750 AW886475 BE160433 J05211 BE082576 BE082584 BE004047            |
|        |           | AW607238 AW377700 AW377699 BE082526 BE082505 BE082507 BE082514 AW178000 AW177933 AI905935 AW747877 AW748114 BE148516          |
|        |           | AW265328 AW847678 AW847688 AW365151 AW365148 AW365153 AW365156 AW365175 AW365157 AW365154 AW068840 BE005272 AW365145          |
|        |           | BE001925 BE182166 BE144243 BE001923 AI951766 AI434518 BE184920 BE184933 AI284090 BE184941 AW804674 BE184924 C04715 W39488     |
|        |           | AW995615 BE184948 BE159646 AW606653 AA099891 AA131128 AA337270 AA340777 AW384371 AA852212 R58704 AW366566 AW364859            |
|        |           | AA025851 AA025852 AA455100 AA719958 AW352220 AW996245 BE165351 BE073467 AA377127 AW890264 AW609750 AW391912 AW849690          |
|        |           | T87267 AW853812 AA852213 W74149 BE009090 AA056401 H91011 AW368529 AW390272 C18467 AW674920 N57176 AA026480 AW576767           |
|        |           | H93284 AA026863 AW177787 AA026654 AW177786 BE092134 BE092137 BE092136 AW177784 AI022862 BE091653 AW376811 AW848592            |
|        |           | AA040018 BE185331 BE182164 AA368564 AW951576 T29918 AA131077 W95048 W25458 AW205789 H90899 N29754 W32490 R20904 BE167181      |
|        |           | BE167165 N84767 H27408 H30146 AI190590 C03378 AI554403 AI205263 AA128470 AI392926 AF139065 AW370813 AW370827 AW798417         |
|        |           | AW798780 AW798883 AW798569 R33557 AA149190 C03029 AW177783 AA088866 AW370829 AA247685 BE002273 AI760816 AI439101 AW879451     |
|        |           | AI700963 AA451923 AI340326 AI590975 T48793 AI568096 AI142882 AA039975 AI470146 AA946936 BE067737 BE067786 W19287 AA644381     |
|        |           | AA702424 AI417612 AI306554 AI686869 AI568892 AW190555 AI571075 AI220573 AA056527 AI471874 AI304772 AW517828 AI915596 AI627383 |
|        |           | AI270345 AW021347 AW166807 AW105614 AI346078 AA552300 W95070 AI494069 AI911702 AA149191 AA026864 AI830049 AI887258 AW780435   |
|        |           | AI910434 AI819984 AI858282 AI078449 AI025932 AI860584 AI635878 AA026047 AA703232 D12062 AW192085 AA658154 AW514597 AW591892   |
|        |           | T87181 AA782066 AW243815 AW150038 AW268383 AW004633 AI927207 AA782109 AW473233 AI804485 AW169216 AI572669 AA602182            |
|        |           | AW015480 AW771865 AI270027 AA961816 AA283207 AI076962 AI498487 AI348053 AI783914 H44405 AW799118 AA128330 AA515500 AA918281   |
|        |           | W02156 AI905927 AA022701 W38382 R20795 T77861 AW860878  |
|        |           | BE300352 BE299274 BE075351 BE297444   |
|        |           | BE144444 BE144430   |
|        |           | H72693 R08673 H72694 F20990 R08580  |
|        |           | AA190712 AA190665 AA252564  |
|        |           | AA236867 AA237066 AA354236 AW957759 H08961  |
|        |           | AW954525 AI372685 AA349501 AI372687 H10564  |
|        |           | N39127 F20776 AI082691 AA865520 F36964 F33894   |
|        |           | AA604405 BE062234 AW748386  |
|        |           | AA618174 AI114549 R36464 R36465   |
|        |           | T64297 AA894931 NM_001443 M10050 AW843109 AI698516 T53219 T48785 T64166 AA706930 R29613 T55913 T56518 T64679 R29666 M10617    |
|        |           | AI768596 AA101894 W90338 AI742193 AW752206 AA099433 T53220 AW082135 AW272775 T29562 T55862 AI343047 AI345671 T68235 T68121    |
|        |           | AW842284  |
|        |           | AI674072 BE268487   |
|        |           | AW381980 BE152244 BE152235 BE152238 BE152232  |
|        |           | AW852286 AW851934 AW852096 AW852274   |
|        |           | AI792298 H14121 AI375113 AA960851 AA744592 AV648739 AI298360 AW293609   |
|        |           | AJ003616 AJ003654 AJ003617  |

|    |  |
|----|--|
| 45 | TABLE 22C:   |
|    | Pkey: Unique number corresponding to an Eos probeset   |
|    | Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <u>Nature</u> 402:489-495. |
|    | Strand: Indicates DNA strand from which exons were predicted.  |
| 50 | NT_position: Indicates nucleotide positions of predicted exons.  |

|    |        |         |        |  |
|----|--------|---------|--------|--|
|    | Pkey   | Ref     | Strand | NT_position  |
|    | 401600 | 4388746 | Minus  | 27363-27518, 28727-28891, 29526-29731  |
|    | 401783 | 7249190 | Plus   | 139369-139827, 140509-140591, 140834-140990, 141496-141657, 141757-141882, 142063-142283 |
| 55 | 402429 | 9796372 | Minus  | 57622-57793, 59282-59402, 59624-59827  |
|    | 403469 | 9929739 | Minus  | 4831-7707  |
|    | 403728 | 7534291 | Minus  | 34481-34671  |
|    | 404091 | 7684554 | Minus  | 82121-83229  |
|    | 404559 | 8748893 | Minus  | 73499-73651, 89575-89739   |
| 60 | 404563 | 9838310 | Plus   | 100136-100343  |
|    | 404606 | 9212936 | Minus  | 22310-23269  |
|    | 405354 | 2642452 | Plus   | 52213-53089  |
|    | 405403 | 6850244 | Minus  | 37491-37670, 40951-41031   |
| 65 | 405670 | 4662655 | Plus   | 96543-96870  |

|    |   |
|----|---|
| 70 | TABLE 23A: ABOUT 441 GENES SIGNIFICANTLY DOWN-REGULATED IN LOWER GRADE GLIOBLASTOMA COMPARED TO NORMAL ADULT CNS  |
|    | Table 23A lists about 441 genes significantly down-regulated in lower grade glioblastoma (LGG) compared to normal adult CNS tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" normal CNS to "average" LGG was greater than or equal to 2.5. The "average" normal CNS level was set to the 75 <sup>th</sup> percentile amongst various normal CNS tissues. The "average" LGG level was set to the 95 <sup>th</sup> percentile amongst various tumor samples. In order to remove gene-specific background levels of non-specific hybridization, the 10 <sup>th</sup> percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated. |

|    |   |
|----|---|
| 75 | Pkey: Unique Eos probeset identifier number                 |
|    | ExAccn: Exemplar Accession number, Genbank accession number |
|    | UnigeneID: Unigene number                                   |
|    | Unigene Title: Unigene gene title                           |
|    | R1: Ratio of CNS to LOWER GRADE GLIOBLASTOMA                |

|    |        |          |           |  |      |
|----|--------|----------|-----------|--|------|
| 80 | Pkey   | ExAccn   | UnigeneID | Unigene Title                            | R1   |
|    | 415388 | AF018081 | Hs.78409  | collagen, type XVIII, alpha 1            | 10.3 |
|    | 418318 | U47732   | Hs.84072  | transmembrane 4 superfamily member 3     | 10.1 |
|    | 445529 | H14421   | Hs.180513 | ATP-binding cassette, sub-family A (ABC1 | 9.9  |
|    | 417433 | BE270266 | Hs.82128  | ST4 oncofetal trophoblast glycoprotein   | 7.8  |

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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
|    | 422746 | NM_004484 | Hs.119651 | glypican 3                               | 7.7 |
|    | 448362 | AA641767  | Hs.21015  | hypothetical protein DKFZp564L0864 simil | 7.7 |
|    | 430573 | AA744550  | Hs.136345 | ESTs                                     | 7.6 |
| 5  | 415274 | AF001548  | Hs.78344  | myosin, heavy polypeptide 11, smooth mus | 7.5 |
|    | 419290 | AI128114  | Hs.112885 | spinal cord-derived growth factor-B      | 7.4 |
|    | 424670 | W61215    | Hs.116651 | epithelial V-like antigen 1              | 7.3 |
|    | 417167 | AW206437  | Hs.4290   | ESTs                                     | 7.3 |
|    | 416018 | AW138239  | Hs.78977  | proprotein convertase subtilisin/kexin 1 | 7.3 |
| 10 | 424632 | AB014523  | Hs.151406 | KIAA0623 gene product                    | 6.9 |
|    | 453165 | S74727    | Hs.32042  | aspartoacylase (aminoacylase 2, Canavan  | 6.5 |
|    | 411770 | NM_014278 | Hs.71992  | heat shock protein (hsp110 family)       | 6.5 |
|    | 439272 | AA832474  | Hs.25851  | ESTs                                     | 6.5 |
|    | 414831 | M31158    | Hs.77439  | protein kinase, cAMP-dependent, regulato | 6.4 |
| 15 | 454076 | AW204712  | Hs.61957  | ESTs                                     | 6.3 |
|    | 446390 | AA233393  | Hs.14992  | hypothetical protein FLJ11151            | 6.3 |
|    | 430865 | AI073424  | Hs.5232   | HSPC125 protein                          | 6.3 |
|    | 434064 | AL049045  | Hs.180758 | hypothetical protein PRO0082             | 6.2 |
|    | 417458 | NM_005655 | Hs.82173  | TGFB inducible early growth response     | 6.1 |
| 20 | 412636 | NM_004415 |           | desmoplakin (DPI, DPII)                  | 6.0 |
|    | 409743 | N48721    | Hs.183506 | hypothetical protein FLJ14213            | 5.9 |
|    | 430998 | AF128847  | Hs.204038 | indolethylamine N-methyltransferase      | 5.8 |
|    | 434725 | AK000796  | Hs.4104   | hypothetical protein                     | 5.6 |
|    | 417175 | R44558    | Hs.94002  | ESTs                                     | 5.6 |
| 25 | 417275 | X63578    | Hs.295449 | parvalbumin                              | 5.5 |
|    | 427322 | AK002017  | Hs.176227 | hypothetical protein FLJ11155            | 5.5 |
|    | 431009 | BE149762  | Hs.48956  | gap junction protein, beta 6 (connexin 3 | 5.4 |
|    | 420297 | AI628272  | Hs.88323  | ESTs, Weakly similar to ALU1_HUMAN ALU S | 5.4 |
|    | 412472 | AW975398  | Hs.293836 | ESTs                                     | 5.4 |
| 30 | 443258 | AF169301  | Hs.9098   | sulfate transporter 1                    | 5.3 |
|    | 427210 | BE396283  | Hs.173987 | eukaryotic translation initiation factor | 5.3 |
|    | 442064 | AI422867  | Hs.88594  | ESTs                                     | 5.2 |
|    | 438868 | AW246243  | Hs.334800 | hypothetical protein FLJ20974            | 5.2 |
|    | 444409 | AI792140  | Hs.49265  | ESTs                                     | 5.2 |
| 35 | 442310 | AF033199  | Hs.8198   | zinc finger protein 204                  | 5.1 |
|    | 409031 | AA376836  | Hs.288856 | ESTs                                     | 5.1 |
|    | 438460 | AB020702  | Hs.6224   | KIAA0895 protein                         | 5.1 |
|    | 411939 | AI365585  | Hs.146246 | ESTs                                     | 5.0 |
| 40 | 448429 | D17408    | Hs.21223  | calponin 1, basic, smooth muscle         | 5.0 |
|    | 413293 | AL047483  | Hs.302498 | GTP-binding protein homologous to Saccha | 5.0 |
|    | 408968 | AI652236  | Hs.49376  | hypothetical protein FLJ20644            | 5.0 |
|    | 443491 | AW499665  | Hs.9456   | SWI/SNF related, matrix associated, acti | 4.9 |
|    | 448960 | AF006513  | Hs.22670  | chromodomain helicase DNA binding protei | 4.9 |
|    | 416101 | R24854    | Hs.268805 | ESTs                                     | 4.9 |
| 45 | 433558 | AA833757  | Hs.201769 | ESTs, Weakly similar to T24435 hypotheti | 4.9 |
|    | 424645 | NM_014682 | Hs.151449 | KIAA0535 gene product                    | 4.8 |
|    | 437679 | NM_014214 | Hs.5753   | inositol(myo)-1-(or 4)-monophosphatase 2 | 4.8 |
|    | 408428 | NM_014787 | Hs.44896  | DnaJ (Hsp40) homolog, subfamily B, membe | 4.8 |
|    | 414502 | AL133721  | Hs.224680 | ESTs                                     | 4.8 |
| 50 | 442572 | AI001922  | Hs.135121 | hypothetical protein FLJ22415            | 4.8 |
|    | 412700 | BE222433  | Hs.239208 | ESTs, Weakly similar to I38022 hypotheti | 4.8 |
|    | 422603 | BE242587  | Hs.118651 | hematopoietically expressed homeobox     | 4.8 |
|    | 420605 | BE391491  | Hs.99291  | HSPC156 protein                          | 4.7 |
|    | 422482 | AI439905  | Hs.344476 | gb:ti57g08.x1 NCL CGAP_Lym12 Homo sapien | 4.7 |
| 55 | 416636 | N32536    | Hs.42645  | solute carrier family 16 (monocarboxylic | 4.7 |
|    | 409263 | AA069573  | Hs.50319  | ESTs                                     | 4.7 |
|    | 410657 | AF063228  | Hs.65248  | dynein, cytoplasmic, intermediate polype | 4.6 |
|    | 457216 | AA452554  | Hs.283697 | ESTs, Weakly similar to A41796 neural re | 4.6 |
|    | 433423 | BE407127  | Hs.8997   | heat shock 70kD protein 1A               | 4.6 |
| 60 | 449901 | AI674072  |           | gb:wd15h01.x1 Soares_NFL_T_GBC_S1 Homo s | 4.6 |
|    | 445618 | H79667    | Hs.237642 | Homo sapiens cDNA FLJ12052 fis, clone HE | 4.6 |
|    | 431582 | F07136    | Hs.261828 | G protein-coupled receptor kinase 7      | 4.5 |
|    | 424675 | NM_005512 | Hs.151641 | glycoprotein A repetitions predominant   | 4.5 |
|    | 449511 | AI436187  | Hs.296261 | guanine nucleotide binding protein (G pr | 4.5 |
| 65 | 401600 | BE247275  |           | U5 snRNP-specific protein, 116 kD        | 4.5 |
|    | 447135 | T58148    |           | gb:yb98g06.s1 Stratagene lung (937210) H | 4.5 |
|    | 426689 | BE245550  | Hs.171825 | basic helix-loop-helix domain containing | 4.4 |
|    | 429598 | AA811257  | Hs.269710 | ESTs                                     | 4.4 |
|    | 428206 | AB020643  | Hs.183006 | KIAA0836 protein                         | 4.4 |
| 70 | 450715 | AI266484  | Hs.31570  | ESTs, Weakly similar to KIAA1324 protein | 4.4 |
|    | 428508 | BE252383  | Hs.184668 | SBB131 protein                           | 4.4 |
|    | 435145 | AI277259  | Hs.116631 | ESTs                                     | 4.4 |
|    | 405670 |           |           | C2000627:gij12034653 gb AAG45951.1 AF22  | 4.4 |
|    | 442321 | AF207664  | Hs.8230   | a disintegrin-like and metalloprotease ( | 4.3 |
| 75 | 427670 | BE612888  | Hs.180224 | myosin regulatory light chain            | 4.3 |
|    | 428465 | AW970976  | Hs.293653 | ESTs                                     | 4.3 |
|    | 449180 | AI633836  | Hs.195649 | ESTs                                     | 4.3 |
|    | 402364 | AV653231  |           | CCAAT/enhancer binding protein (C/EBP),  | 4.3 |
|    | 426471 | M22440    | Hs.170009 | transforming growth factor, alpha        | 4.2 |
| 80 | 419386 | AA236867  |           | ESTs, Weakly similar to I38022 hypotheti | 4.2 |
|    | 441408 | AI733249  | Hs.126897 | ESTs                                     | 4.2 |
|    | 419631 | AW188117  | Hs.303154 | popeye protein 3                         | 4.2 |
|    | 409231 | AA446644  | Hs.692    | GA733-2 antigen; epithelial glycoprotein | 4.2 |
|    | 448958 | AB020651  | Hs.22653  | KIAA0844 protein                         | 4.2 |

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|    |        |           |           |   |     |
|----|--------|-----------|-----------|---|-----|
|    | 421878 | AA299652  | Hs.111496 | Homo sapiens cDNA FLJ11643 fis, clone HE  | 4.2 |
|    | 422278 | AF072873  | Hs.114218 | frizzled (Drosophila) homolog 6           | 4.2 |
|    | 459053 | AI807052  | Hs.210361 | ESTs                                      | 4.1 |
|    | 450600 | BE079478  | Hs.24880  | ESTs                                      | 4.1 |
| 5  | 415839 | RA0611    | Hs.94694  | ESTs                                      | 4.1 |
|    | 450374 | AA397540  | Hs.60293  | Homo sapiens clone 122482 unknown mRNA    | 4.1 |
|    | 422270 | AF114494  | Hs.114062 | protein tyrosine phosphatase-like (proli  | 4.1 |
|    | 405674 |           |           | NM_022775:Homo sapiens hypothetical prot  | 4.1 |
|    | 453906 | AW444952  | Hs.257054 | ESTs                                      | 4.1 |
| 10 | 419318 | AW969742  | Hs.291005 | ESTs                                      | 4.0 |
|    | 456382 | NM_001126 | Hs.90011  | adenylosuccinate synthase                 | 4.0 |
|    | 435902 | AA701867  | Hs.297726 | ESTs                                      | 4.0 |
|    | 449483 | AK001971  | Hs.23607  | hypothetical protein FLJ11109             | 4.0 |
| 15 | 434228 | Z42047    | Hs.263978 | Homo sapiens PRO2751 mRNA, complete cds   | 4.0 |
|    | 403890 |           |           | C5002036*:gij10241574[emb]CAC09416.1](A   | 4.0 |
|    | 429470 | AI878901  | Hs.203862 | guanine nucleotide binding protein (G pr  | 4.0 |
|    | 409856 | AW502082  |           | gb:U1-HF-BR0p-ajq-g-04-0-ULr1 NIH_MGC_5   | 4.0 |
|    | 443682 | AI383061  | Hs.47248  | ESTs, Highly similar to similar to Cdc14  | 4.0 |
| 20 | 420230 | AL034344  | Hs.284186 | forkhead box C1                           | 4.0 |
|    | 410509 | AW840743  |           | gb:QV1-CN0002-080300-102-407 CN0002 Homo  | 4.0 |
|    | 428414 | AL049980  | Hs.184216 | DKFZP564C152 protein                      | 3.9 |
|    | 400138 |           |           | Ecs Control                               | 3.9 |
|    | 451522 | BE565817  | Hs.26498  | hypothetical protein FLJ21657             | 3.9 |
| 25 | 436521 | AW203986  | Hs.213003 | ESTs                                      | 3.9 |
|    | 401507 |           |           | C15000810*:gij11131272[sp]P79331[ATS2_BO  | 3.9 |
|    | 449785 | AI225235  | Hs.288300 | hypothetical protein FLJ23231             | 3.9 |
|    | 434815 | AF155582  | Hs.46744  | core 1 UDP-galactose:N-acetylgalactosamin | 3.9 |
|    | 411906 | AW875765  |           | gb:QV2-PT0012-020500-185-a08 PT0012 Homo  | 3.9 |
| 30 | 440509 | BE410132  | Hs.134202 | ESTs, Weakly similar to T17279 hypothi    | 3.9 |
|    | 427061 | AB032971  | Hs.173392 | KIAA1145 protein                          | 3.9 |
|    | 430261 | AA305127  | Hs.237225 | hypothetical protein HT023                | 3.9 |
|    | 449658 | AI964033  | Hs.195730 | ESTs, Weakly similar to CTXN RAT CORTEXI  | 3.8 |
|    | 429876 | AB028977  | Hs.225974 | KIAA1054 protein                          | 3.8 |
| 35 | 410330 | AW023630  | Hs.159425 | ESTs                                      | 3.8 |
|    | 431369 | BE184455  | Hs.251754 | secretory leukocyte protease inhibitor (  | 3.8 |
|    | 437659 | AB007944  | Hs.5737   | KIAA0475 gene product                     | 3.8 |
|    | 438171 | AW976507  | Hs.293515 | ESTs                                      | 3.8 |
|    | 418394 | AF132818  | Hs.84728  | Kruppel-like factor 5 (intestinal)        | 3.8 |
| 40 | 405586 |           |           | NM_000299:Homo sapiens plakophilin 1 (ec  | 3.8 |
|    | 432298 | AL118812  | Hs.274293 | Homo sapiens mRNA; cDNA DKFZp761G1111 (f  | 3.8 |
|    | 426716 | NM_006379 | Hs.171921 | sema domain, immunoglobulin domain (lg),  | 3.8 |
|    | 438202 | AW169287  | Hs.22588  | ESTs                                      | 3.8 |
|    | 404606 |           |           | Target Exon                               | 3.8 |
| 45 | 425329 | AI961644  | Hs.145444 | Homo sapiens cDNA FLJ11494 fis, clone HE  | 3.8 |
|    | 407604 | AW191962  | Hs.288061 | collagen, type VIII, alpha 2              | 3.8 |
|    | 416498 | U33632    | Hs.79351  | potassium channel, subfamily K, member 1  | 3.7 |
|    | 430868 | W93178    | Hs.5232   | HSPC125 protein                           | 3.7 |
|    | 457008 | AA410446  | Hs.112011 | ESTs, Weakly similar to unknown [H.sapie  | 3.7 |
| 50 | 458660 | AI299739  | Hs.99601  | hypothetical protein FLJ12553             | 3.7 |
|    | 408732 | AL117490  | Hs.47225  | Ras-associated protein Rap1               | 3.7 |
|    | 436281 | AW411194  | Hs.85195  | myeloid leukemia factor 1                 | 3.7 |
|    | 413493 | BE144444  |           | gb:MR0-HT0168-141199-002-409 HT0168 Homo  | 3.7 |
|    | 418407 | AL044818  | Hs.84928  | nuclear transcription factor Y, beta      | 3.7 |
| 55 | 445797 | AI253414  |           | gb:aq14f04.x1 Stanley Frontal NS pool 2   | 3.7 |
|    | 457121 | AI743770  | Hs.180513 | ESTs, Weakly similar to KIAA0822 protein  | 3.6 |
|    | 417620 | R02530    | Hs.191198 | ESTs                                      | 3.6 |
|    | 421952 | AA300900  | Hs.98849  | ESTs, Moderately similar to AF161511 1 H  | 3.6 |
|    | 454247 | AJ243950  | Hs.46735  | deafness locus associated putative guani  | 3.6 |
| 60 | 431662 | AA513406  | Hs.152307 | ESTs                                      | 3.6 |
|    | 426908 | AW815163  | Hs.172851 | arginase, type II                         | 3.6 |
|    | 438519 | AI186033  | Hs.147025 | ESTs, Weakly similar to C57785 zinc fing  | 3.6 |
|    | 415606 | W70022    |           | gb:zd51e10r1 Soares_fetal_heart_NbHH19W   | 3.6 |
|    | 444859 | AW449137  | Hs.157487 | ESTs                                      | 3.6 |
| 65 | 414631 | AW970130  | Hs.65406  | ESTs                                      | 3.6 |
|    | 428897 | AJ245719  | Hs.194385 | hypothetical protein FLJ20234             | 3.5 |
|    | 437073 | AI885608  | Hs.94122  | ESTs                                      | 3.5 |
|    | 427287 | NM_014903 | Hs.174188 | KIAA0938 protein                          | 3.5 |
|    | 415927 | AL120168  | Hs.78919  | Kell blood group precursor (McLeod pheno  | 3.5 |
| 70 | 450235 | AA007512  | Hs.17538  | ESTs                                      | 3.5 |
|    | 447263 | AW965667  | Hs.322406 | hypothetical protein FLJ14494             | 3.5 |
|    | 419440 | AB020689  | Hs.90419  | KIAA0882 protein                          | 3.5 |
|    | 427254 | AL121523  | Hs.97774  | ESTs                                      | 3.5 |
|    | 434348 | BE393191  | Hs.181795 | putative b,b-carotene-5',10'-dioxygenase  | 3.5 |
| 75 | 441264 | AA927170  | Hs.23290  | ESTs                                      | 3.5 |
|    | 433629 | R13140    | Hs.13359  | ESTs                                      | 3.5 |
|    | 446494 | AA463276  | Hs.288906 | WW Domain-Containing Gene                 | 3.5 |
|    | 441585 | AI760755  | Hs.202383 | ESTs                                      | 3.5 |
|    | 438704 | AI435060  | Hs.32825  | ESTs                                      | 3.4 |
| 80 | 445279 | R41900    | Hs.22245  | ESTs                                      | 3.4 |
|    | 415114 | D60468    | Hs.94181  | ESTs                                      | 3.4 |
|    | 449561 | AI022240  | Hs.17924  | ESTs, Moderately similar to ALU1_HUMAN A  | 3.4 |
|    | 452420 | BE564871  | Hs.29463  | centrin, EF-hand protein, 3 (CDC31 yeast  | 3.4 |
|    | 416517 | AA775987  | Hs.79357  | proteasome (prosome, macropain) 26S subu  | 3.4 |



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|    |        |               |           |  |     |
|----|--------|---------------|-----------|--|-----|
| 5  | 441134 | W29092        | Hs.346950 | cellular retinoic acid-binding protein 1 | 3.4 |
|    | 427176 | AW381569      | Hs.40334  | ESTs                                     | 3.4 |
|    | 415668 | AW957684      | Hs.306814 | hypothetical protein FLJ21889            | 3.4 |
|    | 450928 | AI744417      |           | gb:tr10h12.x1 NCI_CGAP_Ov23 Homo sapiens | 3.4 |
|    | 457012 | R41480        | Hs.302754 | ESTs                                     | 3.3 |
| 10 | 405354 |               |           | CX000321:gi 6671579 ref NP_031518.1  an  | 3.3 |
|    | 408855 | T83061        | Hs.319946 | Homo sapiens mRNA for KIAA1727 protein,  | 3.3 |
|    | 418525 | AW450369      | Hs.86937  | ESTs                                     | 3.3 |
|    | 420174 | AI824144      | Hs.23912  | ESTs                                     | 3.3 |
|    | 437124 | AA554458      | Hs.279860 | KIAA0666 protein                         | 3.3 |
| 15 | 419211 | BE270817      | Hs.37617  | ESTs, Weakly similar to A53933 myosin I  | 3.3 |
|    | 424335 | AW021508      | Hs.28170  | ESTs                                     | 3.3 |
|    | 453344 | BE349075      | Hs.44571  | ESTs                                     | 3.3 |
|    | 428065 | AI634046      | Hs.157313 | ESTs                                     | 3.3 |
|    | 417248 | AA329449      | Hs.247302 | twisted gastrulation                     | 3.3 |
| 20 | 429415 | NM_002593     | Hs.202097 | procollagen C-endopeptidase enhancer     | 3.3 |
|    | 411393 | AW797437      | Hs.69771  | B-factor, properdin                      | 3.3 |
|    | 406976 | M60299        |           | gb:Human alpha-1 collagen type II gene,  | 3.3 |
|    | 441071 | D79550        | Hs.7149   | Homo sapiens cDNA: FLJ21950 fis, clone H | 3.3 |
|    | 414327 | BE408145      | Hs.185254 | ESTs, Weakly similar to T24435 hypotheti | 3.3 |
| 25 | 433703 | AA210863      | Hs.3532   | nemo-like kinase                         | 3.3 |
|    | 418880 | N87353        | Hs.89421  | CBF1 interacting corepressor             | 3.3 |
|    | 445947 | AW612084      | Hs.298494 | ESTs                                     | 3.3 |
|    | 437334 | AL353947      | Hs.283780 | hypothetical protein DKFZp761N1814       | 3.3 |
|    | 434795 | BE620794      | Hs.4147   | translocating chain-associating membrane | 3.2 |
| 30 | 400127 |               |           | Eos Control                              | 3.2 |
|    | 414602 | AW630088      | Hs.76550  | Homo sapiens mRNA; cDNA DKFZp564B1264 (f | 3.2 |
|    | 402429 |               |           | Target Exon                              | 3.2 |
|    | 428695 | AI355647      | Hs.189999 | putative receptor (family A group 5)     | 3.2 |
|    | 427699 | AW965076      | Hs.180378 | hypothetical protein 669                 | 3.2 |
| 35 | 403442 |               |           | Target Exon                              | 3.2 |
|    | 419272 | AA663904      | Hs.89862  | TNFRSF1A-associated via death domain     | 3.2 |
|    | 456614 | AV653110      | Hs.106650 | hypothetical protein FLJ20533            | 3.2 |
|    | 407581 | R48402        | Hs.173508 | P3ECSL                                   | 3.2 |
|    | 412633 | AF001691      | Hs.74304  | periplakin                               | 3.2 |
| 40 | 433328 | AW298159      | Hs.23644  | ESTs, Weakly similar to S65824 reverse t | 3.2 |
|    | 449294 | AI651786      | Hs.195045 | ESTs                                     | 3.1 |
|    | 442799 | AI564739      | Hs.68505  | ESTs                                     | 3.1 |
|    | 434045 | AI065133      | Hs.152316 | hypothetical protein PRO0971             | 3.1 |
|    | 409403 | AA668224      | Hs.6634   | Homo sapiens cDNA: FLJ22547 fis, clone H | 3.1 |
| 45 | 420033 | D59502        | Hs.292590 | ESTs                                     | 3.1 |
|    | 422137 | AJ236885      | Hs.112180 | zinc finger protein 148 (pHZ-52)         | 3.1 |
|    | 444760 | AI796296      | Hs.208062 | ESTs                                     | 3.1 |
|    | 403488 |               |           | ENSP00000201948:KARYOPHERIN BETA2B HOMOL | 3.1 |
|    | 411359 | H86088        | Hs.22635  | ESTs                                     | 3.1 |
| 50 | 443037 | AW500305      | Hs.8906   | syntaxin 7                               | 3.1 |
|    | 407127 | R45970        | Hs.236349 | EST                                      | 3.1 |
|    | 416851 | AW963951      | Hs.85618  | ESTs                                     | 3.1 |
|    | 416838 | DB4109        | Hs.80248  | RNA-binding protein gene with multiple s | 3.1 |
|    | 443030 | R68048        | Hs.9238   | hypothetical protein FLJ23516            | 3.1 |
| 55 | 410389 | AW954049      | Hs.8177   | ESTs, Weakly similar to PIHUB6 salivary  | 3.1 |
|    | 459399 | BE407712      | Hs.153998 | creatine kinase, mitochondrial 1 (ubiqui | 3.1 |
|    | 433582 | BE548749      | Hs.148016 | ESTs                                     | 3.1 |
|    | 431128 | AI203545      | Hs.296169 | S-phase response (cyclin-related)        | 3.1 |
|    | 420411 | AI581085      | Hs.24678  | sphingosine-1-phosphatase                | 3.1 |
| 60 | 459584 | AI910884      | Hs.346429 | ESTs                                     | 3.1 |
|    | 449883 | AI004464      | Hs.344156 | gb:ot56e06.s1 Soares_testis_NHT Homo sap | 3.1 |
|    | 445320 | AA503887      | Hs.167011 | Homo sapiens cDNA: FLJ21362 fis, clone C | 3.1 |
|    | 410786 | AW803340      |           | gb:IL2-UM0079-090300-050-D02 UM0079 Homo | 3.1 |
|    | 418207 | C14685        | Hs.34772  | ESTs                                     | 3.0 |
| 65 | 420521 | AI915734      | Hs.87298  | ESTs                                     | 3.0 |
|    | 425890 | H24530        | Hs.273294 | hypothetical protein FLJ20069            | 3.0 |
|    | 416749 | AW068550.comp | Hs.79732  | fibulin 1                                | 3.0 |
|    | 412258 | AA376758      | Hs.324841 | hypothetical protein FLJ22622            | 3.0 |
|    | 407173 | T64349        |           | gb:yc10d08.s1 Stratagene lung (937210) H | 3.0 |
| 70 | 415672 | N53097        | Hs.193579 | ESTs                                     | 3.0 |
|    | 448583 | NM_015239     | Hs.21542  | KIAA1035 protein                         | 3.0 |
|    | 429043 | AI824977      | Hs.145319 | ESTs                                     | 3.0 |
|    | 404091 |               |           | Target Exon                              | 3.0 |
|    | 406085 |               |           | Target Exon                              | 3.0 |
| 75 | 438825 | BE327427      | Hs.79953  | ESTs                                     | 3.0 |
|    | 457441 | BE467737      | Hs.146125 | ESTs                                     | 3.0 |
|    | 403512 |               |           | C3000579*:gi 12643308 sp Q9Y4K1 AIM1_HUM | 3.0 |
|    | 416866 | AA297356      | Hs.80324  | serine/threonine protein phosphatase cat | 3.0 |
|    | 439877 | H39685        | Hs.250700 | tryptase beta 1                          | 3.0 |
| 80 | 441984 | AB037763      | Hs.8059   | synaptotagmin IV                         | 3.0 |
|    | 436765 | AB028952      | Hs.5307   | synaptopodin                             | 3.0 |
|    | 445071 | AI280246      | Hs.149504 | ESTs                                     | 3.0 |
|    | 404333 |               |           | C7001735*:gi 7768636 dbj BAA95483.1  (AB | 3.0 |
|    | 422907 | AI879263      | Hs.77273  | Human glucose transporter pseudogene     | 3.0 |
|    | 413266 | BE300352      |           | gb:00944231F1 NIH_MGC_17 Homo sapiens c  | 3.0 |
|    | 429393 | AA383024      | Hs.201603 | Homo sapiens mRNA; cDNA DKFZp434D0917 (f | 3.0 |
|    | 415337 | Z44881        | Hs.9012   | ESTs, Weakly similar to S26650 DNA-bindi | 3.0 |

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|----|--------|-----------|-----------|--|-----|
|    | 15044  | AA419108  | Hs.77840  | annexin A4                               | 2.9 |
|    | 403469 |           |           | Target Exon                              | 2.9 |
|    | 416928 | AA190573  | Hs.85902  | ESTs, Weakly similar to MCHU calmodulin  | 2.9 |
| 5  | 430195 | AW969308  | Hs.188594 | ESTs                                     | 2.9 |
|    | 458544 | AI631036  | Hs.196843 | ESTs                                     | 2.9 |
|    | 440667 | BE076969  | Hs.7337   | hypothetical protein FLJ10936            | 2.9 |
|    | 424641 | AB001106  | Hs.151413 | glia maturation factor, beta             | 2.9 |
|    | 428820 | AA436187  | Hs.172631 | integrin, alpha M (complement component  | 2.9 |
|    | 405403 |           |           | Target Exon                              | 2.9 |
| 10 | 452197 | AW023595  | Hs.232048 | ESTs                                     | 2.9 |
|    | 437357 | AL359559  | Hs.331666 | Homo sapiens mRNA; cDNA DKFZp762O2215 (f | 2.9 |
|    | 423479 | NM_014326 | Hs.129208 | death-associated protein kinase 2        | 2.9 |
|    | 404559 |           |           | Target Exon                              | 2.9 |
|    | 405270 |           |           | Target Exon                              | 2.9 |
| 15 | 422190 | H17399    | Hs.115506 | Human clone 23589 mRNA sequence          | 2.9 |
|    | 431300 | AA502346  |           | gb:ne26b03.s1 NCI_CGAP_Co3 Homo sapiens  | 2.9 |
|    | 420286 | AI796395  | Hs.111377 | ESTs                                     | 2.9 |
|    | 422964 | AW439476  | Hs.256895 | ESTs                                     | 2.9 |
| 20 | 431583 | AL042613  | Hs.262476 | S-adenosylmethionine decarboxylase 1     | 2.9 |
|    | 428595 | AB037795  | Hs.186547 | KIAA1374 protein                         | 2.9 |
|    | 402198 |           |           | NM_024323:Homo sapiens hypothetical prot | 2.9 |
|    | 416246 | U47413    | Hs.79101  | cyclin G1                                | 2.9 |
|    | 427593 | AK001132  | Hs.179752 | Homo sapiens cDNA FLJ10270 fis, clone HE | 2.9 |
|    | 446351 | AW444551  | Hs.35380  | x 001 protein                            | 2.9 |
| 25 | 440432 | AI239637  | Hs.202653 | ESTs, Weakly similar to T14267 Xin prote | 2.9 |
|    | 446525 | AW967059  | Hs.211556 | hypothetical protein MGC5487             | 2.8 |
|    | 400965 |           |           | C11002190*:gil12737279[ref]XP_012163.1]  | 2.8 |
|    | 436489 | AJ272269  | Hs.121429 | zinc-binding protein Rboc728             | 2.8 |
| 30 | 458793 | N80159    | Hs.121849 | microtubule-associated proteins 1A/1B li | 2.8 |
|    | 406810 | U82275    | Hs.94498  | leukocyte immunoglobulin-like receptor,  | 2.8 |
|    | 445577 | N40696    | Hs.137064 | cytoplasmic polyadenylation element bind | 2.8 |
|    | 428874 | W32133    | Hs.194366 | transferrin (prealbumin, amyloidosis t   | 2.8 |
|    | 418745 | AW882645  | Hs.88044  | sprouty (Drosophila) homolog 1 (antagoni | 2.8 |
| 35 | 433095 | AK001092  | Hs.302480 | Homo sapiens cDNA FLJ10230 fis, clone HE | 2.8 |
|    | 425580 | L11144    | Hs.1907   | galanin                                  | 2.8 |
|    | 416233 | AA176633  |           | gb:zp13g01.s1 Stratagene fetal retina 93 | 2.8 |
|    | 438219 | AI916151  | Hs.257194 | ESTs                                     | 2.8 |
|    | 404661 |           |           | C9000306*:gil12737280[ref]XP_006682.2] k | 2.8 |
| 40 | 435836 | AW292532  | Hs.343667 | homolog of yeast long chain polyunsatura | 2.8 |
|    | 423665 | BE167153  | Hs.24380  | ESTs                                     | 2.8 |
|    | 430320 | BE245290  | Hs.239218 | uncharacterized hypothalamus protein HCD | 2.8 |
|    | 401783 |           |           | NM_003771*:Homo sapiens keratin, hair, a | 2.8 |
|    | 423837 | AW937063  | Hs.275150 | gb:PM3-DT0037-231299-001-g11 DT0037 Homo | 2.8 |
| 45 | 447271 | AL041747  | Hs.170261 | ESTs                                     | 2.8 |
|    | 438913 | AI380429  | Hs.172445 | ESTs                                     | 2.8 |
|    | 441962 | AW972542  | Hs.289008 | Homo sapiens cDNA: FLJ21814 fis, clone H | 2.8 |
|    | 444385 | BE278964  | Hs.11085  | CGI-111 protein                          | 2.8 |
|    | 432278 | AL137506  | Hs.274256 | hypothetical protein FLJ23563            | 2.8 |
| 50 | 415666 | H72693    |           | gb:yu03c11.r1 Soares fetal liver spleen  | 2.8 |
|    | 452345 | AA293279  | Hs.29173  | hypothetical protein FLJ20515            | 2.8 |
|    | 445898 | AF070623  | Hs.13423  | Homo sapiens clone 24468 mRNA sequence   | 2.8 |
|    | 439556 | AI623752  | Hs.163603 | ESTs                                     | 2.8 |
|    | 405474 |           |           | NM_001093*:Homo sapiens acetyl-Coenzyme  | 2.8 |
| 55 | 426208 | AI370379  | Hs.132216 | ESTs                                     | 2.8 |
|    | 419461 | AI452601  | Hs.288869 | nuclear receptor subfamily 2, group F, m | 2.8 |
|    | 428501 | AL041162  | Hs.98587  | ESTs                                     | 2.8 |
|    | 413427 | U31120    | Hs.845    | interleukin 13                           | 2.8 |
|    | 433109 | N58907    | Hs.162430 | EST                                      | 2.8 |
| 60 | 427974 | BE093023  | Hs.188767 | ESTs                                     | 2.8 |
|    | 455040 | AW852286  |           | gb:QV0-CT0225-100400-187-d08 CT0225 Homo | 2.8 |
|    | 453994 | BE180964  | Hs.165590 | ribosomal protein S13                    | 2.8 |
|    | 459171 | AW967801  | Hs.64783  | ESTs, Weakly similar to T42705 hypotheti | 2.8 |
|    | 404845 |           |           | C22000163*:gil10242166[gb]AAG15318.1]AF2 | 2.8 |
| 65 | 408182 | AA047854  |           | gb:zf49g04.r1 Soares retina N2b4HR Homo  | 2.8 |
|    | 427111 | AA351026  | Hs.173594 | serine (or cysteine) proteinase inhibito | 2.7 |
|    | 414541 | BE293116  | Hs.76392  | aldehyde dehydrogenase 1 family, member  | 2.7 |
|    | 432815 | Z30045    | Hs.293676 | ESTs                                     | 2.7 |
|    | 404036 |           |           | Target Exon                              | 2.7 |
| 70 | 418157 | W99382    | Hs.283709 | lipopolysaccharide specific response-7 p | 2.7 |
|    | 426403 | NM_000361 | Hs.2030   | thrombomodulin                           | 2.7 |
|    | 439659 | AW970780  | Hs.59483  | Homo sapiens cDNA FLJ14471 fis, clone MA | 2.7 |
|    | 443932 | AW888222  | Hs.9973   | tensin                                   | 2.7 |
|    | 444930 | BE185536  | Hs.301183 | molecule possessing ankyrin repeats indu | 2.7 |
| 75 | 419269 | AA235838  |           | gb:zs41b04.s1 Soares_NhHMPu_S1 Homo sapi | 2.7 |
|    | 416004 | D11880    | Hs.299254 | Homo sapiens cDNA: FLJ23597 fis, clone L | 2.7 |
|    | 430371 | D87466    | Hs.240112 | KIAA0276 protein                         | 2.7 |
|    | 449117 | AW449310  | Hs.210262 | ESTs, Weakly similar to HSS2_HUMAN HEPAR | 2.7 |
|    | 451007 | H38108    | Hs.32759  | ESTs                                     | 2.7 |
| 80 | 421202 | AF193339  | Hs.102506 | eukaryotic translation initiation factor | 2.7 |
|    | 406308 |           |           | NM_025192:Homo sapiens hypothetical prot | 2.7 |
|    | 413208 | BE071799  |           | gb:RC0-BT0522-071299-011-b10 BT0522 Homo | 2.7 |
|    | 421420 | AI024236  | Hs.123296 | ESTs, Weakly similar to PEC1_HUMAN PLATE | 2.7 |
|    | 445693 | AW800444  | Hs.76507  | LPS-induced TNF-alpha factor             | 2.7 |

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|    |        |           |           |   |     |
|----|--------|-----------|-----------|---|-----|
|    | 452351 | AA025647  |           | gb:ze85d01.r1 Soares_fetal_heart_NbHH19W  | 2.7 |
|    | 410538 | AW753115  |           | gb:PMO-CT0248-131099-001-h12 CT0248 Homo  | 2.7 |
|    | 448072 | AI459306  | Hs.24908  | ESTs                                      | 2.7 |
| 5  | 420912 | AW853156  | Hs.90787  | ESTs                                      | 2.7 |
|    | 453830 | AA534296  | Hs.20953  | ESTs                                      | 2.7 |
|    | 457791 | AW117431  | Hs.191906 | ESTs                                      | 2.7 |
|    | 417735 | AA188175  | Hs.82506  | KIAA1254 protein                          | 2.7 |
|    | 411773 | NM_006799 | Hs.72026  | protease, serine, 21 (testisin)           | 2.7 |
| 10 | 417076 | AW973454  | Hs.238442 | ESTs, Moderately similar to ALU7_HUMAN A  | 2.7 |
|    | 436476 | AA326108  | Hs.33829  | bHLH protein DEC2                         | 2.7 |
|    | 440945 | AW505345  | Hs.7540   | f-box and leucine-rich repeat protein 3A  | 2.7 |
|    | 425826 | U97698    |           | mucin 6, gastric                          | 2.7 |
|    | 422795 | AB033109  | Hs.120866 | KIAA1283 protein                          | 2.7 |
|    | 433921 | AA618174  |           | gb:nq14f01.s1 NCI_CGAP_Thy1 Homo sapiens  | 2.7 |
| 15 | 414272 | AI651603  | Hs.46988  | ESTs                                      | 2.7 |
|    | 418047 | R37633    | Hs.4847   | ESTs                                      | 2.7 |
|    | 421089 | AB037771  | Hs.101799 | KIAA1350 protein                          | 2.7 |
|    | 419763 | AI039691  | Hs.127486 | ESTs                                      | 2.7 |
| 20 | 459265 | AJ003616  |           | gb:AJ003616 Selected chromosome 21 cDNA   | 2.7 |
|    | 410970 | AW812151  |           | gb:RC5-ST0178-081099-011-A06 ST0178 Homo  | 2.7 |
|    | 401925 | N98378    |           | sialyltransferase 1 (beta-galactoside al  | 2.7 |
|    | 418504 | BE159718  | Hs.85335  | Homo sapiens mRNA; cDNA DKFZp564D1462 (f  | 2.6 |
|    | 433789 | AA220977  |           | gb:zr01a08.r1 Stratagene NT2 neuronal pr  | 2.6 |
|    | 418308 | AA215738  | Hs.182514 | ESTs, Weakly similar to A46010 X-linked   | 2.6 |
| 25 | 444618 | AV653785  | Hs.173334 | ELL-RELATED RNA POLYMERASE II, ELONGATIO  | 2.6 |
|    | 406299 |           |           | Target Exon                               | 2.6 |
|    | 422963 | M79141    | Hs.13234  | ESTs                                      | 2.6 |
|    | 441244 | BE612935  | Hs.184052 | PP1201 protein                            | 2.6 |
| 30 | 439954 | AL046748  | Hs.6790   | DnaJ (Hsp40) homolog, subfamily B, membe  | 2.6 |
|    | 405088 |           |           | Target Exon                               | 2.6 |
|    | 404741 |           |           | Target Exon                               | 2.6 |
|    | 451927 | AL355687  | Hs.27261  | Homo sapiens mRNA full length insert cDN  | 2.6 |
|    | 439103 | AF085959  | Hs.38705  | ESTs                                      | 2.6 |
| 35 | 437241 | AL137318  | Hs.306450 | Homo sapiens mRNA; cDNA DKFZp434L171 (fr  | 2.6 |
|    | 442379 | NM_004613 | Hs.8265   | transglutaminase 2 (C polypeptide, prote  | 2.6 |
|    | 457394 | M86528    | Hs.266902 | neurotrophin 5 (neurotrophin 4/5)         | 2.6 |
|    | 427229 | AI799751  | Hs.5635   | ESTs                                      | 2.6 |
|    | 414630 | BE410857  | Hs.15064  | gb:601301177F1 NIH_MGC_21 Homo sapiens c  | 2.6 |
| 40 | 406744 | AA554082  | Hs.279860 | tumor protein, translationally-controlled | 2.6 |
|    | 443984 | AI424415  | Hs.143719 | ESTs                                      | 2.6 |
|    | 421221 | AW276914  | Hs.326714 | Homo sapiens clone IMAGE:713177, mRNA se  | 2.6 |
|    | 421709 | AA159394  | Hs.107056 | CED-6 protein                             | 2.6 |
|    | 426747 | AA535210  | Hs.171995 | kallikrein 3, (prostate specific antigen  | 2.6 |
|    | 439480 | AL038511  | Hs.125316 | ESTs, Weakly similar to S33990 finger pr  | 2.6 |
| 45 | 419567 | AW339890  | Hs.128187 | ESTs                                      | 2.6 |
|    | 421922 | AW295043  | Hs.109590 | genethonin 1                              | 2.6 |
|    | 421859 | AA356620  | Hs.108947 | KIAA0050 gene product                     | 2.6 |
|    | 431441 | U81961    | Hs.2794   | sodium channel, nonvoltage-gated 1 alpha  | 2.6 |
| 50 | 444843 | AA400172  |           | gb:zu69e01.r1 Soares_testis_NHT Homo sap  | 2.6 |
|    | 416729 | U46165    | Hs.1027   | Ras-related associated with diabetes      | 2.6 |
|    | 439238 | N47305    | Hs.302161 | ESTs                                      | 2.6 |
|    | 439183 | AW970600  | Hs.303261 | ESTs                                      | 2.6 |
|    | 408739 | W01556    | Hs.238797 | ESTs, Moderately similar to I38022 hypot  | 2.6 |
| 55 | 412061 | AA833763  | Hs.330211 | ESTs                                      | 2.6 |
|    | 432114 | AL036021  | Hs.8934   | ESTs                                      | 2.6 |
|    | 425337 | AA355442  | Hs.169054 | ESTs                                      | 2.6 |
|    | 424299 | AK000377  | Hs.82294  | homolog of mouse C2PA                     | 2.6 |
|    | 448871 | BE616709  | Hs.159265 | kruppel-related zinc finger protein hckr  | 2.6 |
| 60 | 414516 | AI307802  | Hs.135560 | ESTs, Weakly similar to T43458 hypotheti  | 2.6 |
|    | 456235 | AA203637  |           | gb:zx58b12.r1 Soares_fetal_liver_spleen_  | 2.6 |
|    | 410429 | AA310600  | Hs.63657  | peptide:N-glycanase similar to yeast PNG  | 2.6 |
|    | 449251 | AW151660  | Hs.31444  | ESTs                                      | 2.6 |
|    | 436546 | AW023329  | Hs.132743 | ESTs                                      | 2.6 |
| 65 | 450546 | AA010200  | Hs.175551 | ESTs                                      | 2.6 |
|    | 437255 | R58970    | Hs.9887   | ESTs                                      | 2.6 |
|    | 409041 | AB033025  | Hs.50081  | Hypothetical protein, XP_051860 (KIAA119  | 2.6 |
|    | 427983 | M17706    | Hs.2233   | colony stimulating factor 3 (granulocyte  | 2.5 |
|    | 413341 | H78472    | Hs.191325 | ESTs, Weakly similar to T18967 hypotheti  | 2.5 |
|    | 423763 | R98203    | Hs.132724 | nuclear transcription factor Y, alpha     | 2.5 |
| 70 | 413282 | BE078159  |           | gb:CM0-BT0615-140200-175-e06 BT0615 Homo  | 2.5 |
|    | 415590 | T74068    | Hs.170081 | gb:yc81f07.r1 Soares infant brain 1N1B H  | 2.5 |
|    | 406215 |           |           | Target Exon                               | 2.5 |
|    | 453938 | AF082569  | Hs.36794  | D-type cyclin-interacting protein 1       | 2.5 |
| 75 | 424310 | AA338648  | Hs.50334  | testes development-related NYD-SP22       | 2.5 |
|    | 442097 | AW015799  | Hs.128474 | ESTs                                      | 2.5 |
|    | 456650 | AA620501  | Hs.106773 | ESTs, Weakly similar to T42689 hypotheti  | 2.5 |
|    | 413231 | D87461    | Hs.75244  | BCL2-like 2                               | 2.5 |
|    | 457297 | AW968188  |           | gb:EST380383 MAGE resequences, MAGJ Homo  | 2.5 |
| 80 | 444942 | AW293458  | Hs.283807 | chromosome 11 open reading frame 16       | 2.5 |
|    | 425764 | AW996009  | Hs.112572 | Homo sapiens cDNA FLJ14130 fis, clone MA  | 2.5 |
|    | 435712 | AA694607  | Hs.176956 | ESTs                                      | 2.5 |
|    | 436624 | T64297    |           | fatty acid binding protein 1, liver       | 2.5 |
|    | 443155 | R54485    | Hs.23772  | ESTs                                      | 2.5 |

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|    |             |                                       |   |  |     |
|----|-------------|---------------------------------------|---|--|-----|
| 5  | 425907      | AA365752                              | Hs.155965   | ESTs                                     | 2.5 |
|    | 414759      | AW295157                              | Hs.47587  | ESTs                                     | 2.5 |
|    | 414699      | AI815523                              | Hs.76930  | synuclein, alpha (non A4 component of am | 2.5 |
|    | 411426      | BE141714                              |   | gb:QV0-HT0101-061099-032-c04 HT0101 Homo | 2.5 |
|    | 404492      |                                       |   | C8000067*gi10432400 emb CAC10290.1  (A   | 2.5 |
| 10 | 425153      | AW023193                              | Hs.27046  | ESTs                                     | 2.5 |
|    | 426372      | BE304680                              | Hs.169531   | DEAD/H (Asp-Glu-Ala-Asp/His) box polypep | 2.5 |
|    | 434803      | AW974640                              | Hs.303413   | ESTs                                     | 2.5 |
|    | 425694      | U51333                                | Hs.159237   | hexokinase 3 (white cell)                | 2.5 |
|    | 433069      | X76732                                | Hs.3164   | nucleobindin 2                           | 2.5 |
| 15 | 428054      | AI948688                              | Hs.266619   | ESTs                                     | 2.5 |
|    | 424823      | NM_006226                             | Hs.153322   | phospholipase C, epsilon                 | 2.5 |
|    | 456972      | AI054347                              | Hs.2017   | ribosomal protein L38                    | 2.5 |
|    | 431405      | AI470895                              | Hs.334895   | ribosomal protein L10a                   | 2.5 |
|    | 427982      | NM_016156                             | Hs.181326   | KIAA1073 protein                         | 2.5 |
| 20 | 412831      | AA121352                              | Hs.143314   | ESTs                                     | 2.5 |
|    | 437114      | AA836641                              | Hs.163085   | ESTs                                     | 2.5 |
|    | 426157      | AA370977                              | Hs.345728   | STAT induced STAT inhibitor 3            | 2.5 |
|    | 448786      | BE048842                              | Hs.179075   | Homo sapiens cDNA FLJ11881 fis, clone HE | 2.5 |
|    | 432251      | AW972983                              | Hs.232165   | polycythemia rubra vera 1; cell surface  | 2.5 |
| 25 | 449239      | T24653                                | Hs.23360  | likely ortholog of yeast ARV1            | 2.5 |
|    | 453572      | AA382590                              | Hs.46366  | KJAA0948 protein                         | 2.5 |
|    | TABLE 23B:  |                                       |   |  |     |
| 30 | Pkey:       | Unique Eos probeset identifier number |   |  |     |
|    | CAT number: | Gene cluster number                   |   |  |     |
|    | Accession:  | Genbank accession numbers             |   |  |     |
| 35 | Pkey        | CAT Number                            | Accession   |  |     |
|    | 408182      | 104479_1                              | AA047854 AA057506 AA053841  |  |     |
|    | 409856      | 1156268_1                             | AW502082 AW502979 AW502807 AW501876   |  |     |
|    | 410509      | 1206599_1                             | AW840743 AW752404 H43469  |  |     |
|    | 410538      | 1207341_1                             | AW753115 AW753113 R45779  |  |     |
| 40 | 410786      | 1221063_1                             | AW803340 AW803280 AW803275 AW803415 AW803343 AW803422   |  |     |
|    | 410970      | 1228131_1                             | AW812151 AW812186 AW812166  |  |     |
|    | 411426      | 1245515_1                             | BE141714 AW845993 AW845989  |  |     |
|    | 411906      | 1265204_1                             | AW875765 H50294 AW875444  |  |     |
|    | 412636      | 13165_1                               | NM_004415 AL031058 M77830 BE149760 AW752599 AW848723 AW376697 AW376817 AW376699 AW848371 AW376782 AW848789 AW361413           |  |     |
| 45 |             |                                       | AW849074 AW997139 AW799304 AW799309 BE077020 BE077017 BE185187 AW997196 BE156621 BE179915 BE006561 BE143155 AW890985          |  |     |
|    |             |                                       | BE002107 AW103521 AA857316 AW383133 BE011378 AW170253 BE185750 AW886475 BE160433 J05211 BE082576 BE082584 BE004047            |  |     |
|    |             |                                       | AW607238 AW377700 AW377699 BE082526 BE082505 BE082507 BE082514 AW178000 AW177933 AI905935 AW747877 AW748114 BE148516          |  |     |
|    |             |                                       | AW265328 AW847678 AW847688 AW365151 AW365148 AW365153 AW365156 AW365175 AW365157 AW365154 AW068840 BE005272 AW365145          |  |     |
|    |             |                                       | BE001925 BE182166 BE144243 BE001923 AI951766 AI434518 BE184920 BE184933 AI284090 BE184941 AW804674 BE184924 C04715 W39488     |  |     |
| 50 |             |                                       | AW995615 BE184948 BE159646 AW606653 AA099891 AA131128 AA337270 AA340777 AW384371 AA852212 R58704 AW366566 AW364859            |  |     |
|    |             |                                       | AA025851 AA025852 AA455100 AA719958 AW352220 AW996245 BE165351 BE073467 AA377127 AW990264 AW609750 AW391912 AW849690          |  |     |
|    |             |                                       | T87267 AW853812 AA852213 W74149 BE009090 AA056401 H91011 AW368529 AW390272 C18467 AW674920 N57176 AA026480 AW576767           |  |     |
|    |             |                                       | H93284 AA026863 AW177787 AA026654 AW177786 BE092134 BE092137 BE092136 AW177784 AI022862 BE091653 AW376811 AW848592            |  |     |
|    |             |                                       | AA040018 BE185331 BE182164 AA368564 AW951576 T29918 AA131077 W95048 W25458 AW205789 H90899 N29754 W32490 R20904 BE167181      |  |     |
| 55 |             |                                       | BE167165 N84767 H27408 H30146 AI190590 C03378 AI554403 AI205263 AA128470 AI392926 AF139065 AW370813 AW370827 AW798417         |  |     |
|    |             |                                       | AW798780 AW798883 AW798569 R33557 AA149190 C03029 AW177783 AA088866 AW370829 AA247685 BE002273 AI760816 AI439101 AW879451     |  |     |
|    |             |                                       | AI700963 AA451923 AI340326 AI590975 T48793 AI568096 AI142882 AA039975 AI470146 AA946936 BE067737 BE067786 W19287 AA644381     |  |     |
|    |             |                                       | AA702424 AI417612 AI306554 AI686869 AI568892 AW190555 AI571075 AI220573 AA056527 AI471874 AI304772 AW517828 AI915596 AI627383 |  |     |
|    |             |                                       | AI270345 AW021347 AW166807 AW105614 AI346078 AA552300 W95070 AI494069 AI911702 AA149191 AA026864 AI830049 AI887258 AW780435   |  |     |
| 60 |             |                                       | AI910434 AI819984 AI858282 AI078449 AI025932 AI850584 AI635878 AA026047 AA703232 D12062 AW192085 AA658154 AW514597 AW591892   |  |     |
|    |             |                                       | T87181 AA782066 AW243815 AW150038 AW268383 AW004633 AI927207 AA782109 AW473233 AI804485 AW169216 AI572669 AA602182            |  |     |
|    |             |                                       | AW015480 AW771865 AI270027 AA961816 AA283207 AI076962 AI498487 AI348053 AI783914 H44405 AW799118 AA128330 AA515500 AA918281   |  |     |
|    |             |                                       | W02156 AI905927 AA022701 W38382 R20795 T77861 AW860878  |  |     |
|    |             |                                       | BE071799 BE071804 BE071798  |  |     |
| 65 | 413208      | 1353610_1                             | BE300352 BE299274 BE075351 BE297444   |  |     |
|    | 413266      | 1356260_1                             | BE078159 BE078276 BE078163 BE078277 BE078279 BE078158   |  |     |
|    | 413282      | 1358147_1                             | BE144444 BE144430   |  |     |
|    | 413493      | 1373555_1                             | W70022 R35201 F12763 T74725 H63485 Z45782 H61126  |  |     |
|    | 415606      | 1540470_1                             | H72693 R08673 H72694 F20990 R08580  |  |     |
| 70 | 415666      | 1543492_1                             | AA176633 AW961842 AA309418  |  |     |
|    | 416233      | 158010_1                              | AA235838 BE180775   |  |     |
|    | 419269      | 183444_1                              | AA236867 AA237066 AA354236 AW957759 H08961  |  |     |
|    | 419386      | 184356_1                              | U97698 AW815264 AI791966 AI732669 AA588236 AI521662 AI804760 AI955717 AW292169 AI468227 AI420483 AA603459 AI868225 AI919551   |  |     |
|    | 425826      | 25682_1                               | AA502346 BE159863   |  |     |
| 75 | 431300      | 331217_1                              | AA220977 AF091029 AA701227  |  |     |
|    | 433789      | 37421_1                               | AA818174 AI114549 R36464 R36465   |  |     |
|    | 433921      | 377350_1                              | T64297 AA894931 NM_001443 M10050 AW843109 AI698516 T53219 T48785 T64166 AA706930 R29613 T55913 T56518 T64679 R29666 M10617    |  |     |
|    | 436624      | 4237_5                                | AI768596 AA101894 W90338 AI742193 AW752206 AA099433 T53220 AW082135 AW272775 T29562 T55862 AI343047 AI345671 T68235 T68121    |  |     |
|    |             |                                       | AW842284  |  |     |
| 80 | 444843      | 62260_1                               | AA400172 AA400146 AV651691  |  |     |
|    | 445797      | 650943_1                              | AI253414 AI366014 R34822  |  |     |
|    | 447135      | 70963_1                               | T58148 AW516579 AW059603  |  |     |
|    | 449901      | 818599_1                              | AI674072 BE268487   |  |     |
|    | 450928      | 851593_1                              | AI744417 R91614 H77365  |  |     |
|    | 452351      | 91233_1                               | AA025647 R45716 AW753786  |  |     |
|    | 455040      | 1250028_1                             | AW852286 AW851934 AW852096 AW852274   |  |     |
|    | 456235      | 168686_1                              | AA203637 AA832266 H67452  |  |     |
|    | 457297      | 313764_1                              | AW968188 AA468196 AA468269 AA468298   |  |     |
|    | 459265      | 966590_1                              | AJ003616 AJ003654 AJ003617  |  |     |

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TABLE 23C:

Pkey: Unique number corresponding to an Eos probeset  
 Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) Nature 402:489-495.  
 Strand: Indicates DNA strand from which exons were predicted.  
 NL\_position: Indicates nucleotide positions of predicted exons.

| Pkey   | Ref     | Strand | NL_position   |
|--------|---------|--------|---|
| 400965 | 7770576 | Minus  | 173043-173564   |
| 401507 | 7534110 | Plus   | 71055-71259   |
| 401600 | 4388746 | Minus  | 27363-27518,28727-28891,29526-29731   |
| 401783 | 7249190 | Plus   | 139369-139827,140509-140591,140834-140990,141496-141657,141757-141882,142063-142283 |
| 401925 | 3892083 | Minus  | 138252-138469,140239-140364,140437-140598,141037-141193,141925-142007,142787-143230 |
| 402198 | 8576116 | Plus   | 79041-79191   |
| 402364 | 9454515 | Minus  | 54983-55240,56507-56785,56982-57365   |
| 402429 | 9796372 | Minus  | 57622-57793,59282-59402,59624-59827   |
| 403442 | 7210003 | Plus   | 174560-175270   |
| 403469 | 9929739 | Minus  | 4831-7707   |
| 403488 | 9966615 | Minus  | 12450-12753   |
| 403512 | 7656757 | Minus  | 114487-114610   |
| 403890 | 7710561 | Plus   | 83165-83350   |
| 404036 | 8567760 | Minus  | 65247-67529,112537-114863   |
| 404091 | 7684554 | Minus  | 82121-83229   |
| 404333 | 9802821 | Minus  | 137948-138024,138111-138300   |
| 404492 | 8123400 | Minus  | 138612-138803   |
| 404559 | 8748893 | Minus  | 73499-73651,89575-89739   |
| 404606 | 9212936 | Minus  | 22310-23269   |
| 404661 | 9797073 | Plus   | 33374-33675,33769-34008   |
| 404741 | 8574139 | Plus   | 143025-143467   |
| 404845 | 7958980 | Minus  | 47174-47326,52928-53146,53312-53602   |
| 405088 | 8072518 | Minus  | 115690-117621   |
| 405354 | 2642452 | Plus   | 52213-53089   |
| 405403 | 6850244 | Minus  | 37491-37670,40951-41031   |
| 405474 | 8439781 | Plus   | 172005-172175   |
| 405586 | 5002511 | Plus   | 38810-39017   |
| 405670 | 4662655 | Plus   | 96543-96870   |
| 405674 | 4589984 | Plus   | 68302-68429   |
| 406085 | 9123888 | Plus   | 18665-18843   |
| 406215 | 7342161 | Plus   | 310-432   |
| 406270 | 7534217 | Plus   | 13136-13591   |
| 406299 | 5686278 | Minus  | 35655-36119   |
| 406308 | 9211532 | Plus   | 358408-358651   |

TABLE 24A: ABOUT 1260 GENES UP-REGULATED IN GLIOBLASTOMA COMPARED TO NORMAL ADULT TISSUES

Table 24A lists about 1260 genes up-regulated in glioblastoma compared to normal adult tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" glioblastoma to "average" normal adult tissues was greater than or equal to 2.5. The "average" glioblastoma level was set to the 75<sup>th</sup> percentile amongst various glioblastoma tumors. The "average" normal adult tissue level was set to the 85<sup>th</sup> percentile amongst various non-malignant tissues. In order to remove gene-specific background levels of non-specific hybridization, the 10<sup>th</sup> percentile value amongst the various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 R1: Ratio of 75<sup>th</sup> percentile tumor to 85<sup>th</sup> percentile normal body tissue

| Pkey   | ExAccn    | UnigenelD | Unigene Title                            | R1   |
|--------|-----------|-----------|--|------|
| 431917 | D16181    | Hs.2368   | peripheral myelin protein 2              | 75.2 |
| 427343 | A1880044  | Hs.176977 | protein kinase C binding protein 2       | 74.6 |
| 455601 | A1368680  | Hs.816    | SRY (sex determining region Y)-box 2     | 74.2 |
| 428321 | A1699994  | Hs.2868   | peripheral myelin protein 2              | 71.6 |
| 412719 | AW016610  | Hs.129911 | ESTs                                     | 70.7 |
| 449494 | AW237014  | Hs.315369 | Homo sapiens cDNA: FLJ23075 fis, clone L | 66.3 |
| 415817 | U88967    | Hs.78867  | protein tyrosine phosphatase, receptor-t | 64.3 |
| 413472 | BE242870  | Hs.75379  | solute carrier family 1 (glial high affi | 60.1 |
| 456759 | BE259150  | Hs.127792 | delta (Drosophila)-like 3                | 52.3 |
| 435147 | AL133731  | Hs.4774   | Homo sapiens mRNA; cDNA DKFZp761C1712 (f | 46.7 |
| 425842 | A1587490  | Hs.159623 | NK-2 (Drosophila) homolog B              | 40.1 |
| 412733 | AA984472  | Hs.74554  | KIAA0080 protein                         | 39.0 |
| 418375 | NM_003081 | Hs.84389  | synaptosomal-associated protein, 25kD    | 38.7 |
| 453392 | U23752    | Hs.32964  | SRY (sex determining region Y)-box 11    | 37.2 |
| 423849 | AL157425  | Hs.133315 | Homo sapiens mRNA; cDNA DKFZp761J1324 (f | 36.8 |
| 413333 | M74028    | Hs.75297  | fibroblast growth factor 1 (acidic)      | 32.8 |
| 416829 | AB013805  | Hs.80220  | catenin (cadherin-associated protein), d | 31.8 |
| 431941 | AK000106  | Hs.272227 | Homo sapiens cDNA FLJ20099 fis, clone CO | 31.8 |
| 436878 | BE465204  | Hs.47448  | ESTs                                     | 31.4 |
| 426325 | D28114    | Hs.169309 | myelin-associated oligodendrocyte basic  | 30.9 |
| 425057 | AA826434  | Hs.1619   | achaete-scute complex (Drosophila) homol | 30.4 |
| 446711 | AF169692  | Hs.12450  | protocadherin 9                          | 30.2 |
| 439415 | F05538    | Hs.12825  | ESTs                                     | 28.3 |
| 430838 | N46664    | Hs.169395 | hypothetical protein FLJ12015            | 26.9 |
| 429466 | M85835    | Hs.12827  | ESTs                                     | 25.9 |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 447004 | AW296968  | Hs.157539 | ESTs                                     | 25.3 |
|    | 424581 | M62062    | Hs.150917 | catenin (cadherin-associated protein), a | 24.8 |
|    | 452744 | AI267652  | Hs.30504  | Homo sapiens mRNA; cDNA DKFZp434E082 (fr | 24.8 |
| 5  | 441285 | NM_002374 | Hs.167    | microtubule-associated protein 2         | 24.3 |
|    | 453642 | AI370936  | Hs.34074  | dipeptidylpeptidase VI                   | 24.3 |
|    | 424140 | Z48051    | Hs.141308 | myelin oligodendrocyte glycoprotein      | 24.2 |
|    | 450133 | AW969769  | Hs.105201 | ESTs                                     | 24.2 |
|    | 408562 | AI436323  | Hs.31141  | Homo sapiens mRNA for KIAA1568 protein,  | 23.3 |
| 10 | 448672 | AI955511  | Hs.225106 | ESTs                                     | 22.7 |
|    | 435708 | AI362949  | Hs.75169  | ESTs                                     | 22.0 |
|    | 407034 | U84540    |           | gb:Human dystrobrevin isoform DTN-3 (DTN | 21.9 |
|    | 407168 | R45175    | Hs.117183 | ESTs                                     | 21.7 |
|    | 431019 | NM_005249 | Hs.2714   | forkhead box G1B                         | 21.5 |
| 15 | 409049 | AI423132  | Hs.146343 | ESTs                                     | 21.4 |
|    | 433896 | AW294729  | Hs.274461 | ESTs                                     | 21.1 |
|    | 445041 | T64183    | Hs.282982 | solute carrier                           | 21.0 |
|    | 418738 | AW388633  | Hs.6682   | solute carrier family 7, (cationic amino | 20.4 |
|    | 444378 | R41339    | Hs.12569  | ESTs                                     | 20.0 |
| 20 | 411305 | BE241596  | Hs.69547  | myelin basic protein                     | 19.9 |
|    | 437414 | AW894071  | Hs.48448  | hypothetical protein DKFZp547C176        | 19.8 |
|    | 441016 | AW138653  | Hs.25845  | ESTs                                     | 19.6 |
|    | 440435 | AL042201  | Hs.21273  | transcription factor NYD-sp10            | 18.5 |
|    | 438209 | AL120659  | Hs.6111   | aryl-hydrocarbon receptor nuclear trans  | 18.4 |
| 25 | 452461 | N78223    | Hs.108106 | transcription factor                     | 18.1 |
|    | 409395 | U46745    | Hs.54435  | dystrobrevin, alpha                      | 18.1 |
|    | 417183 | R52089    | Hs.172717 | ESTs                                     | 18.0 |
|    | 409638 | AW450420  | Hs.21335  | ESTs                                     | 18.0 |
|    | 428392 | H10233    | Hs.2265   | secretory granule, neuroendocrine protei | 18.0 |
| 30 | 449611 | AI970394  | Hs.197075 | ESTs                                     | 17.0 |
|    | 446692 | Z44514    | Hs.156829 | Homo sapiens mRNA for KIAA1763 protein,  | 16.9 |
|    | 425088 | AA663372  | Hs.169395 | hypothetical protein FLJ12015            | 16.9 |
|    | 444471 | AB020684  | Hs.11217  | KIAA0877 protein                         | 16.8 |
|    | 421659 | NM_014459 | Hs.106511 | protocadherin 17                         | 16.7 |
| 35 | 431725 | X65724    | Hs.2839   | Norrie disease (pseudoglioma)            | 16.6 |
|    | 429276 | AF056085  | Hs.198612 | G protein-coupled receptor 51            | 16.6 |
|    | 416892 | L24498    | Hs.80409  | growth arrest and DNA-damage-inducible,  | 16.5 |
|    | 441440 | AI807981  | Hs.30495  | ESTs                                     | 15.7 |
|    | 449433 | AI672096  | Hs.9012   | ESTs, Weakly similar to S26650 DNA-bindi | 15.7 |
| 40 | 421264 | AL039123  | Hs.103042 | microtubule-associated protein 1B        | 15.5 |
|    | 415910 | U20350    | Hs.78913  | chemokine (C-X3-C) receptor 1            | 15.3 |
|    | 413597 | AW302885  | Hs.117183 | ESTs                                     | 15.1 |
|    | 424945 | AI221919  | Hs.173438 | hypothetical protein FLJ10582            | 14.9 |
|    | 447414 | D82343    | Hs.18551  | neuroblastoma (nerve tissue) protein     | 14.9 |
| 45 | 426269 | H15302    | Hs.168950 | Homo sapiens mRNA; cDNA DKFZp566A1046 (f | 14.8 |
|    | 416857 | AA188775  | Hs.292453 | ESTs                                     | 14.7 |
|    | 419721 | NM_001650 | Hs.288650 | aquaporin 4                              | 14.6 |
|    | 411078 | AI222020  | Hs.182364 | CocoaCrisp                               | 14.4 |
|    | 453924 | R49295    | Hs.24886  | ESTs                                     | 14.4 |
| 50 | 409389 | AB007979  | Hs.301281 | Homo sapiens mRNA, chromosome 1 specific | 14.3 |
|    | 430130 | AL137311  | Hs.234074 | Homo sapiens mRNA; cDNA DKFZp761G02121 ( | 14.1 |
|    | 410909 | AW898161  | Hs.53112  | ESTs, Moderately similar to ALU8_HUMAN A | 14.0 |
|    | 412266 | N59006    | Hs.26133  | ESTs                                     | 14.0 |
|    | 412986 | X81120    | Hs.75110  | cannabinoid receptor 1 (brain)           | 14.0 |
| 55 | 424790 | AL119344  | Hs.13326  | ESTs, Weakly similar to 2004399A chromos | 14.0 |
|    | 439239 | AI031540  | Hs.235331 | ESTs                                     | 14.0 |
|    | 441497 | R51064    | Hs.23172  | ESTs                                     | 14.0 |
|    | 445495 | BE622641  | Hs.38489  | ESTs, Weakly similar to I38022 hypotheti | 14.0 |
|    | 414245 | BE148072  | Hs.75850  | WAS protein family, member 1             | 13.7 |
| 60 | 429900 | AA460421  | Hs.30875  | ESTs                                     | 13.6 |
|    | 448595 | AB014544  | Hs.21572  | KIAA0644 gene product                    | 13.6 |
|    | 449605 | AW138581  | Hs.198416 | ESTs                                     | 13.6 |
|    | 452526 | W38537    | Hs.280740 | hypothetical protein MGC3040             | 13.6 |
|    | 420547 | AF155140  | Hs.98738  | gonadotropin-regulated testicular RNA he | 13.3 |
| 65 | 441350 | AB020690  | Hs.7782   | paraneoplastic antigen MA2               | 13.3 |
|    | 420077 | AW512260  | Hs.87767  | ESTs                                     | 13.2 |
|    | 424120 | T80579    | Hs.290270 | ESTs                                     | 13.2 |
|    | 456965 | AW131888  | Hs.172792 | ESTs, Weakly similar to hypothetical pro | 13.2 |
|    | 423361 | AW170055  | Hs.47628  | ESTs                                     | 13.1 |
| 70 | 428409 | AW117207  | Hs.98523  | ESTs                                     | 12.9 |
|    | 417160 | N76497    | Hs.1787   | proteolipid protein 1 (Pelizaeus-Merzbac | 12.6 |
|    | 451621 | AI879148  | Hs.26770  | fatty acid binding protein 7, brain      | 12.5 |
|    | 411379 | AI816344  | Hs.12554  | ESTs, Weakly similar to NPL4_HUMAN NUCLE | 12.5 |
|    | 436954 | AA740151  | Hs.130425 | ESTs                                     | 12.4 |
|    | 430691 | C14187    | Hs.103538 | ESTs                                     | 12.4 |
| 75 | 433551 | AI985544  | Hs.12450  | protocadherin 9                          | 12.4 |
|    | 422544 | AB018259  | Hs.118140 | KIAA0716 gene product                    | 12.2 |
|    | 427540 | R12014    | Hs.20976  | ESTs                                     | 12.1 |
|    | 435624 | AF218942  | Hs.24889  | formin 2                                 | 12.1 |
| 80 | 415849 | R20529    | Hs.6806   | ESTs                                     | 12.1 |
|    | 428845 | AL157579  | Hs.153610 | KIAA0751 gene product                    | 11.9 |
|    | 442671 | AI005668  | Hs.134779 | EST                                      | 11.9 |
|    | 444396 | T65213    | Hs.4257   | ESTs                                     | 11.8 |
|    | 452752 | AW044058  | Hs.33578  | KIAA0820 protein                         | 11.8 |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 425523 | AB007948  | Hs.158244 | KIAA0479 protein                         | 11.8 |
|    | 416072 | AL110370  | Hs.79000  | growth associated protein 43             | 11.7 |
|    | 440184 | AB002297  | Hs.7022   | dedicator of cyto-kinesis 3              | 11.7 |
| 5  | 428976 | AL037824  | Hs.194695 | ras homolog gene family, member 1        | 11.6 |
|    | 444783 | AK001468  | Hs.62180  | anillin (Drosophila Scraps homolog), act | 11.6 |
|    | 448299 | AA497044  | Hs.20887  | hypothetical protein FLJ10392            | 11.6 |
|    | 414214 | D49958    | Hs.75819  | glycoprotein M6A                         | 11.5 |
|    | 428982 | NM_005097 | Hs.194704 | leucine-rich, glioma inactivated 1       | 11.5 |
|    | 405238 |           |           |  | 11.4 |
| 10 | 420362 | U79734    | Hs.97206  | huntingtin interacting protein 1         | 11.4 |
|    | 422980 | N46569    | Hs.76722  | CCAAT/enhancer binding protein (C/EBP),  | 11.4 |
|    | 424918 | R13982    | Hs.169309 | myelin-associated oligodendrocyte basic  | 11.4 |
|    | 434277 | X77748    | Hs.3786   | glutamate receptor, metabotropic 3       | 11.4 |
|    | 451952 | AL120173  | Hs.301653 | ESTs                                     | 11.3 |
| 15 | 408829 | NM_006042 | Hs.48384  | heparan sulfate (glucosamine) 3-O-sulfot | 11.3 |
|    | 424278 | AK000723  | Hs.144517 | hypothetical protein FLJ20716            | 11.3 |
|    | 429418 | AI381028  | Hs.118769 | ESTs                                     | 11.3 |
|    | 429918 | AW873986  | Hs.119383 | ESTs                                     | 11.3 |
|    | 443912 | R37257    | Hs.184780 | ESTs                                     | 11.3 |
| 20 | 448743 | AB032962  | Hs.21896  | KIAA1136 protein                         | 11.3 |
|    | 420092 | AA814043  | Hs.88045  | ESTs                                     | 11.2 |
|    | 408081 | AW451597  | Hs.167409 | ESTs                                     | 11.2 |
|    | 411642 | NM_014932 | Hs.71132  | neuroligin 1                             | 10.9 |
|    | 415170 | R44386    | Hs.164578 | ESTs                                     | 10.9 |
| 25 | 426320 | W47595    | Hs.169300 | transforming growth factor, beta 2       | 10.8 |
|    | 450568 | AL050078  | Hs.25159  | Homo sapiens cDNA FLJ10784 fis, clone NT | 10.8 |
|    | 425799 | T08133    | Hs.182906 | Homo sapiens mRNA for KIAA1872 protein,  | 10.8 |
|    | 423853 | AB011537  | Hs.133466 | slit (Drosophila) homolog 1              | 10.7 |
|    | 400293 | N51002    | Hs.306480 | Homo sapiens mRNA: cDNA DKFZp761E2112 (f | 10.7 |
| 30 | 447773 | AI423930  | Hs.36790  | ESTs, Weakly similar to putative p150 [H | 10.7 |
|    | 448321 | NM_005883 | Hs.20912  | adenomatous polyposis coli like          | 10.5 |
|    | 448533 | AL119710  | Hs.21365  | nucleosome assembly protein 1-like 3     | 10.5 |
|    | 440684 | AI253123  | Hs.127355 | ESTs, Highly similar to S21424 nestin [H | 10.3 |
| 35 | 444017 | U04840    | Hs.214    | neuro-oncological ventral antigen 1      | 10.3 |
|    | 438380 | T06430    | Hs.6194   | chondroitin sulfate proteoglycan BEHAB/b | 10.3 |
|    | 440471 | AA886146  | Hs.307944 | ESTs                                     | 10.2 |
|    | 413063 | AL035737  | Hs.75184  | chitinase 3-like 1 (cartilage glycoprote | 10.1 |
|    | 439978 | BE139460  | Hs.124673 | Homo sapiens cDNA FLJ11477 fis, clone HE | 10.1 |
| 40 | 448902 | Z45998    | Hs.22543  | Homo sapiens mRNA: cDNA DKFZp761I1912 (f | 10.1 |
|    | 424932 | R14070    | Hs.315369 | Homo sapiens cDNA: FLJ23075 fis, clone L | 9.9  |
|    | 431721 | AB032996  | Hs.268044 | KIAA1170 protein                         | 9.9  |
|    | 419088 | AI538323  | Hs.52620  | integrin, beta 8                         | 9.8  |
|    | 420602 | AF060877  | Hs.99236  | regulator of G-protein signalling 20     | 9.8  |
|    | 436511 | AA721252  | Hs.291502 | ESTs                                     | 9.8  |
| 45 | 414696 | AF002020  | Hs.76918  | Niemann-Pick disease, type C1            | 9.7  |
|    | 449539 | W80363    | Hs.58446  | ESTs                                     | 9.7  |
|    | 412959 | D87458    | Hs.75090  | KIAA0282 protein                         | 9.6  |
|    | 412811 | H06382    | Hs.21400  | ESTs                                     | 9.6  |
|    | 449300 | AI656959  | Hs.222165 | ESTs                                     | 9.6  |
| 50 | 426344 | H41821    | Hs.322469 | transcriptional activator of the c-fos p | 9.5  |
|    | 419271 | N34901    | Hs.238532 | ESTs                                     | 9.5  |
|    | 419078 | M93119    | Hs.89584  | insulinoma-associated 1                  | 9.4  |
|    | 451516 | AI800515  | Hs.12024  | ESTs                                     | 9.4  |
| 55 | 422656 | AI870435  | Hs.1569   | LIM homeobox protein 2                   | 9.3  |
|    | 449318 | AW236021  | Hs.78531  | Homo sapiens, Similar to RIKEN cDNA 5730 | 9.3  |
|    | 414175 | AI308876  | Hs.103849 | hypothetical protein DKFZp761D112        | 9.3  |
|    | 415279 | F04237    | Hs.1447   | glial fibrillary acidic protein          | 9.2  |
|    | 428784 | Y12851    | Hs.193470 | purinergic receptor P2X, ligand-gated io | 9.2  |
| 60 | 429903 | AL134197  | Hs.93597  | cyclin-dependent kinase 5, regulatory su | 9.2  |
|    | 424641 | AB001106  | Hs.151413 | glia maturation factor, beta             | 9.1  |
|    | 417435 | NM_005181 | Hs.82129  | carbonic anhydrase III, muscle specific  | 9.1  |
|    | 449448 | D60730    | Hs.57471  | ESTs                                     | 9.1  |
|    | 408508 | AI806109  | Hs.135736 | KIAA1580 protein                         | 9.0  |
| 65 | 452785 | AL359942  | Hs.296434 | erythroid differentiation and denucleati | 9.0  |
|    | 448986 | H42169    | Hs.18653  | hypothetical protein FLJ14627            | 8.9  |
|    | 447072 | D61594    | Hs.17279  | tyrosylprotein sulfotransferase 1        | 8.9  |
|    | 433800 | AI034361  | Hs.135150 | lung type-I cell membrane-associated gly | 8.9  |
|    | 408926 | AF217525  | Hs.49002  | Down syndrome cell adhesion molecule     | 8.8  |
| 70 | 449625 | NM_014253 | Hs.23796  | odx (odd Oz/ten-m, Drosophila) homolog 1 | 8.8  |
|    | 400292 | AA250737  | Hs.72472  | ESTs                                     | 8.8  |
|    | 417404 | NM_007350 | Hs.82101  | pleckstrin homology-like domain, family  | 8.7  |
|    | 420345 | AW295230  | Hs.25231  | ESTs                                     | 8.7  |
|    | 429927 | NM_001115 | Hs.2522   | adenylate cyclase 8 (brain)              | 8.7  |
| 75 | 437528 | N59646    | Hs.169745 | crumbs (Drosophila) homolog 1            | 8.7  |
|    | 440152 | AB002376  | Hs.7006   | KIAA0378 protein                         | 8.7  |
|    | 451099 | R52795    | Hs.25954  | interleukin 13 receptor, alpha 2         | 8.6  |
|    | 400780 |           |           |  | 8.6  |
|    | 434891 | AA814309  | Hs.123583 | ESTs                                     | 8.6  |
| 80 | 449277 | AA001064  | Hs.172976 | ESTs                                     | 8.6  |
|    | 415709 | AA649850  | Hs.278558 | ESTs                                     | 8.5  |
|    | 439947 | AB006627  | Hs.6788   | astrotactin                              | 8.5  |
|    | 447197 | R36075    |           | gb:yh88b01.s1 Scores placenta Nb2HP Homo | 8.5  |
|    | 433042 | AW193534  | Hs.281895 | Homo sapiens cDNA FLJ11660 fis, clone HE | 8.4  |

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|    | 16370  | N90470    | Hs.203697 | ESTs, Weakly similar to I38022 hypotheti | 8.4 |
|    | 452786 | R61362    | Hs.106642 | ESTs, Weakly similar to T09052 hypotheti | 8.4 |
|    | 415796 | R87548    | Hs.78854  | ATPase, Na+/K+ transporting, beta 2 poly | 8.3 |
|    | 426271 | AF026547  | Hs.169047 | chondroitin sulfate proteoglycan 3 (neur | 8.3 |
| 5  | 408947 | AI080093  | Hs.49117  | Homo sapiens mRNA; cDNA DKFZp564N1662 (f | 8.3 |
|    | 419863 | AW952691  | Hs.93485  | Homo sapiens mRNA; cDNA DKFZp761D191 (fr | 8.3 |
|    | 433447 | U29195    | Hs.3281   | neuronal pentraxin II                    | 8.3 |
|    | 431467 | N71831    | Hs.256398 | Homo sapiens mRNA; cDNA DKFZp434E0528 (f | 8.3 |
|    | 409327 | L41162    | Hs.53563  | collagen, type IX, alpha 3               | 8.3 |
| 10 | 414300 | AI304870  | Hs.188680 | ESTs                                     | 8.2 |
|    | 407728 | AW071502  | Hs.175931 | ESTs                                     | 8.2 |
|    | 422798 | R92347    | Hs.34574  | ESTs, Weakly similar to ALU1_HUMAN ALU S | 8.2 |
|    | 419704 | AA429104  | Hs.45057  | ESTs                                     | 8.2 |
|    | 429007 | D80642    |           | gb:HUM092E09B Human fetal brain (TFujiwa | 8.1 |
| 15 | 442710 | AI015631  | Hs.23210  | ESTs                                     | 8.1 |
|    | 425048 | H05468    | Hs.164502 | ESTs                                     | 8.1 |
|    | 429149 | AW193360  | Hs.197962 | ESTs, Weakly similar to I38022 hypotheti | 8.0 |
|    | 445740 | T78281    | Hs.13226  | Homo sapiens clone 25181 mRNA sequence   | 8.0 |
|    | 418771 | AA807881  | Hs.25329  | ESTs                                     | 7.9 |
| 20 | 422728 | AW937826  | Hs.103262 | ESTs, Weakly similar to ZN91_HUMAN ZINC  | 7.9 |
|    | 425984 | AW836277  | Hs.165636 | hypothetical protein DKFZp761C07121      | 7.9 |
|    | 448408 | AA322866  | Hs.21107  | neurotigin                               | 7.9 |
|    | 455364 | H72176    | Hs.4273   | hypothetical protein FLJ13159            | 7.9 |
|    | 446619 | AU076643  | Hs.313    | secreted phosphoprotein 1 (osteopontin,  | 7.9 |
| 25 | 435501 | AW051819  | Hs.129908 | KIAA0591 protein                         | 7.8 |
|    | 423600 | AI633559  | Hs.310359 | ESTs                                     | 7.8 |
|    | 450625 | AW970107  |           | gb:EST382188 MAGE resequences, MAGK Homo | 7.8 |
|    | 415314 | N88802    | Hs.5422   | glycoprotein M6B                         | 7.7 |
|    | 420036 | R60336    | Hs.52792  | Homo sapiens mRNA; cDNA DKFZp58611823 (f | 7.7 |
| 30 | 427687 | AW003867  | Hs.1570   | histamine receptor H1                    | 7.7 |
|    | 449328 | AI962493  | Hs.197647 | ESTs                                     | 7.7 |
|    | 419249 | X14767    | Hs.89768  | gamma-aminobutyric acid (GABA) A recepto | 7.7 |
|    | 407896 | D76435    | Hs.41154  | Zic family member 1 (odd-paired Drosophi | 7.7 |
|    | 419103 | Z40229    | Hs.96423  | hypothetical protein FLJ23033            | 7.6 |
| 35 | 438779 | NM_003787 | Hs.6414   | nucleolar protein 4                      | 7.6 |
|    | 433532 | AW975367  |           | gb:EST387475 MAGE resequences, MAGN Homo | 7.6 |
|    | 448555 | AI536697  | Hs.159863 | ESTs                                     | 7.5 |
|    | 439662 | H97552    | Hs.269060 | ESTs                                     | 7.5 |
| 40 | 448543 | AW897741  | Hs.21380  | Homo sapiens mRNA; cDNA DKFZp586P1124 (f | 7.5 |
|    | 410099 | AA081630  | Hs.169387 | KIAA0036 gene product                    | 7.5 |
|    | 431592 | R69016    | Hs.213194 | hypothetical protein MGC10895            | 7.4 |
|    | 409731 | AA125985  | Hs.56145  | thymosin, beta, identified in neuroblast | 7.4 |
|    | 405819 |           |           |  | 7.4 |
|    | 407886 | AW969688  | Hs.100826 | ESTs                                     | 7.4 |
| 45 | 437416 | AL359605  | Hs.283851 | Homo sapiens mRNA; cDNA DKFZp547G036 (fr | 7.4 |
|    | 437698 | R61837    | Hs.7990   | ESTs, Moderately similar to I84505 calci | 7.4 |
|    | 408604 | D51408    | Hs.21925  | ESTs                                     | 7.4 |
|    | 418506 | AA084248  | Hs.85339  | G protein-coupled receptor 39            | 7.3 |
|    | 447499 | AW262580  | Hs.147674 | protocadherin beta 16                    | 7.3 |
| 50 | 454036 | AA374756  | Hs.93560  | Homo sapiens mRNA for KIAA1771 protein,  | 7.3 |
|    | 409746 | NM_004794 | Hs.56294  | RAB33A, member RAS oncogene family       | 7.2 |
|    | 410037 | AB020725  | Hs.58009  | KIAA0918 protein                         | 7.2 |
|    | 419318 | AW969742  | Hs.291005 | ESTs                                     | 7.2 |
|    | 424051 | AL110203  | Hs.138411 | Homo sapiens mRNA; cDNA DKFZp586J1922 (f | 7.2 |
| 55 | 442026 | AI243749  | Hs.8074   | brain-specific angiogenesis inhibitor 3  | 7.2 |
|    | 448243 | AW369771  | Hs.52620  | integrin, beta 8                         | 7.2 |
|    | 436281 | AW411194  | Hs.85195  | myeloid leukemia factor 1                | 7.2 |
|    | 426429 | X73114    | Hs.169849 | myosin-binding protein C, slow-type      | 7.2 |
|    | 407182 | AA312551  | Hs.230157 | ESTs                                     | 7.1 |
| 60 | 415293 | R49462    | Hs.106541 | ESTs                                     | 7.1 |
|    | 422764 | AI767727  | Hs.47522  | ESTs                                     | 7.1 |
|    | 451592 | AI805416  | Hs.213897 | ESTs                                     | 7.1 |
|    | 429469 | M64590    | Hs.27     | glycine dehydrogenase (decarboxylating;  | 7.0 |
|    | 415734 | NM_014747 | Hs.78748  | KIAA0237 gene product                    | 7.0 |
| 65 | 434149 | Z43829    | Hs.19574  | hypothetical protein MGC5469             | 7.0 |
|    | 436726 | AA324975  | Hs.128993 | ESTs, Weakly similar to T00079 hypotheti | 7.0 |
|    | 417632 | R20855    | Hs.5422   | glycoprotein M6B                         | 7.0 |
|    | 422421 | AA325138  | Hs.235873 | hypothetical protein FLJ22672            | 6.9 |
|    | 435267 | N23797    | Hs.110114 | ESTs                                     | 6.9 |
| 70 | 437117 | AL049256  | Hs.122593 | ESTs                                     | 6.9 |
|    | 445523 | Z30118    | Hs.293788 | ESTs, Moderately similar to unnamed prot | 6.9 |
|    | 445900 | AF070526  | Hs.13429  | Homo sapiens clone 24787 mRNA sequence   | 6.9 |
|    | 445745 | AB007924  | Hs.13245  | KIAA0455 gene product                    | 6.9 |
|    | 424085 | NM_002914 | Hs.139226 | replication factor C (activator 1) 2 (40 | 6.9 |
| 75 | 428588 | F12101    | Hs.185701 | Homo sapiens mRNA full length insert cDN | 6.8 |
|    | 421723 | AA620400  | Hs.300717 | sodium channel, voltage-gated, type III, | 6.8 |
|    | 447342 | AI199268  | Hs.19322  | Homo sapiens, Similar to RIKEN cDNA 2010 | 6.7 |
|    | 443297 | AI049864  | Hs.133029 | ESTs                                     | 6.7 |
|    | 443992 | AW022228  | Hs.322922 | ESTs                                     | 6.7 |
| 80 | 453096 | AW294631  | Hs.11325  | ESTs                                     | 6.7 |
|    | 453857 | AI080235  | Hs.35861  | DKFZP586E1621 protein                    | 6.7 |
|    | 443761 | AI525743  | Hs.160603 | ESTs                                     | 6.6 |
|    | 429609 | AF002246  | Hs.210863 | cell adhesion molecule with homology to  | 6.6 |



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|    | 435056 | AW023337  | Hs.5422   | glycoprotein M6B                         | 6.5 |
|    | 453431 | AF094754  | Hs.32973  | glycine receptor, beta                   | 6.5 |
|    | 444190 | AI878918  | Hs.10526  | cysteine and glycine-rich protein 2      | 6.5 |
|    | 418110 | R43523    | Hs.217754 | hypothetical protein FLJ22202            | 6.5 |
| 5  | 413988 | M81883    | Hs.324784 | glutamate decarboxylase 1 (brain, 67kD)  | 6.5 |
|    | 420805 | L10333    | Hs.99947  | reticulon 1                              | 6.4 |
|    | 429125 | AA446854  | Hs.271004 | ESTs, Weakly similar to 138022 hypotheti | 6.4 |
|    | 435256 | AF193766  | Hs.13872  | cytokine-like protein C17                | 6.4 |
| 10 | 407866 | AW088232  | Hs.89506  | paired box gene 6 (aniridia, keratitis)  | 6.3 |
|    | 440700 | AW952281  | Hs.296184 | guanine nucleotide binding protein (G pr | 6.3 |
|    | 427701 | AA411101  | Hs.243886 | nuclear autoantigenic sperm protein (his | 6.3 |
|    | 422949 | AA319435  |           | gb:EST21657 Adrenal gland tumor Homo sap | 6.2 |
|    | 445102 | AW204610  | Hs.22270  | ESTs                                     | 6.2 |
| 15 | 452401 | NM_007115 | Hs.29352  | tumor necrosis factor, alpha-induced pro | 6.2 |
|    | 435538 | AB011540  | Hs.4930   | low density lipoprotein receptor-related | 6.2 |
|    | 410102 | AW248508  | Hs.279727 | Homo sapiens cDNA FLJ14035 fis, clone HE | 6.2 |
|    | 416871 | H98716    |           | gb:yx13d08.s1 Soares melanocyte 2NbHM Ho | 6.1 |
|    | 416702 | AA186428  | Hs.85591  | ESTs                                     | 6.1 |
|    | 419347 | C15944    | Hs.90005  | superiorcervical ganglia, neural specif  | 6.1 |
| 20 | 424997 | AL138167  | Hs.96920  | ESTs                                     | 6.1 |
|    | 438660 | U95740    | Hs.6349   | Homo sapiens, clone IMAGE:3010666, mRNA, | 6.1 |
|    | 453649 | Y07494    | Hs.34114  | ATPase, Na+/K+ transporting, alpha 2 (+) | 6.1 |
|    | 449444 | AW818436  | Hs.23590  | solute carrier family 16 (monocarboxylic | 6.1 |
|    | 414117 | W88559    | Hs.1787   | proteolipid protein 1 (Pelizaeus-Merzbac | 6.0 |
| 25 | 425517 | AF121179  |           | gb:AF121179 Homo sapiens liver (Chang L- | 6.0 |
|    | 427457 | AW779105  | Hs.164682 | ESTs                                     | 6.0 |
|    | 437034 | AA742643  |           | gb:ny91c01.s1 NCL_CGAP_GCB1 Homo sapiens | 6.0 |
|    | 444170 | AW613879  | Hs.102408 | ESTs                                     | 6.0 |
| 30 | 457183 | H91882    | Hs.118569 | Dvl-binding protein IDAX (inhibition of  | 6.0 |
|    | 448999 | AF179274  | Hs.22791  | transmembrane protein with EGF-like and  | 6.0 |
|    | 454048 | H05626    | Hs.6921   | ESTs                                     | 6.0 |
|    | 439772 | AL365406  | Hs.10268  | Homo sapiens mRNA full length insert cDN | 5.9 |
|    | 448944 | AB014605  | Hs.22599  | atrophin-1 interacting protein 1; activi | 5.9 |
|    | 410011 | AB020641  | Hs.57856  | PFTAIRE protein kinase 1                 | 5.9 |
| 35 | 415486 | H12214    | Hs.13284  | ESTs, Weakly similar to 2109260A B cell  | 5.9 |
|    | 438993 | AA828995  |           | gb:rod77b08.s1 NCL_CGAP_Ov2 Homo sapiens | 5.9 |
|    | 447350 | AI375572  | Hs.172634 | ESTs                                     | 5.9 |
|    | 451783 | R42554    | Hs.210862 | T-box, brain, 1                          | 5.9 |
| 40 | 447101 | N72185    | Hs.44189  | ESTs                                     | 5.9 |
|    | 440492 | R39127    | Hs.21433  | hypothetical protein DKFZp547J036        | 5.9 |
|    | 440274 | R24595    | Hs.7122   | scrapie responsive protein 1             | 5.9 |
|    | 438461 | AW075485  | Hs.286049 | phosphoserine aminotransferase           | 5.9 |
|    | 418064 | BE387287  | Hs.83384  | S100 calcium-binding protein, beta (neur | 5.8 |
|    | 437036 | AI571514  | Hs.133022 | ESTs                                     | 5.7 |
| 45 | 412225 | AW902042  |           | gb:QV0-NN1022-170400-193-c02 NN1022 Homo | 5.7 |
|    | 426342 | AF093419  | Hs.169378 | multiple PDZ domain protein              | 5.7 |
|    | 444218 | AF070641  | Hs.10684  | Homo sapiens clone 24421 mRNA sequence   | 5.7 |
|    | 445828 | F05802    | Hs.81907  | ESTs                                     | 5.7 |
|    | 447198 | D61523    | Hs.283435 | ESTs                                     | 5.7 |
| 50 | 427897 | NM_017413 | Hs.303084 | apelin; peptide ligand for APJ receptor  | 5.7 |
|    | 448499 | BE513280  | Hs.77550  | hypothetical protein MGC1780             | 5.7 |
|    | 443672 | AA323362  | Hs.9667   | butyrobetaine (gamma), 2-oxoglutarate di | 5.6 |
|    | 412155 | R38167    | Hs.12449  | Homo sapiens transmembrane protein HTMP1 | 5.6 |
|    | 435718 | R06569    | Hs.269534 | ESTs                                     | 5.6 |
| 55 | 449340 | AW235786  | Hs.195359 | hypothetical protein MGC10954            | 5.6 |
|    | 424481 | R19453    | Hs.1787   | proteolipid protein 1 (Pelizaeus-Merzbac | 5.6 |
|    | 451996 | AW514021  | Hs.245510 | ESTs                                     | 5.6 |
|    | 422411 | AW749443  | Hs.22511  | ESTs                                     | 5.6 |
|    | 438328 | AI492261  | Hs.32450  | ESTs                                     | 5.6 |
| 60 | 433244 | AB040943  | Hs.271285 | KIAA1510 protein                         | 5.6 |
|    | 435191 | R15912    | Hs.4817   | Homo sapiens clone 24461 mRNA sequence   | 5.5 |
|    | 418677 | S83308    | Hs.87224  | SRY (sex determining region Y)-box 5     | 5.5 |
|    | 400859 |           |           |  | 5.5 |
|    | 413625 | AW451103  | Hs.71371  | ESTs                                     | 5.5 |
| 65 | 421863 | AI952677  | Hs.108972 | Homo sapiens mRNA; cDNA DKFZp434P228 (fr | 5.5 |
|    | 434933 | R91095    | Hs.4276   | KIAA1701 protein                         | 5.5 |
|    | 438702 | AI879064  | Hs.54618  | ESTs                                     | 5.5 |
|    | 452055 | AI377431  | Hs.141693 | hypothetical protein MGC10858            | 5.5 |
|    | 430979 | AI479755  | Hs.129010 | ESTs                                     | 5.5 |
| 70 | 412709 | AL022327  | Hs.74518  | KIAA0027 protein                         | 5.5 |
|    | 439920 | H05430    | Hs.288433 | neurotrimin                              | 5.5 |
|    | 424343 | AW956360  | Hs.4748   | adenylate cyclase activating polypeptide | 5.4 |
|    | 407846 | AA426202  | Hs.40403  | Cbp/p300-interacting transactivator, wit | 5.4 |
|    | 419235 | AW470411  | Hs.288433 | neurotrimin                              | 5.4 |
| 75 | 418030 | BE207573  | Hs.83321  | neuromedin B                             | 5.4 |
|    | 410330 | AW023630  | Hs.46786  | ESTs                                     | 5.4 |
|    | 410781 | AI375672  | Hs.165028 | ESTs                                     | 5.4 |
|    | 420658 | AW965215  | Hs.336656 | ESTs                                     | 5.4 |
| 80 | 421308 | AA687322  | Hs.192843 | leucine zipper protein FKSG14            | 5.4 |
|    | 443740 | R56434    | Hs.21062  | ESTs                                     | 5.4 |
|    | 426457 | AW894667  | Hs.169965 | chimerin (chimaerin) 1                   | 5.4 |
|    | 450375 | AA009647  | Hs.8850   | a disintegrin and metalloproteinase doma | 5.4 |
|    | 412494 | AL133900  | Hs.792    | ADP-ribosylation factor domain protein 1 | 5.4 |

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|    | 426600 | NM_003378 | Hs.171014 | VGF nerve growth factor inducible              | 5.4 |
|    | 424432 | AB037821  | Hs.146858 | protocadherin 10                               | 5.4 |
|    | 429250 | H56585    | Hs.198308 | tryptophan rich basic protein                  | 5.4 |
|    | 443785 | AW449952  | Hs.190125 | basic-helix-loop-helix-PAS protein             | 5.4 |
| 5  | 436282 | R91913    | Hs.272104 | ESTs, Moderately similar to ALU1_HUMAN A       | 5.4 |
|    | 404584 |           |           |  | 5.3 |
|    | 430091 | AB032958  | Hs.233023 | KIAA1132 protein                               | 5.3 |
|    | 439845 | AL355743  | Hs.56663  | Homo sapiens EST from clone 41214, full        | 5.3 |
|    | 424001 | W67883    | Hs.137476 | paternally expressed 10                        | 5.3 |
| 10 | 425073 | W39609    | Hs.22003  | solute carrier family 6 (neurotransmitter)     | 5.3 |
|    | 426625 | T78300    | Hs.300642 | serologically defined colon cancer antigen     | 5.3 |
|    | 428137 | AA421792  | Hs.170999 | ESTs   | 5.3 |
|    | 428679 | AA431765  |           | gb:zw80c03.s1 Soares_testis_NHT Homo sapiens   | 5.3 |
|    | 438176 | AW138970  | Hs.122113 | ESTs   | 5.3 |
| 15 | 440138 | AB033023  | Hs.318127 | hypothetical protein FLJ10201                  | 5.3 |
|    | 451018 | AW965599  | Hs.247324 | mitochondrial ribosomal protein S14            | 5.3 |
|    | 416340 | N31772    | Hs.79226  | fasciculation and elongation protein zeta      | 5.3 |
|    | 435244 | N77221    | Hs.187824 | ESTs   | 5.3 |
|    | 446035 | NM_006558 | Hs.13565  | Sam68-like phosphotyrosine protein, T-ST       | 5.3 |
| 20 | 424624 | AB032947  | Hs.151301 | Ca2+-dependent activator protein for secretion | 5.3 |
|    | 407748 | AL079409  | Hs.38176  | KIAA0606 protein; SCN Circadian Oscillator     | 5.3 |
|    | 430437 | AI768801  | Hs.169943 | Homo sapiens cDNA FLJ13569 fis, clone PL       | 5.3 |
|    | 414825 | X06370    | Hs.77432  | epidermal growth factor receptor (avian)       | 5.2 |
|    | 453941 | U39817    | Hs.36820  | Bloom syndrome                                 | 5.2 |
| 25 | 424998 | U58515    | Hs.154138 | chitinase 3-like 2                             | 5.2 |
|    | 423419 | R55336    | Hs.23539  | ESTs   | 5.2 |
|    | 424922 | BE386547  | Hs.217112 | hypothetical protein MGC10825                  | 5.2 |
|    | 447359 | NM_012093 | Hs.18268  | adenylate kinase 5                             | 5.2 |
| 30 | 408206 | AF041853  | Hs.43570  | kinesin family member 3A                       | 5.2 |
|    | 421013 | M62397    | Hs.1345   | mutated in colorectal cancers                  | 5.2 |
|    | 429443 | AB028967  | Hs.202687 | potassium voltage-gated channel, Shal-related  | 5.2 |
|    | 434367 | AB020700  | Hs.3830   | KIAA0893 protein                               | 5.2 |
|    | 444861 | R46789    | Hs.76118  | ubiquitin carboxyl-terminal esterase L1        | 5.2 |
| 35 | 446142 | AI754693  | Hs.145968 | ESTs   | 5.2 |
|    | 448816 | AB033052  | Hs.22151  | KIAA1226 protein                               | 5.2 |
|    | 451050 | AW937420  | Hs.69662  | ESTs   | 5.2 |
|    | 451106 | BE382701  | Hs.25960  | v-myc avian myelocytomatosis viral related     | 5.2 |
|    | 439285 | AL133916  | Hs.172572 | hypothetical protein FLJ20093                  | 5.2 |
| 40 | 416737 | AF154335  | Hs.79691  | LIM domain protein                             | 5.2 |
|    | 424800 | AL035588  | Hs.153203 | MyoD family inhibitor                          | 5.2 |
|    | 443695 | AW204099  | Hs.337720 | ESTs, Weakly similar to AF126780 1 retin       | 5.2 |
|    | 415257 | F03016    | Hs.27513  | ESTs   | 5.2 |
|    | 433929 | AI375499  | Hs.27379  | ESTs   | 5.1 |
| 45 | 415651 | AI207162  | Hs.3815   | stathmin-like-protein RB3                      | 5.1 |
|    | 451027 | AW519204  | Hs.40808  | ESTs   | 5.1 |
|    | 409172 | Z99399    | Hs.118145 | ESTs   | 5.1 |
|    | 423343 | AA324643  | Hs.246106 | ESTs   | 5.1 |
|    | 429172 | AA447417  | Hs.285491 | ESTs   | 5.1 |
| 50 | 437268 | AI754847  | Hs.227571 | regulator of G-protein signalling 4            | 5.1 |
|    | 451270 | AW341392  | Hs.235795 | ESTs   | 5.1 |
|    | 452904 | AL157581  | Hs.30957  | Homo sapiens mRNA; cDNA DKFZp434E0626 (f       | 5.1 |
|    | 420560 | AW207748  | Hs.59115  | ESTs   | 5.1 |
|    | 418097 | R45137    | Hs.21868  | ESTs   | 5.1 |
| 55 | 442910 | AI365130  | Hs.11307  | ESTs, Weakly similar to T19326 hypothetical    | 5.1 |
|    | 434849 | AW292765  | Hs.8053   | ESTs   | 5.1 |
|    | 413554 | AA319146  | Hs.75426  | secretogranin II (chromogranin C)              | 5.1 |
|    | 414217 | AI309298  | Hs.279898 | Homo sapiens cDNA: FLJ23165 fis, clone L       | 5.1 |
|    | 412068 | S72043    | Hs.73133  | metallothionein 3 (growth inhibitory factor)   | 5.0 |
| 60 | 413627 | BE182082  | Hs.246973 | ESTs   | 5.0 |
|    | 418661 | NM_001949 | Hs.1189   | E2F transcription factor 3                     | 5.0 |
|    | 422438 | AA445925  | Hs.270896 | ESTs, Moderately similar to Z195_HUMAN Z       | 5.0 |
|    | 423728 | AW891294  | Hs.132136 | solute carrier family 4, sodium bicarbonate    | 5.0 |
|    | 431431 | AL096711  | Hs.252953 | Human DNA sequence from clone RP3-403A15       | 5.0 |
| 65 | 435087 | AW975241  | Hs.23567  | ESTs   | 5.0 |
|    | 452097 | AB002364  | Hs.27916  | a disintegrin-like and metalloprotease (       | 5.0 |
|    | 410434 | AF051152  | Hs.63668  | tol-like receptor 2                            | 4.9 |
|    | 408692 | AL040127  | Hs.34074  | dipeptidylpeptidase VI                         | 4.9 |
|    | 407808 | AA663559  | Hs.279789 | histone deacetylase 3                          | 4.9 |
| 70 | 418940 | H17739    | Hs.288513 | Human DNA sequence from clone RP5-899C14       | 4.9 |
|    | 425977 | R15138    | Hs.165570 | Homo sapiens clone Z5052 mRNA sequence         | 4.9 |
|    | 426814 | AF036943  | Hs.172619 | myelin transcription factor 1-like             | 4.9 |
|    | 447112 | H17800    | Hs.7154   | ESTs   | 4.9 |
|    | 449574 | F05048    | Hs.175373 | ESTs   | 4.9 |
| 75 | 453652 | AW009640  | Hs.28368  | ESTs, Moderately similar to S65657 alpha       | 4.9 |
|    | 423869 | BE409301  | Hs.134012 | C1q-related factor                             | 4.9 |
|    | 413248 | T64858    | Hs.21433  | hypothetical protein DKFZp547J036              | 4.9 |
|    | 449176 | AI633545  | Hs.198072 | ESTs   | 4.9 |
|    | 448451 | AW015994  |           | gb:UH-BI0p-abh-g-09-0-UI.s1 NCI_CGAP_S         | 4.8 |
|    | 402604 |           |           |  | 4.8 |
| 80 | 436039 | AW023323  | Hs.121070 | ESTs   | 4.8 |
|    | 448769 | N66037    | Hs.38173  | ESTs   | 4.8 |
|    | 423678 | AW963357  | Hs.7847   | ESTs   | 4.8 |
|    | 439451 | AF086270  | Hs.278554 | heterochromatin-like protein 1                 | 4.8 |

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|    | 425870 | R13406    | Hs.56782  | ESTs                                     | 4.8 |
|    | 408777 | U71204    | Hs.47626  | Ric (Drosophila)-like, expressed in neur | 4.8 |
|    | 413409 | AI638418  | Hs.78580  | DEAD/H (Asp-Glu-Ala-Asp/His) box polypep | 4.8 |
| 5  | 413623 | AA825721  | Hs.246973 | ESTs                                     | 4.8 |
|    | 417246 | AI760098  | Hs.21411  | ESTs                                     | 4.8 |
|    | 420900 | AL045633  | Hs.44269  | ESTs                                     | 4.8 |
|    | 424153 | AA451737  | Hs.141496 | MAGE-like 2                              | 4.8 |
|    | 443539 | AI076182  | Hs.134074 | ESTs, Moderately similar to ALU5_HUMAN A | 4.8 |
|    | 448750 | U95020    | Hs.21903  | calcium channel, voltage-dependent, beta | 4.8 |
| 10 | 454030 | AW021429  | Hs.231980 | ESTs                                     | 4.8 |
|    | 424458 | M29273    | Hs.1780   | myelin associated glycoprotein           | 4.8 |
|    | 444119 | R41231    | Hs.184261 | ESTs, Weakly similar to T26686 hypotheti | 4.8 |
|    | 407792 | AI077715  | Hs.39384  | putative secreted ligand homologous to f | 4.8 |
| 15 | 431462 | AW583672  | Hs.256311 | granin-like neuroendocrine peptide precu | 4.7 |
|    | 431103 | M57399    | Hs.44     | pleiotrophin (heparin binding growth fac | 4.7 |
|    | 429956 | AI374651  | Hs.22542  | ESTs                                     | 4.7 |
|    | 435060 | AI422719  | Hs.233349 | ESTs, Weakly similar to fork head like p | 4.7 |
|    | 436203 | BE384982  | Hs.5076   | Homo sapiens cDNA: FLJ22128 fis, clone H | 4.7 |
| 20 | 448475 | BE613134  | Hs.247474 | hypothetical protein FLJ21032            | 4.7 |
|    | 422222 | AI699372  | Hs.193247 | hypothetical protein DKFZp434A171        | 4.7 |
|    | 431733 | AW298410  | Hs.21475  | ESTs                                     | 4.7 |
|    | 449353 | AA001220  | Hs.271369 | ESTs                                     | 4.7 |
|    | 452022 | AW072330  | Hs.293875 | ESTs                                     | 4.7 |
| 25 | 454269 | AI961060  | Hs.129908 | KIAA0591 protein                         | 4.7 |
|    | 404541 |           |           |  | 4.7 |
|    | 428189 | AA424030  | Hs.46627  | ESTs                                     | 4.7 |
|    | 409125 | R17268    | Hs.259873 | axonal transport of synaptic vesicles    | 4.7 |
|    | 458435 | AI418718  | Hs.144121 | ESTs, Weakly similar to T46916 hypotheti | 4.6 |
| 30 | 425745 | U44060    | Hs.14427  | Homo sapiens cDNA: FLJ21800 fis, clone H | 4.6 |
|    | 413492 | D87470    | Hs.75400  | KIAA0280 protein                         | 4.6 |
|    | 419629 | AB020695  | Hs.91662  | KIAA0888 protein                         | 4.6 |
|    | 407638 | AJ404672  | Hs.334483 | hypothetical protein FLJ23571            | 4.6 |
|    | 436140 | W87355    | Hs.269587 | ESTs                                     | 4.6 |
| 35 | 439169 | AI912122  | Hs.41095  | ESTs                                     | 4.6 |
|    | 443150 | AI034467  | Hs.34650  | ESTs                                     | 4.6 |
|    | 451073 | AI758905  | Hs.206063 | ESTs                                     | 4.6 |
|    | 451659 | BE379761  | Hs.14248  | ESTs                                     | 4.6 |
|    | 452106 | AI141031  | Hs.21342  | ESTs                                     | 4.6 |
| 40 | 451407 | AA131376  | Hs.326401 | fibroblast growth factor 12B             | 4.6 |
|    | 448765 | R15337    | Hs.21958  | Homo sapiens mRNA: cDNA DKFZp547D086 (fr | 4.6 |
|    | 430147 | R60704    | Hs.234434 | hairy/enhancer-of-split related with YRP | 4.6 |
|    | 437204 | AL110216  | Hs.12285  | ESTs, Weakly similar to I55214 salivary  | 4.6 |
|    | 431117 | AF003522  | Hs.250500 | delta (Drosophila)-like 1                | 4.5 |
| 45 | 422175 | N79885    | Hs.6382   | ESTs, Highly similar to T00391 hypotheti | 4.5 |
|    | 407889 | R34556    | Hs.30800  | ESTs, Weakly similar to S65657 alpha-1C- | 4.5 |
|    | 419343 | AA456245  | Hs.85603  | down-regulated by Cnnb1, a               | 4.5 |
|    | 421790 | AW896201  | Hs.22654  | sodium channel, voltage-gated, type I, a | 4.5 |
|    | 429399 | AA452244  | Hs.16727  | ESTs                                     | 4.5 |
| 50 | 450149 | AW969781  | Hs.132863 | Zic family member 2 (odd-paired Drosophi | 4.5 |
|    | 453118 | AW195849  | Hs.252757 | ESTs                                     | 4.5 |
|    | 443455 | AB001025  | Hs.9349   | ryanodine receptor 3                     | 4.4 |
|    | 442613 | AI004002  | Hs.130522 | Kv channel-interacting protein 1         | 4.4 |
|    | 429643 | AA455889  | Hs.167279 | FYVE-finger-containing Rab5 effector pro | 4.4 |
| 55 | 416209 | AA236776  | Hs.79078  | MAD2 (mitotic arrest deficient, yeast, h | 4.4 |
|    | 418845 | AA852985  | Hs.89232  | chromobox homolog 5 (Drosophila HP1 alph | 4.4 |
|    | 435202 | AI971313  | Hs.170204 | KIAA0551 protein                         | 4.4 |
|    | 437496 | AA452378  | Hs.170144 | Homo sapiens mRNA: cDNA DKFZp547J125 (fr | 4.4 |
|    | 451254 | AI571016  | Hs.172967 | ESTs                                     | 4.4 |
| 60 | 439039 | AI656707  | Hs.48713  | ESTs                                     | 4.4 |
|    | 439979 | AW600291  | Hs.6823   | hypothetical protein FLJ10430            | 4.4 |
|    | 441607 | NM_005010 | Hs.7912   | neuronal cell adhesion molecule          | 4.4 |
|    | 424983 | AI742434  | Hs.169911 | ESTs                                     | 4.4 |
|    | 410611 | AW954134  | Hs.20924  | KIAA1628 protein                         | 4.4 |
|    | 402605 |           |           |  | 4.4 |
| 65 | 409248 | AB033035  | Hs.51965  | KIAA1209 protein                         | 4.4 |
|    | 442222 | AI061301  | Hs.164773 | ESTs                                     | 4.4 |
|    | 454027 | R40192    | Hs.21527  | Human DNA sequence from clone GS1-115M3  | 4.4 |
|    | 454293 | H49739    | Hs.134013 | ESTs, Moderately similar to HK61_HUMAN H | 4.4 |
| 70 | 442832 | AW206560  | Hs.253569 | ESTs                                     | 4.4 |
|    | 407304 | AA565832  |           | gb:n 32b03.s1 NC _CGAP_AA1 Homo sapiens  | 4.4 |
|    | 423279 | AW959861  | Hs.290943 | ESTs                                     | 4.3 |
|    | 427194 | AA399018  | Hs.250835 | ESTs                                     | 4.3 |
|    | 419723 | AL120193  | Hs.92614  | longevity assurance (LAG1, S. cerevisiae | 4.3 |
| 75 | 445810 | AW265700  | Hs.155660 | ESTs                                     | 4.3 |
|    | 409734 | BE161664  | Hs.56155  | hypothetical protein                     | 4.3 |
|    | 410389 | AW954049  | Hs.8177   | ESTs, Weakly similar to PIHUB6 salivary  | 4.3 |
|    | 411571 | AA122393  | Hs.70811  | hypothetical protein FLJ20516            | 4.3 |
|    | 433024 | AA573847  | Hs.26549  | KIAA1708 protein                         | 4.3 |
| 80 | 453202 | AW085781  | Hs.26270  | hypothetical protein FLJ11588            | 4.3 |
|    | 425264 | AA353953  | Hs.20369  | ESTs, Weakly similar to gonadotropin ind | 4.3 |
|    | 416427 | BE244050  | Hs.79307  | Rac/Cdc42 guanine exchange factor (GEF)  | 4.3 |
|    | 431789 | H19500    | Hs.269222 | mitogen-activated protein kinase 4       | 4.3 |
|    | 444600 | R41398    | Hs.6996   | ESTs                                     | 4.3 |

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|    | 454042 | H22570    | Hs.172572 | hypothetical protein FLJ20093             | 4.3 |
|    | 441899 | AI372588  | Hs.8022   | TU3A protein                              | 4.3 |
|    | 425256 | BE297611  | Hs.155392 | collapsin response mediator protein 1     | 4.3 |
| 5  | 410358 | AW975168  | Hs.13337  | ESTs, Weakly similar to unnamed protein   | 4.2 |
|    | 430291 | AV660345  | Hs.238126 | CGI-49 protein                            | 4.2 |
|    | 433597 | AA708205  | Hs.100343 | ESTs                                      | 4.2 |
|    | 444127 | N63620    | Hs.13281  | ESTs                                      | 4.2 |
|    | 448507 | AL133109  | Hs.21333  | Homo sapiens mRNA; cDNA DKFZp566N1047 (f  | 4.2 |
| 10 | 413589 | AW452631  | Hs.313803 | ESTs, Highly similar to AF157833 1 noncl  | 4.2 |
|    | 408577 | H50572    | Hs.19515  | ESTs, Highly similar to NRG3_HUMAN PRO-N  | 4.2 |
|    | 409719 | AI769160  | Hs.108681 | Homo sapiens brain tumor associated prot  | 4.2 |
|    | 428536 | AI143139  | Hs.2288   | visinin-like 1                            | 4.2 |
|    | 429118 | H20669    | Hs.35406  | ESTs, Highly similar to unnamed protein   | 4.2 |
| 15 | 432865 | AI753709  | Hs.152484 | ESTs, Weakly similar to I38022 hypotheti  | 4.2 |
|    | 447138 | AI439112  | Hs.93828  | ESTs, Weakly similar to 2109260A B cell   | 4.2 |
|    | 450648 | AI703366  | Hs.26766  | ESTs                                      | 4.2 |
|    | 451459 | AI797515  | Hs.270560 | ESTs, Moderately similar to ALU7_HUMAN A  | 4.2 |
|    | 421686 | AB011156  | Hs.106794 | KIAA0584 protein                          | 4.2 |
| 20 | 452776 | AA194540  | Hs.13522  | ESTs, Weakly similar to I38022 hypotheti  | 4.2 |
|    | 436421 | AI678031  | Hs.12281  | ESTs, Weakly similar to ZN22_HUMAN ZINC   | 4.2 |
|    | 423858 | AL137326  | Hs.133483 | Homo sapiens mRNA; cDNA DKFZp434B0650 (f  | 4.2 |
|    | 434001 | AW950905  | Hs.3697   | serine (or cysteine) proteinase inhibito  | 4.2 |
|    | 437380 | AI359577  | Hs.112198 | Homo sapiens mRNA; cDNA DKFZp547M073 (fr  | 4.2 |
| 25 | 432328 | AI572739  | Hs.195471 | 6-phosphofructo-2-kinase/fructose-2,6-bi  | 4.1 |
|    | 439607 | BE540565  | Hs.159460 | ESTs                                      | 4.1 |
|    | 424028 | AF055084  | Hs.153692 | Homo sapiens cDNA FLJ14354 fis, clone Y7  | 4.1 |
|    | 446936 | H10207    | Hs.47314  | ESTs                                      | 4.1 |
|    | 424240 | AB023185  | Hs.143535 | calcium/calmodulin-dependent protein kin  | 4.1 |
| 30 | 412446 | AI768015  | Hs.92127  | ESTs                                      | 4.1 |
|    | 409953 | AA332277  | Hs.57691  | cadherin 18, type 2                       | 4.1 |
|    | 416220 | N49776    | Hs.170994 | hypothetical protein MGC10946             | 4.1 |
|    | 419683 | AA248897  | Hs.48784  | ESTs                                      | 4.1 |
|    | 426071 | AW138057  | Hs.163835 | ESTs                                      | 4.1 |
| 35 | 428743 | AL080060  | Hs.301549 | Homo sapiens mRNA; cDNA DKFZp564H172 (fr  | 4.1 |
|    | 432809 | AA565509  | Hs.131703 | ESTs                                      | 4.1 |
|    | 440105 | AA694010  | Hs.6932   | Homo sapiens clone 23809 mRNA sequence    | 4.1 |
|    | 452039 | AI922988  | Hs.172510 | ESTs                                      | 4.1 |
|    | 425905 | AB032959  | Hs.318584 | novel C3HC4 type Zinc finger (ring flinge | 4.1 |
| 40 | 457561 | AA331517  | Hs.286055 | chimerin (chimaerin) 2                    | 4.1 |
|    | 429038 | AL023513  | Hs.194766 | seizure related gene 6 (mouse)-like       | 4.1 |
|    | 433932 | AW954599  | Hs.169330 | neuronal protein                          | 4.1 |
|    | 436637 | AI783629  | Hs.26766  | ESTs                                      | 4.1 |
|    | 439231 | AW581935  | Hs.141480 | Homo sapiens mRNA; cDNA DKFZp434N079 (fr  | 4.1 |
| 45 | 450530 | NM_006668 | Hs.25121  | cytochrome P450, subfamily 46 (cholester  | 4.1 |
|    | 407721 | Y12735    | Hs.38018  | dual-specificity tyrosine-(Y)-phosphoryl  | 4.1 |
|    | 407881 | AW072003  | Hs.40968  | heparan sulfate (glucosamine) 3-O-sulfot  | 4.1 |
|    | 410486 | AW235094  | Hs.69233  | zinc finger protein                       | 4.0 |
|    | 413916 | N49813    | Hs.75615  | apolipoprotein C-II                       | 4.0 |
| 50 | 438703 | AI803373  | Hs.31599  | ESTs                                      | 4.0 |
|    | 424726 | AK001007  | Hs.138760 | Homo sapiens cDNA FLJ10145 fis, clone HE  | 4.0 |
|    | 405771 |           |           |   | 4.0 |
|    | 418841 | NM_002332 | Hs.89137  | low density lipoprotein-related protein   | 4.0 |
|    | 421764 | AI681535  | Hs.148135 | serine/threonine kinase 33                | 4.0 |
| 55 | 424176 | AL137273  | Hs.142307 | hypothetical protein                      | 4.0 |
|    | 425773 | N21279    | Hs.237749 | ESTs                                      | 4.0 |
|    | 427304 | AA761526  | Hs.163853 | ESTs                                      | 4.0 |
|    | 428882 | AA436915  | Hs.131748 | ESTs, Moderately similar to ALU7_HUMAN A  | 4.0 |
|    | 452834 | AI638627  | Hs.105685 | KIAA1688 protein                          | 4.0 |
| 60 | 453745 | AA952989  | Hs.63908  | hypothetical protein MGC14726             | 4.0 |
|    | 405239 | U89281    | Hs.11958  | oxidative 3 alpha hydroxysteroid dehydro  | 4.0 |
|    | 413801 | M62246    | Hs.35406  | ESTs, Highly similar to unnamed protein   | 4.0 |
|    | 429698 | AI685086  | Hs.26339  | ESTs, Weakly similar to S21348 probable   | 4.0 |
|    | 435854 | AJ278120  | Hs.4996   | putative ankyrin-repeat containing prote  | 4.0 |
|    | 439199 | R40373    | Hs.26299  | ESTs                                      | 4.0 |
| 65 | 439450 | R51613    | Hs.125304 | ESTs                                      | 4.0 |
|    | 446782 | AI653048  | Hs.144006 | ESTs                                      | 4.0 |
|    | 419687 | AI638859  | Hs.227699 | ESTs, Weakly similar to T2D3_HUMAN TRANS  | 3.9 |
|    | 402408 |           |           |   | 3.9 |
|    | 453362 | H14988    | Hs.107375 | ESTs                                      | 3.9 |
| 70 | 414219 | W20010    | Hs.75823  | ALL1-fused gene from chromosome 1q        | 3.9 |
|    | 420578 | AA813546  | Hs.99034  | GTP-binding protein Rho7                  | 3.9 |
|    | 425010 | T16837    | Hs.4241   | ESTs                                      | 3.9 |
|    | 444230 | H95537    | Hs.146067 | ESTs                                      | 3.9 |
| 75 | 441736 | AW292779  | Hs.169799 | ESTs                                      | 3.9 |
|    | 418951 | F07809    | Hs.89506  | paired box gene 6 (aniridia, keratitis)   | 3.9 |
|    | 406311 |           |           |   | 3.9 |
|    | 408460 | AA054726  | Hs.285574 | ESTs                                      | 3.9 |
| 80 | 410658 | AW105231  | Hs.192035 | ESTs                                      | 3.9 |
|    | 414699 | AI815523  | Hs.76930  | synuclein, alpha (non A4 component of am  | 3.9 |
|    | 418849 | AW474547  | Hs.53565  | Homo sapiens PIG-M mRNA for mannosyltran  | 3.9 |
|    | 429477 | AI275514  | Hs.6658   | ESTs                                      | 3.9 |
|    | 433766 | AA609234  | Hs.112669 | ESTs                                      | 3.9 |
|    | 436190 | AK001059  |           | gb:Homo sapiens cDNA FLJ10197 fis, clone  | 3.9 |

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|    | 447891 | R41754    | Hs.6496   | ESTs                                      | 3.9 |
|    | 450221 | AA328102  | Hs.24641  | cytoskeleton associated protein 2         | 3.9 |
|    | 404283 |           |           |   | 3.9 |
| 5  | 453919 | AW959912  | Hs.7076   | KIAA1705 protein                          | 3.9 |
|    | 429656 | X05608    | Hs.211584 | neurofilament, light polypeptide (68kD)   | 3.9 |
|    | 412754 | AW160375  | Hs.74565  | amyloid beta (A4) precursor-like protein  | 3.9 |
|    | 445314 | AI689948  | Hs.65489  | Homo sapiens cDNA: FLJ21517 fis, clone C  | 3.9 |
|    | 435652 | N32388    | Hs.334370 | uncharacterized hypothalamus protein HBE  | 3.9 |
| 10 | 407378 | AA299264  | Hs.57776  | ESTs, Moderately similar to I38022 hypot  | 3.9 |
|    | 438054 | AA776626  | Hs.62183  | ESTs                                      | 3.9 |
|    | 436420 | AA443966  | Hs.31595  | ESTs                                      | 3.9 |
|    | 445133 | AW157646  | Hs.153506 | ESTs                                      | 3.9 |
|    | 432590 | AI609273  | Hs.110783 | ESTs                                      | 3.9 |
| 15 | 453331 | AI240665  | Hs.8895   | ESTs                                      | 3.9 |
|    | 410227 | AB009284  | Hs.61152  | exostoses (multiple)-like 2               | 3.8 |
|    | 424635 | AA420687  | Hs.115455 | Homo sapiens cDNA FLJ14259 fis, clone PL  | 3.8 |
|    | 451489 | NM_005503 | Hs.26468  | amyloid beta (A4) precursor protein-bind  | 3.8 |
|    | 447247 | AW369351  | Hs.287955 | Homo sapiens cDNA FLJ13090 fis, clone NT  | 3.8 |
| 20 | 448302 | AI480208  | Hs.182906 | Homo sapiens mRNA for KIAA1872 protein,   | 3.8 |
|    | 415669 | NM_005025 | Hs.78589  | serine (or cysteine) proteinase inhibitor | 3.8 |
|    | 417355 | D13168    | Hs.82002  | endothelin receptor type B                | 3.8 |
|    | 446727 | AB011095  | Hs.16032  | KIAA0523 protein                          | 3.8 |
|    | 424340 | AA339036  | Hs.7033   | ESTs                                      | 3.8 |
| 25 | 423346 | AI267677  | Hs.127416 | synaptojanin 1                            | 3.8 |
|    | 412788 | AA120960  | Hs.198416 | ESTs                                      | 3.8 |
|    | 404593 |           |           |   | 3.8 |
|    | 416856 | N27833    | Hs.269028 | ESTs, Weakly similar to I38022 hypotheti  | 3.8 |
|    | 429896 | AA460367  | Hs.224223 | ESTs, Moderately similar to I38022 hypot  | 3.8 |
| 30 | 439619 | AW975998  | Hs.58595  | ESTs, Weakly similar to I38022 hypotheti  | 3.8 |
|    | 439634 | W79377    | Hs.167    | microtubule-associated protein 2          | 3.8 |
|    | 440322 | AA879430  |           | gb:oj91d08.s1 Soares_NFL_T_GBC_S1 Homo s  | 3.8 |
|    | 447761 | AF061573  | Hs.19492  | protocadherin 8                           | 3.8 |
|    | 452453 | AI902519  |           | gb:QV-BT009-101198-051 BT009 Homo sapien  | 3.8 |
| 35 | 439671 | AW162840  | Hs.6641   | kinesin family member 5C                  | 3.8 |
|    | 447937 | AL109716  | Hs.20034  | Homo sapiens mRNA full length insert cDN  | 3.8 |
|    | 459278 | AW294659  | Hs.34054  | Homo sapiens cDNA: FLJ22488 fis, clone H  | 3.8 |
|    | 447028 | AI973128  | Hs.167257 | brain link protein-1                      | 3.8 |
|    | 449458 | AI805078  | Hs.208261 | ESTs                                      | 3.8 |
| 40 | 445888 | AF070564  | Hs.13415  | Homo sapiens clone 24571 mRNA sequence    | 3.8 |
|    | 407385 | AA610150  | Hs.272072 | ESTs, Weakly similar to I38022 hypotheti  | 3.8 |
|    | 428841 | AI418430  | Hs.104935 | ESTs                                      | 3.8 |
|    | 430643 | AW970065  | Hs.287425 | MEGF10 protein                            | 3.8 |
|    | 422263 | AA307639  | Hs.129908 | KIAA0591 protein                          | 3.8 |
| 45 | 451625 | R56793    | Hs.106576 | alanine-glyoxylate aminotransferase 2-li  | 3.8 |
|    | 439236 | BE160952  | Hs.247117 | ESTs, Moderately similar to ALUF_HUMAN I  | 3.8 |
|    | 441928 | AI370188  | Hs.211454 | ESTs                                      | 3.8 |
|    | 441797 | AI936933  | Hs.214635 | ESTs                                      | 3.7 |
|    | 414922 | D00723    | Hs.77631  | glycine cleavage system protein H (amino  | 3.7 |
| 50 | 425588 | F07396    | Hs.46751  | ESTs                                      | 3.7 |
|    | 437007 | AA741300  | Hs.202599 | ESTs, Weakly similar to I38022 hypotheti  | 3.7 |
|    | 435793 | AB037734  | Hs.4993   | KIAA1313 protein                          | 3.7 |
|    | 443682 | AI383061  | Hs.47248  | ESTs, Highly similar to similar to Cdc14  | 3.7 |
|    | 425741 | AF052152  | Hs.159412 | Homo sapiens clone 24628 mRNA sequence    | 3.7 |
| 55 | 418211 | BE244746  | Hs.247474 | hypothetical protein FLJ21032             | 3.7 |
|    | 440080 | AW051597  | Hs.143707 | ESTs                                      | 3.7 |
|    | 452898 | AA814497  | Hs.78792  | ESTs                                      | 3.7 |
|    | 435575 | AF213457  | Hs.44234  | triggering receptor expressed on myeloid  | 3.7 |
|    | 409234 | AI879419  | Hs.27206  | ESTs                                      | 3.7 |
| 60 | 420489 | AA815089  | Hs.193513 | ESTs                                      | 3.7 |
|    | 426890 | AA393167  | Hs.41294  | ESTs                                      | 3.7 |
|    | 438849 | W28948    | Hs.10762  | ESTs                                      | 3.7 |
|    | 441869 | NM_003947 | Hs.8004   | huntingtin-associated protein interactin  | 3.7 |
|    | 448796 | AA147829  | Hs.301431 | endothelial zinc finger protein induced   | 3.7 |
| 65 | 459318 | NM_000038 |           | gb:Homo sapiens adenomatosis polyposi c   | 3.7 |
|    | 459518 | AI937419  | Hs.294069 | Homo sapiens cDNA FLJ13384 fis, clone PL  | 3.7 |
|    | 434444 | AI765276  | Hs.101257 | hypothetical protein MGC3295              | 3.7 |
|    | 421183 | AL135740  | Hs.102447 | TSC-22-like                               | 3.7 |
|    | 410555 | U92649    | Hs.64311  | a disintegrin and metalloproteinase doma  | 3.7 |
| 70 | 421637 | AF035290  | Hs.106300 | Homo sapiens clone 23556 mRNA sequence    | 3.7 |
|    | 418522 | AA605038  | Hs.7149   | Homo sapiens cDNA: FLJ21950 fis, clone H  | 3.7 |
|    | 420807 | AA280627  | Hs.57846  | ESTs                                      | 3.7 |
|    | 449961 | AW265634  | Hs.133100 | ESTs                                      | 3.7 |
|    | 422634 | NM_016010 | Hs.118821 | CGI-62 protein                            | 3.7 |
| 75 | 421030 | AW161357  | Hs.101174 | microtubule-associated protein tau        | 3.7 |
|    | 427099 | AB032953  | Hs.173560 | odd Oz/ten-m homolog 2 (Drosophila, mous  | 3.7 |
|    | 452355 | N54926    | Hs.29202  | G protein-coupled receptor 34             | 3.7 |
|    | 440483 | AI200836  | Hs.150386 | ESTs                                      | 3.7 |
|    | 429597 | NM_003816 | Hs.2442   | a disintegrin and metalloproteinase doma  | 3.7 |
| 80 | 423756 | AA828125  |           | gb:od71a09.s1 NCI_CGAP_Ov2 Homo sapiens   | 3.6 |
|    | 425187 | AW014486  | Hs.22509  | ESTs                                      | 3.6 |
|    | 434859 | BE255080  | Hs.299315 | collapsin response mediator protein-5; C  | 3.6 |
|    | 413199 | M62843    | Hs.75236  | ELAV (embryonic lethal, abnormal vision,  | 3.6 |
|    | 445729 | H21066    | Hs.13223  | Homo sapiens mRNA full length insert cDN  | 3.6 |

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|    |        |           |  |  |     |
|----|--------|-----------|--|--|-----|
|    | 416120 | H46739    | gb:yo14h02.s1 Soares adult brain N2b5HB5 | 3.6                                      |     |
|    | 429239 | AA448419  | Hs.45209                                 | ESTs                                     | 3.6 |
|    | 419086 | NM_000216 | Hs.89591                                 | Kallmann syndrome 1 sequence             | 3.6 |
| 5  | 446659 | AI335361  | Hs.226376                                | ESTs                                     | 3.6 |
|    | 426757 | AW205640  | Hs.158206                                | ESTs                                     | 3.6 |
|    | 418819 | AA228776  | Hs.191721                                | ESTs                                     | 3.6 |
|    | 458332 | AI000341  | Hs.220491                                | ESTs                                     | 3.6 |
|    | 408826 | AF216077  | Hs.48376                                 | Homo sapiens clone HB-2 mRNA sequence    | 3.6 |
| 10 | 410343 | AA084273  | Hs.76561                                 | ESTs, Weakly similar to S47072 finger pr | 3.6 |
|    | 410507 | AA355288  | Hs.40834                                 | transitional epithelia response protein  | 3.6 |
|    | 422977 | AA631498  |  | gb:np83h04.s1 NCL_CGAP_Thy1 Homo sapiens | 3.6 |
|    | 425305 | AA363025  | Hs.155572                                | Human clone 23801 mRNA sequence          | 3.6 |
|    | 428002 | AA418703  |  | gb:zv98c03.s1 Soares_NhHMPu_S1 Homo sapi | 3.6 |
| 15 | 428505 | AL035461  | Hs.2281                                  | chromogranin B (secretogranin 1)         | 3.6 |
|    | 430530 | AA480870  | Hs.47660                                 | ESTs                                     | 3.6 |
|    | 436425 | AI913146  | Hs.318725                                | CGI-72 protein                           | 3.6 |
|    | 438078 | AI016377  | Hs.131693                                | ESTs                                     | 3.6 |
|    | 442927 | AI024347  | Hs.131519                                | ESTs                                     | 3.6 |
| 20 | 446242 | N66336    | Hs.7360                                  | ESTs                                     | 3.6 |
|    | 448831 | AL080123  | Hs.22182                                 | zinc finger protein 23 (KOX 16)          | 3.6 |
|    | 450474 | AW872844  | Hs.201919                                | ESTs                                     | 3.6 |
|    | 452198 | AI097560  | Hs.61210                                 | ESTs, Weakly similar to I38022 hypotheti | 3.6 |
|    | 455900 | R22479    | Hs.167073                                | Homo sapiens cDNA FLJ13047 fis, clone NT | 3.6 |
| 25 | 436443 | AW138211  | Hs.128746                                | ESTs                                     | 3.6 |
|    | 426514 | BE616633  | Hs.170195                                | bone morphogenetic protein 7 (osteogenic | 3.6 |
|    | 459038 | AA203285  | Hs.294141                                | ESTs, Weakly similar to alternatively sp | 3.6 |
|    | 408902 | AW014869  | Hs.5510                                  | ESTs                                     | 3.6 |
|    | 442950 | AI500417  | Hs.46764                                 | ESTs                                     | 3.6 |
| 30 | 423905 | AW579960  | Hs.135150                                | lung type-I cell membrane-associated gly | 3.6 |
|    | 425478 | AB007953  | Hs.268840                                | ESTs                                     | 3.6 |
|    | 453884 | AA355925  | Hs.36232                                 | KIAA0186 gene product                    | 3.6 |
|    | 404721 |           |  |  | 3.6 |
|    | 408453 | AI369838  | Hs.45127                                 | chondroitin sulfate proteoglycan 5 (neur | 3.6 |
| 35 | 440553 | AA889416  | Hs.295362                                | Homo sapiens cDNA FLJ14459 fis, clone HE | 3.5 |
|    | 446372 | AB020644  | Hs.14945                                 | long fatty acyl-CoA synthetase 2 gene    | 3.5 |
|    | 413999 | N46124    | Hs.34460                                 | ESTs                                     | 3.5 |
|    | 421458 | NM_003654 | Hs.104576                                | carbohydrate (keratan sulfate Gal-6) sul | 3.5 |
|    | 425017 | AL119305  | Hs.288405                                | ESTs                                     | 3.5 |
| 40 | 435958 | H98180    | Hs.117975                                | ESTs                                     | 3.5 |
|    | 415101 | R45531    | Hs.144534                                | ESTs                                     | 3.5 |
|    | 451320 | AW118072  | Hs.89981                                 | diacylglycerol kinase, zeta (104kD)      | 3.5 |
|    | 430290 | AI734110  | Hs.136355                                | ESTs                                     | 3.5 |
|    | 416836 | D54745    | Hs.80247                                 | cholecystokinin                          | 3.5 |
| 45 | 414821 | M63835    | Hs.77424                                 | Fc fragment of IgG, high affinity Ia, re | 3.5 |
|    | 419412 | AW161058  | Hs.90297                                 | synuclein, beta                          | 3.5 |
|    | 437860 | AA333063  | Hs.279898                                | Homo sapiens cDNA: FLJ23165 fis, clone L | 3.5 |
|    | 452689 | F33868    | Hs.284176                                | transferrin                              | 3.5 |
|    | 416661 | AA634543  | Hs.79440                                 | IGF-II mRNA-binding protein 3            | 3.5 |
| 50 | 427491 | R43279    | Hs.22574                                 | ESTs, Weakly similar to I38022 hypotheti | 3.5 |
|    | 428037 | N47474    | Hs.89230                                 | potassium intermediate/small conductance | 3.5 |
|    | 444584 | AI168422  |  | gb:ok30e11.x1 Soares_NSF_F8_9W_OT_PA_P_S | 3.5 |
|    | 408296 | AL117452  | Hs.44155                                 | DKFZP586G1517 protein                    | 3.5 |
|    | 453775 | NM_002916 | Hs.35120                                 | replication factor C (activator 1) 4 (37 | 3.5 |
| 55 | 412659 | AW753865  | Hs.74376                                 | olfactomedin related ER localized protei | 3.5 |
|    | 429077 | AB028983  | Hs.2352                                  | adenylate cyclase 2 (brain)              | 3.5 |
|    | 436887 | AW953157  | Hs.193235                                | hypothetical protein DKFZp547D155        | 3.5 |
|    | 450784 | AW246803  | Hs.47289                                 | ESTs                                     | 3.5 |
|    | 446827 | AW451243  | Hs.157069                                | ESTs                                     | 3.5 |
| 60 | 436434 | N50465    | Hs.92927                                 | putative 47 kDa protein                  | 3.5 |
|    | 412777 | AI335773  | Hs.270123                                | ESTs                                     | 3.5 |
|    | 436476 | AA326108  | Hs.33829                                 | bHLH protein DEC2                        | 3.5 |
|    | 408601 | U47928    | Hs.86122                                 | protein A                                | 3.4 |
|    | 429401 | AW296102  | Hs.99272                                 | ESTs, Weakly similar to S32567 A4 protei | 3.4 |
| 65 | 448425 | AI500359  | Hs.233401                                | ESTs                                     | 3.4 |
|    | 418727 | AA227609  | Hs.94834                                 | ESTs                                     | 3.4 |
|    | 451729 | AW160725  | Hs.312469                                | ESTs                                     | 3.4 |
|    | 435910 | AI084152  | Hs.21782                                 | ESTs, Weakly similar to ALU7_HUMAN ALU S | 3.4 |
|    | 434577 | R37316    | Hs.179769                                | Homo sapiens cDNA: FLJ22487 fis, clone H | 3.4 |
| 70 | 414598 | AI094221  | Hs.135150                                | lung type-I cell membrane-associated gly | 3.4 |
|    | 439627 | BE621702  | Hs.29076                                 | hypothetical protein FLJ21841            | 3.4 |
|    | 413293 | AL047483  | Hs.302498                                | GTP-binding protein homologous to Saccha | 3.4 |
|    | 423992 | AW896292  | Hs.137206                                | Homo sapiens mRNA; cDNA DKFZp564H1663 (f | 3.4 |
|    | 426249 | F05422    | Hs.168352                                | nucleoporin-like protein 1               | 3.4 |
| 75 | 426968 | U07616    | Hs.173034                                | amphiphysin (Stiff-Mann syndrome with br | 3.4 |
|    | 430388 | AA356923  | Hs.240770                                | nuclear cap binding protein subunit 2, 2 | 3.4 |
|    | 435061 | AI651474  | Hs.163944                                | ESTs                                     | 3.4 |
|    | 452291 | AF015592  | Hs.28853                                 | CDC7 (cell division cycle 7, S. cerevisi | 3.4 |
|    | 449714 | AB033015  | Hs.23941                                 | KIAA1189 protein                         | 3.4 |
| 80 | 443392 | AI055821  | Hs.293420                                | ESTs                                     | 3.4 |
|    | 410082 | AA081594  | Hs.158311                                | Musashi (Drosophila) homolog 1           | 3.4 |
|    | 445337 | NM_013280 | Hs.12523                                 | fibronectin leucine rich transmembrane p | 3.4 |
|    | 408493 | BE206854  | Hs.46039                                 | phosphoglycerate mutase 2 (muscle)       | 3.4 |
|    | 432731 | R31178    | Hs.287820                                | fibronectin 1                            | 3.4 |

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|    | 448758 | AB018311  | Hs.21917  | KIAA0768 protein                         | 3.4 |
|    | 432613 | AW081698  | Hs.80712  | KIAA0202 protein                         | 3.4 |
|    | 434164 | AW207019  | Hs.148135 | serine/threonine kinase 33               | 3.4 |
|    | 425294 | AF033827  | Hs.155553 | HNK-1 sulfotransferase                   | 3.4 |
| 5  | 410108 | AA081659  | Hs.318775 | OSBP-related protein 6                   | 3.4 |
|    | 406815 | AA833930  | Hs.288036 | tRNA isopentenylpyrophosphate transferas | 3.4 |
|    | 402855 |           |           |  | 3.3 |
|    | 422170 | AI791949  | Hs.112432 | anti-Mullerian hormone                   | 3.3 |
|    | 445034 | AW293376  | Hs.143659 | ESTs                                     | 3.3 |
| 10 | 424378 | W28020    | Hs.167988 | neural cell adhesion molecule 1          | 3.3 |
|    | 423611 | AB011163  | Hs.129908 | KIAA0591 protein                         | 3.3 |
|    | 435593 | R88872    | Hs.4964   | DKFZP586J1624 protein                    | 3.3 |
|    | 404819 |           |           |  | 3.3 |
|    | 436607 | AW661783  | Hs.211061 | ESTs                                     | 3.3 |
| 15 | 427315 | AA179949  | Hs.175563 | Homo sapiens mRNA; cDNA DKFZp564N0763 (f | 3.3 |
|    | 452693 | T79153    | Hs.48589  | zinc finger protein 228                  | 3.3 |
|    | 454996 | AW850180  |           | gb:IL3-CT0219-271099-022-C09 CT0219 Homo | 3.3 |
|    | 406927 | M26460    |           | gb:Homo sapiens (clone 104) retinoblasto | 3.3 |
|    | 409045 | AA635062  | Hs.50094  | Homo sapiens mRNA; cDNA DKFZp434O0515 (f | 3.3 |
| 20 | 415238 | R37780    | Hs.21422  | ESTs                                     | 3.3 |
|    | 417845 | AL117461  | Hs.82719  | Homo sapiens mRNA; cDNA DKFZp586F1822 (f | 3.3 |
|    | 421192 | AA833718  | Hs.204529 | KIAA1806 protein                         | 3.3 |
|    | 426695 | AW118191  | Hs.112729 | ESTs                                     | 3.3 |
|    | 438885 | AI886558  | Hs.184987 | ESTs                                     | 3.3 |
| 25 | 451762 | AF222980  | Hs.26985  | disrupted in schizophrenia 1             | 3.3 |
|    | 452103 | R42764    | Hs.339654 | ESTs, Weakly similar to I38022 hypothe   | 3.3 |
|    | 453590 | AF150278  | Hs.33578  | KIAA0820 protein                         | 3.3 |
|    | 453616 | NM_003462 | Hs.33846  | dynein, axonemal, light intermediate pol | 3.3 |
|    | 457285 | AI033858  | Hs.130522 | Kv channel-interacting protein 1         | 3.3 |
| 30 | 436045 | AB037723  | Hs.5028   | DKFZP564O0423 protein                    | 3.3 |
|    | 437470 | AL390147  | Hs.134742 | hypothetical protein DKFZp547D065        | 3.3 |
|    | 448520 | AB002367  | Hs.21355  | doublecortin and CaM kinase-like 1       | 3.3 |
|    | 436480 | AJ271643  | Hs.87469  | putative acid-sensing ion channel        | 3.3 |
|    | 432656 | NM_000246 | Hs.3076   | MHC class II transactivator              | 3.3 |
| 35 | 443898 | AW804296  | Hs.9950   | Sec61 gamma                              | 3.3 |
|    | 423582 | BE000831  | Hs.23837  | Homo sapiens cDNA FLJ11812 fis, clone HE | 3.3 |
|    | 445953 | AI612775  | Hs.145710 | ESTs                                     | 3.3 |
|    | 427940 | AA417812  | Hs.38775  | ESTs                                     | 3.3 |
|    | 414683 | S78296    | Hs.76888  | hypothetical protein MGC12702            | 3.3 |
| 40 | 428484 | AF104032  | Hs.184601 | solute carrier family 7 (cationic amino  | 3.3 |
|    | 420649 | AI866964  | Hs.124704 | ESTs, Moderately similar to S65657 alpha | 3.3 |
|    | 419498 | AL036591  | Hs.20887  | hypothetical protein FLJ10392            | 3.3 |
|    | 457579 | AB030816  | Hs.36761  | HRAS-like suppressor                     | 3.3 |
|    | 436556 | AI364997  | Hs.7572   | ESTs                                     | 3.2 |
| 45 | 424369 | R87622    | Hs.26714  | KIAA1831 protein                         | 3.2 |
|    | 457065 | AI476318  | Hs.192480 | ESTs                                     | 3.2 |
|    | 440210 | AW674562  | Hs.125296 | ESTs                                     | 3.2 |
|    | 444513 | AL120214  | Hs.7117   | glutamate receptor, ionotropic, AMPA 1   | 3.2 |
|    | 434353 | AA630863  | Hs.131375 | ESTs, Moderately similar to ALUB_HUMAN!  | 3.2 |
| 50 | 414430 | AI346201  | Hs.76118  | ubiquitin carboxyl-terminal esterase L1  | 3.2 |
|    | 439924 | AI985897  | Hs.125293 | ESTs                                     | 3.2 |
|    | 411505 | AF155659  | Hs.70565  | molybdenum cofactor synthesis 2          | 3.2 |
|    | 423175 | W27595    | Hs.18653  | hypothetical protein FLJ14627            | 3.2 |
|    | 415115 | AA214228  | Hs.127751 | hypothetical protein                     | 3.2 |
| 55 | 407878 | D87468    | Hs.40888  | activity-regulated cytoskeleton-associat | 3.2 |
|    | 410274 | AA381807  | Hs.61762  | hypoxia-inducible protein 2              | 3.2 |
|    | 437762 | T78028    | Hs.154679 | synaptotagmin I                          | 3.2 |
|    | 438944 | AA302517  | Hs.92732  | KIAA1444 protein                         | 3.2 |
|    | 450313 | AI038989  | Hs.332633 | Bardet-Biedl syndrome 2                  | 3.2 |
| 60 | 409459 | D86407    | Hs.54481  | low density lipoprotein receptor-related | 3.2 |
|    | 410953 | AW811766  | Hs.334858 | hypothetical protein MGC12250            | 3.2 |
|    | 418527 | AA450386  | Hs.7149   | Homo sapiens cDNA: FLJ21950 fis, clone H | 3.2 |
|    | 420081 | AW510776  | Hs.94958  | tubulin tyrosine ligase-like 1           | 3.2 |
|    | 429496 | AA453800  | Hs.192793 | ESTs                                     | 3.2 |
| 65 | 430099 | AW194988  | Hs.20537  | hypothetical protein FLJ13942            | 3.2 |
|    | 434928 | AW015595  | Hs.4267   | Homo sapiens clones 24714 and 24715 mRNA | 3.2 |
|    | 435532 | AW291488  | Hs.117305 | Homo sapiens, clone IMAGE:3582908, mRNA  | 3.2 |
|    | 438306 | AW188266  | Hs.163645 | ESTs                                     | 3.2 |
|    | 439274 | AF086092  | Hs.48372  | ESTs                                     | 3.2 |
| 70 | 440847 | AA907511  | Hs.130178 | ESTs                                     | 3.2 |
|    | 447750 | AI422234  | Hs.143434 | contactin 1                              | 3.2 |
|    | 455350 | AW901809  |           | gb:QV0-NN1020-170400-195-h02 NN1020 Homo | 3.2 |
|    | 430890 | X54232    | Hs.2699   | glypican 1                               | 3.2 |
| 75 | 420568 | F09247    | Hs.247735 | protocadherin alpha 10                   | 3.2 |
|    | 410768 | AF038185  | Hs.66187  | Homo sapiens clone 23700 mRNA sequence   | 3.2 |
|    | 427450 | AB014526  | Hs.178121 | KIAA0626 gene product                    | 3.2 |
|    | 430456 | AA314998  | Hs.241503 | hypothetical protein                     | 3.2 |
|    | 430181 | AF065314  | Hs.234785 | cyclic nucleotide gated channel alpha 3  | 3.2 |
| 80 | 418512 | AW498974  | Hs.89981  | diacylglycerol kinase, zeta (104kD)      | 3.2 |
|    | 419912 | AF249745  | Hs.6066   | Rho guanine nucleotide exchange factor ( | 3.2 |
|    | 450689 | AI369275  | Hs.243010 | Homo sapiens cDNA FLJ14445 fis, clone HE | 3.2 |
|    | 424899 | AL119387  | Hs.119062 | ESTs                                     | 3.2 |
|    | 436277 | R88520    | Hs.120917 | ESTs                                     | 3.2 |

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|    | 451455 | AI937227  | Hs.8821   | hepcidin antimicrobial peptide           | 3.2 |
|    | 445078 | AI869975  | Hs.4775   | junctophilin 3                           | 3.2 |
|    | 447746 | AW015920  | Hs.161359 | ESTs                                     | 3.2 |
| 5  | 435458 | F11872    | Hs.4892   | Homo sapiens clone 24841 mRNA sequence   | 3.2 |
|    | 427729 | AB033100  | Hs.300646 | KIAA protein (similar to mouse paladin)  | 3.2 |
|    | 417417 | F05745    | Hs.89512  | ATPase, Ca++ transporting, plasma membra | 3.1 |
|    | 438810 | AW897846  | Hs.6421   | hypothetical protein DKFZp761N09121      | 3.1 |
|    | 439570 | T79925    | Hs.269165 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 3.1 |
| 10 | 432527 | AW975028  | Hs.102754 | ESTs                                     | 3.1 |
|    | 416801 | X98834    | Hs.79971  | sal (Drosophila)-like 2                  | 3.1 |
|    | 421988 | AW450481  | Hs.161333 | ESTs                                     | 3.1 |
|    | 426509 | M31165    | Hs.2050   | pentaxin-related gene, rapidly induced b | 3.1 |
|    | 408786 | AA773187  | Hs.294027 | ESTs                                     | 3.1 |
| 15 | 433494 | AB029396  | Hs.3353   | beta-1,3-glucuronyltransferase 1 (glucur | 3.1 |
|    | 412723 | AA648459  | Hs.335951 | hypothetical protein AF301222            | 3.1 |
|    | 418329 | AW247430  | Hs.84152  | cystathionine-beta-synthase              | 3.1 |
|    | 439456 | AI752409  | Hs.109314 | hypothetical protein FLJ20980            | 3.1 |
|    | 428832 | AA578229  | Hs.324239 | ESTs, Moderately similar to ZN91_HUMAN Z | 3.1 |
|    | 452780 | BE171598  | Hs.13522  | ESTs, Weakly similar to I38022 hypothi   | 3.1 |
| 20 | 438192 | AI859065  | Hs.337620 | Homo sapiens AFG3L1 isoform 1 mRNA, part | 3.1 |
|    | 424939 | AK000059  | Hs.153881 | Homo sapiens NY-REN-62 antigen mRNA, par | 3.1 |
|    | 403053 | R58624    | Hs.2186   | eukaryotic translation elongation factor | 3.1 |
|    | 404299 |           |           |  | 3.1 |
| 25 | 407864 | AF069291  | Hs.40539  | chromosome 8 open reading frame 1        | 3.1 |
|    | 410181 | AI468210  | Hs.261285 | pleiotropic regulator 1 (PRL1, Arabidops | 3.1 |
|    | 418852 | BE537037  | Hs.273294 | hypothetical protein FLJ20069            | 3.1 |
|    | 449101 | AA205847  | Hs.23016  | G protein-coupled receptor               | 3.1 |
|    | 453240 | AI969564  | Hs.166254 | hypothetical protein DKFZp566I133        | 3.1 |
| 30 | 440486 | BE243513  | Hs.7212   | hypothetical protein PP1044              | 3.1 |
|    | 408096 | BE250162  | Hs.83765  | dihydrofolate reductase                  | 3.1 |
|    | 439864 | AI720078  | Hs.291997 | ESTs, Weakly similar to A47582 B-cell gr | 3.1 |
|    | 414706 | AW340125  | Hs.76989  | KIAA0097 gene product                    | 3.1 |
|    | 436315 | BE390513  | Hs.27935  | hypothetical protein MGC4837             | 3.1 |
| 35 | 426855 | AL117427  | Hs.172778 | Homo sapiens mRNA; cDNA DKFZp566P013 (fr | 3.1 |
|    | 425683 | AB037813  | Hs.155200 | hypothetical protein DKFZp762K222        | 3.1 |
|    | 410126 | BE169274  | Hs.169387 | KIAA0036 gene product                    | 3.1 |
|    | 435312 | AJ243396  | Hs.4865   | voltage-gated sodium channel beta-3 subu | 3.1 |
|    | 425491 | AA883316  | Hs.255221 | ESTs                                     | 3.1 |
| 40 | 456273 | AF154846  | Hs.1148   | zinc finger protein                      | 3.1 |
|    | 412140 | AA219691  | Hs.73625  | RAB6 interacting, kinesin-like (rakines  | 3.1 |
|    | 445255 | NM_014841 | Hs.12477  | synaposomal-associated protein, 91 kDa   | 3.1 |
|    | 432154 | AI701523  | Hs.112577 | ESTs                                     | 3.1 |
|    | 453128 | AW026516  | Hs.31791  | acylphosphatase 2, muscle type           | 3.1 |
| 45 | 438458 | AW975186  |           | gb:EST387294 MAGE resequences, MAGN Homo | 3.1 |
|    | 448616 | AF035621  | Hs.21611  | kinesin family member 3C                 | 3.0 |
|    | 429281 | AA830856  | Hs.29808  | Homo sapiens cDNA: FLJ21122 fis, clone C | 3.0 |
|    | 443906 | AA348031  | Hs.7913   | ESTs                                     | 3.0 |
|    | 417318 | AW953937  | Hs.12891  | ESTs                                     | 3.0 |
| 50 | 452619 | AW298597  | Hs.61884  | Homo sapiens, clone IMAGE:4298026, mRNA, | 3.0 |
|    | 444153 | AK001610  | Hs.10414  | hypothetical protein FLJ10748            | 3.0 |
|    | 408790 | AW580227  | Hs.47860  | neurotrophic tyrosine kinase, receptor,  | 3.0 |
|    | 426327 | W03242    | Hs.44898  | Homo sapiens clone TCCCTA00151 mRNA sequ | 3.0 |
|    | 451468 | AW503398  | Hs.293663 | ESTs, Moderately similar to I38022 hypot | 3.0 |
| 55 | 422758 | AF152329  | Hs.284180 | protocadherin gamma subfamily C, 3       | 3.0 |
|    | 421633 | AF121860  | Hs.106260 | sorting nexin 10                         | 3.0 |
|    | 428361 | NM_015905 | Hs.183858 | transcriptional intermediary factor 1    | 3.0 |
|    | 418932 | L34059    | Hs.89484  | cadherin 4, type 1, R-cadherin (retinal) | 3.0 |
|    | 416805 | F13271    | Hs.79981  | Human clone 23560 mRNA sequence          | 3.0 |
| 60 | 419518 | U79289    | Hs.90798  | Human clone 23595 mRNA sequence          | 3.0 |
|    | 422709 | AA315331  | Hs.153485 | ESTs                                     | 3.0 |
|    | 423135 | N67655    | Hs.26411  | ESTs                                     | 3.0 |
|    | 424901 | Z11933    | Hs.182505 | POU domain, class 3, transcription facto | 3.0 |
|    | 426617 | W58006    | Hs.266258 | endonuclease G-like 1                    | 3.0 |
| 65 | 427386 | AW836261  | Hs.337717 | ESTs                                     | 3.0 |
|    | 429859 | NM_007050 | Hs.225952 | protein tyrosine phosphatase, receptor I | 3.0 |
|    | 435071 | D60683    | Hs.35495  | ESTs                                     | 3.0 |
|    | 435092 | AL137310  | Hs.4749   | Homo sapiens mRNA; cDNA DKFZp761E13121 ( | 3.0 |
|    | 436211 | AK001581  | Hs.334828 | hypothetical protein FLJ10719; KIAA1794  | 3.0 |
| 70 | 436936 | AL134451  | Hs.197478 | ESTs                                     | 3.0 |
|    | 445855 | BE247129  | Hs.145569 | ESTs                                     | 3.0 |
|    | 452294 | AI871925  | Hs.117895 | ESTs, Moderately similar to A47582 B-cel | 3.0 |
|    | 433980 | AA137152  | Hs.286049 | phosphoserine aminotransferase           | 3.0 |
|    | 430228 | AW950939  | Hs.6382   | ESTs, Highly similar to T00391 hypothi   | 3.0 |
| 75 | 451026 | AA013218  | Hs.157492 | cer-d4 (mouse) homolog                   | 3.0 |
|    | 435232 | NM_001262 | Hs.4854   | cyclin-dependent kinase inhibitor 2C (p1 | 3.0 |
|    | 439566 | AF086387  |           | gb:Homo sapiens full length insert cDNA  | 3.0 |
|    | 425782 | U66468    | Hs.159525 | cell growth regulatory with EF-hand doma | 3.0 |
|    | 416586 | D44643    | Hs.14144  | secreted modular calcium-binding protein | 3.0 |
| 80 | 416874 | H98752    | Hs.42558  | ESTs                                     | 3.0 |
|    | 410386 | W26187    | Hs.3327   | Homo sapiens cDNA: FLJ22219 fis, clone H | 3.0 |
|    | 411411 | AA345241  | Hs.55950  | ESTs, Weakly similar to KIAA1330 protein | 3.0 |
|    | 424066 | Z99348    | Hs.112461 | ESTs, Weakly similar to I38022 hypothi   | 3.0 |
|    | 404048 |           |           |  | 3.0 |



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|    |        |           |           |   |     |
|----|--------|-----------|-----------|---|-----|
|    | 429163 | AA884766  |           | gb:am20a10.s1 Soares_NFL_T_GBC_S1 Homo s  | 3.0 |
|    | 454117 | BE410100  | Hs.40368  | adaptor-related protein complex 1, sigma  | 3.0 |
|    | 418196 | AI745649  | Hs.26549  | KIAA1708 protein                          | 3.0 |
|    | 434131 | AI858275  | Hs.143659 | ESTs                                      | 3.0 |
| 5  | 441255 | RO6350    | Hs.171635 | ESTs                                      | 2.9 |
|    | 453900 | AW003582  | Hs.226414 | ESTs, Weakly similar to ALU8_HUMAN ALU S  | 2.9 |
|    | 453905 | NM_002314 | Hs.36566  | LIM domain kinase 1                       | 2.9 |
|    | 416602 | NM_006159 | Hs.79389  | nel (chicken)-like 2                      | 2.9 |
|    | 431173 | AW971198  | Hs.294068 | ESTs                                      | 2.9 |
| 10 | 425599 | AW366745  | Hs.214140 | ESTs, Weakly similar to ALU1_HUMAN ALU S  | 2.9 |
|    | 436401 | AI087958  | Hs.29088  | ESTs                                      | 2.9 |
|    | 422960 | AW890487  | Hs.63984  | cadherin 13, H-cadherin (heart)           | 2.9 |
|    | 451558 | NM_001089 | Hs.26630  | ATP-binding cassette, sub-family A (ABC1  | 2.9 |
|    | 412490 | AW803564  | Hs.288850 | Homo sapiens cDNA: FLJ22528 fis, clone H  | 2.9 |
| 15 | 433149 | BE257672  | Hs.42949  | hypothetical protein HES6                 | 2.9 |
|    | 434811 | AW971205  | Hs.114280 | ESTs                                      | 2.9 |
|    | 425897 | AA935315  | Hs.48965  | Homo sapiens cDNA: FLJ21693 fis, clone C  | 2.9 |
|    | 452092 | BE245374  | Hs.27842  | hypothetical protein FLJ11210             | 2.9 |
|    | 453496 | AA442103  | Hs.33084  | solute carrier family 2 (facilitated glu  | 2.9 |
| 20 | 411124 | AW196937  | Hs.53929  | ESTs, Weakly similar to ALUB_HUMAN !!!    | 2.9 |
|    | 419227 | BE537383  | Hs.89739  | cholinergic receptor, nicotinic, beta po  | 2.9 |
|    | 427651 | AW405731  | Hs.18498  | Homo sapiens cDNA FLJ12277 fis, clone MA  | 2.9 |
|    | 441707 | R42637    | Hs.21963  | hypothetical protein DKFZp761B0514        | 2.9 |
|    | 435741 | AI240668  | Hs.113099 | ESTs                                      | 2.9 |
| 25 | 437273 | AL137451  | Hs.120873 | ESTs, Highly similar to T46266 hypothi    | 2.9 |
|    | 422939 | AW394055  | Hs.98427  | ESTs, Weakly similar to I38022 hypothi    | 2.9 |
|    | 439376 | AA883521  | Hs.222064 | ESTs                                      | 2.9 |
|    | 439935 | S75105    | Hs.301676 | glutamate receptor, ionotropic, kainate   | 2.9 |
|    | 437267 | AW511443  | Hs.258110 | ESTs                                      | 2.9 |
| 30 | 453740 | AL120295  | Hs.311809 | ESTs, Moderately similar to PC4259 femi   | 2.9 |
|    | 400250 |           |           |   | 2.9 |
|    | 400992 |           |           |   | 2.9 |
|    | 408814 | N62499    | Hs.176227 | hypothetical protein FLJ11155             | 2.9 |
| 35 | 411849 | AW964970  | Hs.18861  | ESTs, Moderately similar to KIAA1276 pro  | 2.9 |
|    | 414853 | U31116    | Hs.77501  | sarcoglycan, beta (43kD dystrophin-assoc  | 2.9 |
|    | 423751 | AW235633  | Hs.46525  | ESTs                                      | 2.9 |
|    | 426910 | AA470023  | Hs.190089 | ESTs, Moderately similar to ALU1_HUMAN A  | 2.9 |
|    | 450203 | AF097994  | Hs.301528 | L-kynurenine/alpha-aminoadipate aminotra  | 2.9 |
| 40 | 459311 | R40192    | Hs.21527  | Human DNA sequence from clone GS1-115M3   | 2.9 |
|    | 425304 | AA463844  | Hs.31339  | fibroblast growth factor 11               | 2.9 |
|    | 428500 | AI815395  | Hs.184641 | fatty acid desaturase 2                   | 2.9 |
|    | 421641 | AI638184  | Hs.106334 | Homo sapiens clone Z3836 mRNA sequence    | 2.9 |
|    | 421141 | AW117261  | Hs.125914 | ESTs                                      | 2.9 |
|    | 407870 | AB032990  | Hs.40719  | hypothetical protein KIAA1164             | 2.9 |
| 45 | 456723 | Z43902    | Hs.4748   | adenylate cyclase activating polypeptide  | 2.9 |
|    | 436456 | AW292677  | Hs.248122 | G protein-coupled receptor 24             | 2.9 |
|    | 421483 | NM_003388 | Hs.104717 | hypothetical protein MGC11333             | 2.9 |
|    | 412190 | R16180    | Hs.274461 | ESTs                                      | 2.9 |
|    | 446131 | NM_000929 | Hs.290    | phospholipase A2, group V                 | 2.9 |
| 50 | 441668 | AI611973  | Hs.127525 | ESTs                                      | 2.9 |
|    | 437387 | AI198874  | Hs.28847  | AD026 protein                             | 2.9 |
|    | 423420 | AI571364  | Hs.126382 | Homo sapiens mRNA; cDNA DKFZp7611224 (f   | 2.9 |
|    | 427958 | AA418000  | Hs.98280  | potassium intermediate/small conductance  | 2.9 |
| 55 | 429084 | AJ001443  | Hs.195614 | splicing factor 3b, subunit 3, 130kD      | 2.9 |
|    | 447067 | R42098    | Hs.21964  | ESTs                                      | 2.9 |
|    | 430887 | M66801    | Hs.260287 | KIAA1841 protein                          | 2.9 |
|    | 441824 | AB007871  | Hs.7977   | KIAA0411 gene product                     | 2.9 |
|    | 424126 | AA335635  | Hs.96917  | ESTs                                      | 2.9 |
| 60 | 408739 | W01556    | Hs.238797 | ESTs, Moderately similar to I38022 hypot  | 2.9 |
|    | 447422 | BE618703  | Hs.98258  | orthopedia (Drosophila) homolog           | 2.9 |
|    | 435615 | Y15065    | Hs.4975   | potassium voltage-gated channel, KQT-lik  | 2.9 |
|    | 446997 | AA383439  | Hs.16758  | Spir-1 protein                            | 2.9 |
|    | 433573 | AF234887  | Hs.57652  | cadherin, EGF LAG seven-pass G-type rece  | 2.9 |
| 65 | 408447 | AK002089  | Hs.45080  | Homo sapiens cDNA FLJ11227 fis, clone PL  | 2.9 |
|    | 419586 | AI088485  | Hs.144759 | ESTs, Weakly similar to I38022 hypothi    | 2.8 |
|    | 417022 | NM_014737 | Hs.80905  | Ras association (RalGDS/AF-6) domain fam  | 2.8 |
|    | 408432 | AW195262  |           | gb:xn67b05.x1 NCI_CGAP_CML1 Homo sapiens  | 2.8 |
|    | 420320 | AB002361  | Hs.96633  | KIAA0363 protein                          | 2.8 |
| 70 | 425241 | AA324624  | Hs.155247 | aldolase C, fructose-bisphosphate         | 2.8 |
|    | 428670 | AA431682  | Hs.134832 | ESTs                                      | 2.8 |
|    | 424415 | NM_001975 | Hs.146580 | enolase 2, (gamma, neuronal)              | 2.8 |
|    | 409185 | AW961601  | Hs.252406 | hypothetical protein FLJ12296 similar to  | 2.8 |
|    | 411555 | AF113537  | Hs.70669  | HMP19 protein                             | 2.8 |
| 75 | 426847 | S78723    | Hs.298623 | 5-hydroxytryptamine (serotonin) receptor  | 2.8 |
|    | 458809 | AW972512  | Hs.20985  | sin3-associated polypeptide, 30kD         | 2.8 |
|    | 420071 | AB028985  | Hs.94806  | ATP-binding cassette, sub-family A (ABC1  | 2.8 |
|    | 424572 | M19650    | Hs.150741 | 2',3'-cyclic nucleotide 3' phosphodiester | 2.8 |
|    | 444670 | H58373    | Hs.332938 | hypothetical protein MGC5370              | 2.8 |
| 80 | 411089 | AA456454  | Hs.183418 | cell division cycle 2-like 1 (PITSLRE pr  | 2.8 |
|    | 416111 | AA033813  | Hs.79018  | chromatin assembly factor 1, subunit A (  | 2.8 |
|    | 440637 | AW900115  | Hs.7309   | Homo sapiens clone 23741 mRNA sequence    | 2.8 |
|    | 408554 | AA836381  | Hs.315111 | nuclear receptor co-repressor/HDAC3 comp  | 2.8 |
|    | 403056 | R58624    | Hs.2186   | eukaryotic translation elongation factor  | 2.8 |

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|    |        |           |           |   |     |
|----|--------|-----------|-----------|---|-----|
|    | 423449 | AI497900  | Hs.33067  | ESTs                                      | 2.8 |
|    | 424188 | AW954552  | Hs.142634 | zinc finger protein                       | 2.8 |
|    | 429006 | AA443143  | Hs.50929  | hypothetical protein FLJ13842             | 2.8 |
|    | 434981 | AW182577  | Hs.293077 | ESTs                                      | 2.8 |
| 5  | 437435 | AA249439  | Hs.27027  | hypothetical protein DKFZp762H1311        | 2.8 |
|    | 442748 | AI016713  | Hs.135787 | ESTs                                      | 2.8 |
|    | 443312 | N52025    | Hs.46616  | ESTs                                      | 2.8 |
|    | 450940 | AI744943  | Hs.143209 | ESTs, Weakly similar to I38022 hypotheti  | 2.8 |
| 10 | 452738 | AL133800  | Hs.7086   | hypothetical protein MGC12435             | 2.8 |
|    | 409182 | AA064970  | Hs.118145 | ESTs                                      | 2.8 |
|    | 439793 | AA018825  | Hs.7934   | Kruppel-like factor 4 (gut)               | 2.8 |
|    | 432683 | AW995441  | Hs.10475  | ESTs                                      | 2.8 |
|    | 434269 | AK001991  | Hs.3781   | similar to murine leucine-rich repeat pr  | 2.8 |
|    | 429500 | X78565    | Hs.289114 | hexabrachion (tenascin C, cytotoxin)      | 2.8 |
| 15 | 433290 | R20077    | Hs.302185 | Homo sapiens clone 23618 mRNA sequence    | 2.8 |
|    | 434276 | AF123659  | Hs.93605  | leucine zipper, putative tumor suppressor | 2.8 |
|    | 435977 | AL138079  | Hs.5012   | brain-specific membrane-anchored protein  | 2.8 |
|    | 430294 | AI538226  | Hs.32976  | guanine nucleotide binding protein 4      | 2.8 |
|    | 425168 | R96366    |           | gb:yq37d04.s1 Soares fetal liver spleen   | 2.8 |
| 20 | 428180 | AI129767  | Hs.182874 | guanine nucleotide binding protein (G pr  | 2.8 |
|    | 409348 | AI401535  | Hs.146090 | ESTs                                      | 2.8 |
|    | 409887 | AL137534  | Hs.56876  | Homo sapiens mRNA; cDNA DKFZp434H1419 (f  | 2.8 |
|    | 457211 | AW972565  | Hs.32399  | ESTs, Weakly similar to S51797 vasodilat  | 2.8 |
|    | 430039 | BE253012  | Hs.153400 | ESTs, Weakly similar to ALU1_HUMAN ALU S  | 2.8 |
| 25 | 417642 | BE302665  | Hs.105461 | hypothetical protein FLJ20357             | 2.8 |
|    | 419169 | AW851980  | Hs.262346 | ESTs, Weakly similar to S72482 hypotheti  | 2.8 |
|    | 434008 | AA740878  | Hs.112982 | ESTs                                      | 2.8 |
|    | 446776 | AW293417  | Hs.156455 | ESTs                                      | 2.8 |
| 30 | 408838 | AI669535  | Hs.40369  | ESTs                                      | 2.8 |
|    | 422565 | BE259035  | Hs.118400 | singed (Drosophila)-like (sea urchin fas  | 2.8 |
|    | 447397 | BE247676  | Hs.18442  | E-1 enzyme                                | 2.8 |
|    | 412530 | AA766268  | Hs.266273 | hypothetical protein FLJ13346             | 2.8 |
|    | 424330 | AW073953  | Hs.333396 | Homo sapiens cDNA FLJ13596 fis, clone PL  | 2.8 |
| 35 | 446377 | AW014022  | Hs.170953 | ESTs                                      | 2.8 |
|    | 458924 | BE242158  | Hs.24427  | DKFZP566O1646 protein                     | 2.8 |
|    | 447710 | AI420523  | Hs.328241 | ESTs                                      | 2.8 |
|    | 404049 |           |           |   | 2.8 |
|    | 416913 | AW934714  |           | gb:RC1-DT0001-031299-011-a11 DT0001 Homo  | 2.8 |
| 40 | 426400 | M78361    | Hs.169743 | Homo sapiens clone 25121 neuronal difact  | 2.8 |
|    | 413264 | W26456    | Hs.134757 | hypothetical protein FLJ20033             | 2.8 |
|    | 458997 | AW937420  | Hs.69662  | ESTs                                      | 2.7 |
|    | 422864 | AA318323  |           | gb:EST20390 Retina II Homo sapiens cDNA   | 2.7 |
|    | 430526 | AF181862  | Hs.242407 | G protein-coupled receptor, family C, gr  | 2.7 |
| 45 | 452023 | AB032999  | Hs.27566  | KIAA1173 protein                          | 2.7 |
|    | 432022 | AL162042  | Hs.272348 | Homo sapiens mRNA; cDNA DKFZp761L1212 (f  | 2.7 |
|    | 452438 | BE514230  | Hs.29595  | JM4 protein                               | 2.7 |
|    | 435408 | H07897    | Hs.4302   | ESTs, Weakly similar to T29299 hypotheti  | 2.7 |
|    | 418791 | AA935633  | Hs.194628 | ESTs                                      | 2.7 |
| 50 | 438821 | AA826425  | Hs.291829 | ESTs                                      | 2.7 |
|    | 423464 | NM_016240 | Hs.128856 | CSR1 protein                              | 2.7 |
|    | 442091 | AW770493  | Hs.182874 | guanine nucleotide binding protein (G pr  | 2.7 |
|    | 442242 | AV647908  | Hs.90424  | Homo sapiens cDNA: FLJ23285 fis, clone H  | 2.7 |
|    | 412436 | AA665089  |           | gb:nu76d01.s1 NCL_CGAP_Alv1 Homo sapiens  | 2.7 |
| 55 | 432821 | BE170702  | Hs.279005 | solute carrier family 21 (organic anion   | 2.7 |
|    | 416404 | AA180138  | Hs.107924 | ESTs                                      | 2.7 |
|    | 441364 | AW450466  | Hs.126830 | ESTs, Weakly similar to YD38_YEAST HYPOT  | 2.7 |
|    | 450202 | AW969756  | Hs.34145  | ESTs, Weakly similar to B49647 GTP-bindi  | 2.7 |
|    | 426304 | AA374532  | Hs.124673 | Homo sapiens cDNA FLJ11477 fis, clone HE  | 2.7 |
| 60 | 428722 | U76456    | Hs.190787 | tissue inhibitor of metalloproteinase 4   | 2.7 |
|    | 449701 | AW952323  | Hs.129908 | KIAA0591 protein                          | 2.7 |
|    | 420372 | AW960049  | Hs.293660 | Homo sapiens, clone IMAGE:3535476, mRNA,  | 2.7 |
|    | 410318 | AA084050  | Hs.269259 | ESTs, Weakly similar to S23650 retroviru  | 2.7 |
|    | 414603 | R58394    | Hs.25119  | ESTs, Weakly similar to YEX0_YEAST HYPOT  | 2.7 |
| 65 | 416096 | H18577    | Hs.88974  | cytochrome b-245, beta polypeptide (chro  | 2.7 |
|    | 420896 | AW149342  | Hs.24444  | Homo sapiens cDNA: FLJ22165 fis, clone H  | 2.7 |
|    | 424856 | AA347746  | Hs.9521   | ESTs, Weakly similar to ZN43_HUMAN ZINC   | 2.7 |
|    | 435304 | AA339622  | Hs.108887 | ESTs                                      | 2.7 |
|    | 441027 | AI911412  | Hs.126444 | ESTs                                      | 2.7 |
| 70 | 452545 | N31940    | Hs.14434  | ESTs, Weakly similar to I38022 hypotheti  | 2.7 |
|    | 454201 | AB023191  | Hs.44131  | KIAA0974 protein                          | 2.7 |
|    | 448560 | BE613183  | Hs.23213  | ESTs                                      | 2.7 |
|    | 426807 | AA385315  | Hs.156682 | ESTs                                      | 2.7 |
|    | 425825 | AI929508  | Hs.159590 | lymphocyte antigen 6 complex, locus H     | 2.7 |
| 75 | 440351 | AF030933  | Hs.7179   | RAD1 (S. pombe) homolog                   | 2.7 |
|    | 425390 | AI092634  | Hs.156114 | protein tyrosine phosphatase, non-recept  | 2.7 |
|    | 427624 | AA406245  | Hs.24895  | ESTs                                      | 2.7 |
|    | 426413 | AA377823  |           | gb:EST90805 Synovial sarcoma Homo sapien  | 2.7 |
| 80 | 422491 | AA338548  | Hs.117546 | neuronatin                                | 2.7 |
|    | 424560 | AA158727  | Hs.150555 | protein predicted by clone 23733          | 2.7 |
|    | 432415 | T16971    | Hs.289014 | ESTs, Weakly similar to A43932 mucin 2 p  | 2.7 |
|    | 414865 | AA157155  | Hs.274414 | hypothetical protein FLJ14457             | 2.7 |
|    | 415827 | H17462    | Hs.23079  | ESTs                                      | 2.7 |
|    | 445568 | H00918    | Hs.268744 | KIAA1796 protein                          | 2.7 |

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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
|    | 433315 | R96754    | Hs.239706 | GRB2-associated binding protein 1        | 2.7 |
|    | 428862 | NM_000346 | Hs.2316   | SRY (sex determining region Y)-box 9 (ca | 2.7 |
|    | 447959 | AI452784  | Hs.270270 | ESTs, Weakly similar to 2109260A B cell  | 2.7 |
|    | 426420 | BE383808  | Hs.322430 | NDRG family, member 4                    | 2.7 |
| 5  | 436899 | AA764852  | Hs.291567 | ESTs                                     | 2.7 |
|    | 444100 | AA383343  | Hs.22116  | CDC14 (cell division cycle 14, S. cerevi | 2.7 |
|    | 426501 | AW043782  | Hs.293616 | ESTs                                     | 2.7 |
|    | 449092 | U91641    | Hs.22985  | alpha2,8-sialyltransferase               | 2.7 |
| 10 | 427311 | AB020672  | Hs.175411 | KIAA0865 protein                         | 2.7 |
|    | 453313 | BE005771  | Hs.153746 | hypothetical protein FLJ22490            | 2.7 |
|    | 404029 |           |           |  | 2.7 |
|    | 416289 | W26333    | Hs.337438 | ESTs                                     | 2.7 |
|    | 439108 | AW163034  | Hs.6467   | synaptogyrin 3                           | 2.6 |
|    | 418746 | AI955289  | Hs.300759 | ribosomal protein L36                    | 2.6 |
| 15 | 412046 | Y07847    | Hs.73088  | RAS-related on chromosome 22             | 2.6 |
|    | 435040 | AI932350  | Hs.152825 | ESTs                                     | 2.6 |
|    | 453083 | U87223    | Hs.31622  | contactin associated protein 1           | 2.6 |
|    | 428167 | AA770021  | Hs.16332  | ESTs                                     | 2.6 |
| 20 | 420028 | AB014680  | Hs.8786   | carbohydrate (N-acetylglucosamine-6-O) s | 2.6 |
|    | 443715 | AI583187  | Hs.9700   | cyclin E1                                | 2.6 |
|    | 421247 | BE391727  | Hs.102910 | general transcription factor IIH, polype | 2.6 |
|    | 424687 | J05070    | Hs.151738 | matrix metalloproteinase 9 (gelatinase B | 2.6 |
|    | 415056 | AB004662  | Hs.77867  | adenosine A1 receptor                    | 2.6 |
| 25 | 451697 | AW449774  | Hs.296380 | POM (PDM121 rat homolog) and ZP3 fusion  | 2.6 |
|    | 433701 | AW445023  | Hs.15155  | ESTs                                     | 2.6 |
|    | 457358 | AI479755  | Hs.129010 | ESTs                                     | 2.6 |
|    | 430347 | NM_002039 | Hs.239706 | GRB2-associated binding protein 1        | 2.6 |
|    | 418027 | AB037807  | Hs.83293  | hypothetical protein                     | 2.6 |
| 30 | 440491 | R35252    | Hs.24944  | ESTs, Weakly similar to 2109260A B cell  | 2.6 |
|    | 425171 | AW732240  | Hs.16365  | ESTs                                     | 2.6 |
|    | 459335 | AW298545  | Hs.250726 | EST                                      | 2.6 |
|    | 425402 | AI215881  | Hs.24970  | ESTs, Weakly similar to B34323 GTP-bindi | 2.6 |
|    | 453169 | AB037815  | Hs.32156  | KIAA1394 protein                         | 2.6 |
| 35 | 433647 | AA603367  | Hs.222294 | ESTs                                     | 2.6 |
|    | 450414 | AB07735   | Hs.21446  | KIAA1716 protein                         | 2.6 |
|    | 446233 | AI282028  | Hs.25205  | ESTs                                     | 2.6 |
|    | 415446 | F08898    | Hs.66075  | ESTs                                     | 2.6 |
| 40 | 445873 | AA250970  | Hs.251946 | poly(A)-binding protein, cytoplasmic 1-I | 2.6 |
|    | 413012 | D83777    | Hs.75137  | KIAA0193 gene product                    | 2.6 |
|    | 428671 | BE297851  | Hs.189482 | zinc finger protein 179                  | 2.6 |
|    | 427158 | AA935603  | Hs.166231 | ESTs                                     | 2.6 |
|    | 408988 | AL119844  | Hs.49476  | Homo sapiens clone TUA8 Cri-du-chat regi | 2.6 |
|    | 459516 | AI049662  | Hs.246858 | EST                                      | 2.6 |
|    | 402693 |           |           |  | 2.6 |
| 45 | 408039 | AA131424  | Hs.50340  | ESTs                                     | 2.6 |
|    | 422896 | AW961489  | Hs.154116 | ESTs                                     | 2.6 |
|    | 423130 | AW897586  | Hs.21213  | ESTs                                     | 2.6 |
|    | 438796 | W67821    | Hs.109590 | genethonin 1                             | 2.6 |
| 50 | 439871 | R88518    | Hs.46736  | hypothetical protein FLJ23476            | 2.6 |
|    | 440192 | AA872282  | Hs.190596 | ESTs                                     | 2.6 |
|    | 419708 | AK000753  | Hs.92374  | hypothetical protein                     | 2.6 |
|    | 449436 | AA860329  | Hs.279307 | hypothetical protein DKFZp434i2117       | 2.6 |
|    | 436870 | AW204219  | Hs.155560 | calnexin                                 | 2.6 |
| 55 | 448424 | AW008992  | Hs.31924  | ESTs                                     | 2.6 |
|    | 401324 |           |           |  | 2.6 |
|    | 414136 | AA812434  | Hs.119023 | SMC2 (structural maintenance of chromoso | 2.6 |
|    | 433943 | AA992805  | Hs.44865  | lymphoid enhancer-binding factor 1       | 2.6 |
| 60 | 428001 | H97428    | Hs.219907 | ESTs, Moderately similar to Transforming | 2.6 |
|    | 429139 | F09092    | Hs.66087  | ESTs                                     | 2.6 |
|    | 423073 | BE252922  | Hs.123119 | MAD (mothers against decapentaplegic, Dr | 2.6 |
|    | 448966 | AW372914  | Hs.86149  | phosphoinositol 3-phosphate-binding prot | 2.6 |
|    | 444001 | AI055087  | Hs.152299 | ESTs, Moderately similar to S65657 alpha | 2.6 |
|    | 412049 | N53437    | Hs.18268  | adenylate kinase 5                       | 2.6 |
| 65 | 441783 | BE313412  | Hs.7961   | Homo sapiens clone 25012 mRNA sequence   | 2.6 |
|    | 425287 | R88249    | Hs.155524 | peanut (Drosophila)-like 2               | 2.6 |
|    | 432149 | AW614326  | Hs.157022 | ESTs, Weakly similar to T34549 probable  | 2.6 |
|    | 452234 | AW084176  | Hs.223296 | ESTs, Weakly similar to I38022 hypotheti | 2.6 |
|    | 453478 | AF083898  | Hs.33021  | neuro-oncological ventral antigen 2      | 2.6 |
| 70 | 418962 | AA714835  | Hs.271863 | ESTs                                     | 2.6 |
|    | 418858 | AW961605  | Hs.21145  | hypothetical protein RG083M05.2          | 2.6 |
|    | 443257 | AI334040  | Hs.11614  | HSPC065 protein                          | 2.6 |
|    | 428748 | AW593206  | Hs.98785  | Ksp37 protein                            | 2.6 |
|    | 444984 | H15474    | Hs.132898 | fatty acid desaturase 1                  | 2.6 |
| 75 | 433404 | T32982    | Hs.102720 | ESTs                                     | 2.6 |
|    | 434779 | AF153815  | Hs.50151  | potassium inwardly-rectifying channel, s | 2.6 |
|    | 420582 | BE047878  | Hs.95093  | Homo sapiens chromosome 19, cosmid R2837 | 2.6 |
|    | 452856 | AF034799  | Hs.30881  | protein tyrosine phosphatase, receptor t | 2.6 |
|    | 436440 | AI471862  | Hs.196008 | Homo sapiens cDNA FLJ11723 fis, clone HE | 2.6 |
| 80 | 438527 | AI969251  | Hs.115325 | RAB7, member RAS oncogene family-like 1  | 2.6 |
|    | 433216 | AF217412  | Hs.47320  | neuroligin 3                             | 2.6 |
|    | 435380 | AA679001  | Hs.192221 | ESTs                                     | 2.6 |
|    | 428966 | AF059214  | Hs.194687 | cholesterol 25-hydroxylase               | 2.6 |
|    | 439653 | AW021103  | Hs.6631   | hypothetical protein FLJ20373            | 2.6 |

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|    |             |                                       |  |   |     |
|----|-------------|---------------------------------------|--|---|-----|
|    | 419304      | AI271326                              | Hs.146101                                    | ESTs, Weakly similar to T45070 protein k  | 2.6 |
|    | 422991      | H10940                                | Hs.48965                                     | Homo sapiens cDNA: FLJ21693 fis, clone C  | 2.6 |
|    | 448548      | R13209                                | Hs.21413                                     | solute carrier family 12, (potassium-chl  | 2.6 |
|    | 435370      | AI964074                              | Hs.225838                                    | ESTs                                      | 2.6 |
| 5  | 408875      | NM_015434                             | Hs.48604                                     | DKFZP434B168 protein                      | 2.5 |
|    | 457005      | AJ007421                              | Hs.172597                                    | sal (Drosophila)-like 3                   | 2.5 |
|    | 430154      | AW583058                              | Hs.234726                                    | serine (or cysteine) proteinase inhibito  | 2.5 |
|    | 438549      | BE386801                              | Hs.21858                                     | trinucleotide repeat containing 3         | 2.5 |
|    | 427951      | AI826125                              | Hs.43546                                     | ESTs                                      | 2.5 |
| 10 | 411800      | N39342                                | Hs.103042                                    | microtubule-associated protein 1B         | 2.5 |
|    | 457683      | AI821877                              | Hs.140002                                    | ESTs, Moderately similar to ALU7_HUMAN A  | 2.5 |
|    | 451422      | AB002336                              | Hs.26395                                     | erythrocyte membrane protein band 4.1-ii  | 2.5 |
|    | 430713      | AA351647                              | Hs.2642                                      | eukaryotic translation elongation factor  | 2.5 |
|    | 428826      | AL048842                              | Hs.194019                                    | attractin                                 | 2.5 |
| 15 | 428963      | AW382682                              | Hs.258208                                    | Homo sapiens, clone MGC:15606, mRNA, com  | 2.5 |
|    | 428141      | D50402                                | Hs.182611                                    | solute carrier family 11 (proton-coupled  | 2.5 |
|    | 429550      | AW293055                              | Hs.119357                                    | ESTs                                      | 2.5 |
|    | 438662      | AA223599                              | Hs.6351                                      | cleavage and polyadenylation specific fa  | 2.5 |
|    | 435760      | AF231922                              | Hs.213004                                    | chromosome 21 open reading frame 62       | 2.5 |
| 20 | 427513      | AI476318                              | Hs.192480                                    | ESTs                                      | 2.5 |
|    | 430061      | AB037817                              | Hs.230188                                    | KIAA1396 protein                          | 2.5 |
|    | 435923      | BE301930                              | Hs.5010                                      | Homo sapiens clone 24672 mRNA sequence    | 2.5 |
|    | 417123      | BE326521                              | Hs.159450                                    | ESTs                                      | 2.5 |
| 25 | 439699      | AF086534                              | Hs.187561                                    | ESTs, Moderately similar to ALU1_HUMAN A  | 2.5 |
|    | 412980      | AI815750                              | Hs.20977                                     | hypothetical protein MGC3129 similar to   | 2.5 |
|    | 427209      | H06509                                | Hs.92423                                     | KIAA1566 protein                          | 2.5 |
|    | 424327      | AA431707                              | Hs.31209                                     | ESTs                                      | 2.5 |
|    | 436340      | R42246                                | Hs.21606                                     | ESTs                                      | 2.5 |
|    | 450650      | T65617                                | Hs.101257                                    | hypothetical protein MGC3295              | 2.5 |
| 30 | 439444      | AI277652                              | Hs.54578                                     | ESTs, Weakly similar to I38022 hypotheti  | 2.5 |
|    | 400777      |                                       |  |   | 2.5 |
|    | 439478      | AF049460                              | Hs.6574                                      | deformed epidermal autoregulatory factor  | 2.5 |
|    | 450407      | NM_000810                             | Hs.24969                                     | gamma-aminobutyric acid (GABA) A recepto  | 2.5 |
| 35 | 450385      | AI631024                              | Hs.24948                                     | synuclein, alpha interacting protein (sy  | 2.5 |
|    | 432558      | R97268                                | Hs.177269                                    | ESTs                                      | 2.5 |
|    | 400860      |                                       |  |   | 2.5 |
|    | 410361      | BE391804                              | Hs.62661                                     | guanylate binding protein 1, interferon-  | 2.5 |
|    | 416063      | BE047699                              | Hs.93454                                     | ESTs                                      | 2.5 |
| 40 | 414998      | NM_002543                             | Hs.77729                                     | oxidised low density lipoprotein (lectin  | 2.5 |
|    | 452823      | AB012124                              | Hs.30696                                     | transcription factor-like 5 (basic helix  | 2.5 |
|    | 417791      | AW965339                              | Hs.111471                                    | ESTs                                      | 2.5 |
|    | 418079      | R40058                                | Hs.6911                                      | ESTs                                      | 2.5 |
|    | 408495      | W68796                                | Hs.237731                                    | ESTs                                      | 2.5 |
|    | 442104      | L20971                                | Hs.188                                       | phosphodiesterase 4B, cAMP-specific (dun  | 2.5 |
| 45 | 437370      | AL359567                              | Hs.161962                                    | Homo sapiens mRNA; cDNA DKFZp547D023 (fr  | 2.5 |
|    | 429803      | W81489                                | Hs.223025                                    | RAB31, member RAS oncogene family         | 2.5 |
|    | 424959      | NM_005781                             | Hs.153937                                    | activated p21cdc42Hs kinase               | 2.5 |
|    | 427413      | BE547647                              | Hs.177781                                    | hypothetical protein MGC5618              | 2.5 |
|    | 408955      | BE315170                              | Hs.8087                                      | NAG-5 protein                             | 2.5 |
| 50 | 415261      | T40928                                | Hs.8346                                      | ESTs                                      | 2.5 |
|    | 415716      | N59294                                | Hs.179662                                    | nucleosome assembly protein 1-like 1      | 2.5 |
|    | 417873      | BE266659                              | Hs.293659                                    | Homo sapiens, Similar to RIKEN cDNA A430  | 2.5 |
|    | 418388      | R72332                                | Hs.29258                                     | Homo sapiens cDNA FLJ11364 fis, clone HE  | 2.5 |
|    | 421002      | AF116030                              | Hs.100932                                    | transcription factor 17                   | 2.5 |
| 55 | 423244      | AL039379                              | Hs.209602                                    | ESTs, Weakly similar to ubiquitous TPR m  | 2.5 |
|    | 423553      | AA405635                              | Hs.96854                                     | ESTs, Weakly similar to DYLYX_HUMAN CYTOP | 2.5 |
|    | 427961      | AW293165                              | Hs.143134                                    | ESTs                                      | 2.5 |
|    | 428301      | AW628666                              | Hs.98440                                     | ESTs, Weakly similar to I38022 hypotheti  | 2.5 |
| 60 | 428508      | BE252383                              | Hs.184668                                    | SBBI31 protein                            | 2.5 |
|    | 428858      | AA436760                              |  | gb:zv67d11.r1 Soares_total_fetus_Nb2HF8_  | 2.5 |
|    | 428943      | AW086180                              | Hs.37636                                     | ESTs, Weakly similar to KIAA1392 protein  | 2.5 |
|    | 432427      | AL037630                              | Hs.6638                                      | Homo sapiens cDNA FLJ11602 fis, clone HE  | 2.5 |
|    | 435347      | AW014873                              | Hs.116963                                    | ESTs                                      | 2.5 |
|    | 437949      | U78519                                | Hs.41654                                     | ESTs, Weakly similar to A46010 X-linked   | 2.5 |
| 65 | 438208      | AL041224                              | Hs.65379                                     | ESTs                                      | 2.5 |
|    | 440286      | U29589                                | Hs.7138                                      | cholinergic receptor, muscarinic 3        | 2.5 |
|    | 441523      | AW514263                              | Hs.301771                                    | ESTs, Weakly similar to ALUF_HUMAN !!!!   | 2.5 |
|    | 441805      | AA285136                              | Hs.301914                                    | neuronal specific transcription factor D  | 2.5 |
|    | 442337      | AI371029                              | Hs.129257                                    | ESTs, Weakly similar to TC17_HUMAN TRANS  | 2.5 |
| 70 | 442789      | AW904361                              | Hs.131191                                    | ESTs, Weakly similar to ALU7_HUMAN ALU S  | 2.5 |
|    | 445556      | AI910241                              | Hs.12887                                     | actin-related protein 3-beta              | 2.5 |
|    | 449086      | AI628357                              | Hs.208037                                    | ESTs                                      | 2.5 |
|    | 459583      | AI907673                              |  | gb:IL-BT152-080399-004 BT152 Homo sapien  | 2.5 |
| 75 | TABLE 24B:  |                                       |  |   |     |
|    | Pkey:       | Unique Eos probeset identifier number |  |   |     |
|    | CAT number: | Gene cluster number                   |  |   |     |
|    | Accession:  | Genbank accession numbers             |  |   |     |
| 80 | Pkey        | CAT Number                            | Accession                                    |   |     |
|    | 408432      | 1058667_1                             | AW195262 R27868 AW811262                     |   |     |
|    | 412225      | 1284108_1                             | AW902042 N77591                              |   |     |
|    | 412436      | 129439_1                              | AA665089 AA135130 AA484059 AA102419 AW877765 |   |     |

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|    |        |           |   |
|----|--------|-----------|---|
| 5  | 416120 | 1571266_1 | H46739 H51513 H19779  |
|    | 416871 | 1626761_1 | H98716 N90792 N24283  |
|    | 416913 | 163001_1  | AW934714 BE161007 BE162500 AW749902 AW749864 BE162498 BE161005 AA190449 AW513465 BE161006 BE162499                            |
|    | 422864 | 222336_1  | AA318323 H11145 R15289 AA451945 AA476690 AA436954 Z43802 F11753 T65491 D81821   |
|    | 422949 | 223184_1  | AA319435 N56456 AA319377 AW961532 T48452 AA894424   |
|    | 422977 | 223410_1  | AA631498 AI017191 AA491211 AA761823 AA714555 AA768099 AA808286 AI934069 AA570223 AA574389 AA582438 AI745346 AW964510 AA319642 |
|    |        |           | AW853758 H56414   |
|    | 423756 | 231725_1  | AA828125 AA834883 AA330555  |
| 10 | 425168 | 247552_1  | R96366 AL133929 AA351636 H78818 AA477084 Z28957 H80194  |
|    | 425517 | 252729_1  | AF121179 BE162736 AA358827  |
|    | 426413 | 266650_1  | AA377823 AW954494 AI022688  |
|    | 428002 | 285602_1  | AA418703 AA418711 BE071915 BE071920 BE071912  |
|    | 428679 | 294049_1  | AA431765 AA432015   |
| 15 | 428858 | 296453_1  | AA436760 AW237453 BE327496 N47347 N56967  |
|    | 429007 | 298301_1  | D80642 AA443145 AL119015 AW904500   |
|    | 429163 | 300543_1  | AA884766 AW974271 AA592975 AA447312   |
|    | 433532 | 368950_1  | AW975367 AA598607 AA742735  |
|    | 436190 | 41555_1   | AK001059 AA633055   |
| 20 | 437034 | 431713_1  | AA742643 AA808575 AW976668  |
|    | 438458 | 457837_1  | AW975186 AA807807 D29548  |
|    | 438993 | 467651_1  | AA828995 AA834879 AI926361  |
|    | 439566 | 47387_1   | AF086387 W77884 W72711  |
|    | 440322 | 491966_1  | AA879430 BE070262 BE070493 BE070272 BE070484 BE070397 BE070395 BE070201 BE070198 BE070404 BE070270 BE070400                   |
| 25 | 444584 | 611496_1  | AI168422 D80113 T59074  |
|    | 447197 | 711623_1  | R36075 AI366546 R36167  |
|    | 448451 | 764066_1  | AW015994 R39898 AW000978 AI596202 AI521706  |
|    | 450625 | 84032_1   | AW970107 AA513951 AA010406  |
|    | 452453 | 918300_1  | AI902519 AI902518 AI902516  |
| 30 | 454996 | 1248640_1 | AW850180 AW850326   |
|    | 455350 | 1283853_1 | AW901809 AW901787 AW901795 AW901792 AW901744 AW901753 AW901807 AW901798   |

TABLE 24C:

|              |   |
|--------------|---|
| Pkey:        | Unique number corresponding to an Eos probeset  |
| Ref:         | Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <u>Nature</u> 402:489-495. |
| Strand:      | Indicates DNA strand from which exons were predicted.   |
| NL_position: | Indicates nucleotide positions of predicted exons.  |

|    |        |         |        |   |
|----|--------|---------|--------|---|
| 40 | Pkey   | Ref     | Strand | NL_position   |
|    | 400777 | 8131663 | Plus   | 70745-71121   |
|    | 400780 | 8131663 | Minus  | 118372-118619   |
|    | 400859 | 9757499 | Minus  | 91888-92018,98131-98294,99474-99570   |
|    | 400860 | 9757499 | Minus  | 151830-152104,152649-152744   |
| 45 | 400992 | 8096828 | Plus   | 140390-140822   |
|    | 401324 | 9863791 | Plus   | 234057-234174   |
|    | 402408 | 9796239 | Minus  | 110326-110491   |
|    | 402604 | 9909420 | Plus   | 20393-20767   |
|    | 402605 | 9909420 | Minus  | 47680-47973   |
| 50 | 402693 | 8569863 | Minus  | 82366-82515   |
|    | 402855 | 9662953 | Minus  | 59763-59909   |
|    | 404029 | 7671252 | Plus   | 108716-111112   |
|    | 404048 | 3688074 | Minus  | 54421-56808   |
|    | 404049 | 3688074 | Minus  | 75765-78155   |
| 55 | 404283 | 2276311 | Minus  | 99460-99564   |
|    | 404299 | 5738652 | Minus  | 3826-4025   |
|    | 404541 | 8318559 | Plus   | 103456-103664   |
|    | 404584 | 9857511 | Plus   | 138651-139153   |
|    | 404593 | 9944086 | Minus  | 74922-75788   |
| 60 | 404721 | 9856648 | Minus  | 173763-174294   |
|    | 404819 | 4678240 | Plus   | 16223-16319,16427-16513,16736-16859,16941-17075,17170-17287,17389-17529,18261-18357,18443-18578 |
|    | 405238 | 7249119 | Minus  | 51728-51836   |
|    | 405771 | 7018349 | Plus   | 91191-91254,91510-91589   |
|    | 405819 | 4007557 | Plus   | 2830-2967   |
| 65 | 406311 | 9211559 | Minus  | 137114-139033   |

TABLE 25A: ABOUT 1202 GENES UP-REGULATED IN GLIOBLASTOMA COMPARED TO NORMAL ADULT CENTRAL NERVOUS SYSTEM (CNS)

Table 25A lists about 1202 genes up-regulated in glioblastoma compared to normal adult central nervous system (CNS). These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" glioblastoma to "average" normal adult CNS tissues was greater than or equal to 2.0. The "average" glioblastoma level was set to the 75<sup>th</sup> percentile amongst various glioblastoma tumors. The "average" normal adult CNS tissue level was set to the 95<sup>th</sup> percentile amongst various non-malignant tissues. In order to remove gene-specific background levels of non-specific hybridization, the 10<sup>th</sup> percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

|                |  |
|----------------|--|
| Pkey:          | Unique Eos probeset identifier number  |
| ExAccn:        | Exemplar Accession number, Genbank accession number  |
| UnigeneID:     | Unigene number   |
| Unigene Title: | Unigene gene title   |
| RT:            | Ratio of 75 <sup>th</sup> percentile tumor to 95 <sup>th</sup> percentile normal adult nervous system tissue |

|    |        |          |           |                        |      |
|----|--------|----------|-----------|------------------------|------|
| 80 | Pkey   | ExAccn   | UnigeneID | Unigene Title          | R1   |
|    | 452461 | N78223   | Hs.108106 | transcription factor   | 20.1 |
|    | 436895 | AF037335 | Hs.5338   | carbonic anhydrase XII | 15.2 |
|    | 453941 | U39817   | Hs.36820  | Bloom syndrome         | 14.2 |
|    | 443247 | BE614387 | Hs.333893 | c-Myc target JPO1      | 12.4 |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 428330 | L22524    | Hs.2256   | matrix metalloproteinase 7 (matrilysin,  | 12.0 |
|    | 447342 | AI199268  | Hs.19322  | Homo sapiens, Similar to RIKEN cDNA 2010 | 11.7 |
|    | 422163 | AF027208  | Hs.112360 | prominin (mouse)-like 1                  | 11.4 |
|    | 439451 | AF086270  | Hs.278554 | heterochromatin-like protein 1           | 11.2 |
| 5  | 424800 | AL035588  | Hs.153203 | MyoD family inhibitor                    | 10.2 |
|    | 416111 | AA033813  | Hs.79018  | chromatin assembly factor 1, subunit A ( | 10.0 |
|    | 444190 | AI878918  | Hs.10526  | cysteine and glycine-rich protein 2      | 9.9  |
|    | 412140 | AA219691  | Hs.73625  | RAB6 interacting, kinesin-like (rabkines | 9.9  |
| 10 | 449340 | AW235786  | Hs.195359 | hypothetical protein MGC10954            | 9.8  |
|    | 409731 | AA125985  | Hs.56145  | thymosin, beta, identified in neuroblast | 9.4  |
|    | 439978 | BE139460  | Hs.124673 | Homo sapiens cDNA FLJ11477 fis, clone HE | 8.9  |
|    | 411411 | AA345241  | Hs.55950  | ESTs, Weakly similar to KIAA1330 protein | 8.9  |
|    | 456516 | BE172704  | Hs.222746 | KIAA1610 protein                         | 8.2  |
| 15 | 420092 | AA814043  | Hs.88045  | ESTs                                     | 7.9  |
|    | 422631 | BE218919  | Hs.118793 | hypothetical protein FLJ10688            | 7.9  |
|    | 453392 | U23752    | Hs.32964  | SRY (sex determining region Y)-box 11    | 7.9  |
|    | 438527 | AI969251  | Hs.115325 | RAB7, member RAS oncogene family-like 1  | 7.9  |
|    | 427581 | NM_014788 | Hs.179703 | KIAA0129 gene product                    | 7.8  |
| 20 | 418661 | NM_001949 | Hs.1189   | E2F transcription factor 3               | 7.8  |
|    | 440684 | AI253123  | Hs.127356 | ESTs, Highly similar to S21424 nestin [H | 7.8  |
|    | 429643 | AA455889  | Hs.167279 | FYVE-finger-containing Rab5 effector pro | 7.7  |
|    | 409638 | AW450420  | Hs.21335  | ESTs                                     | 7.5  |
|    | 444665 | BE613126  | Hs.47783  | B aggressive lymphoma gene               | 7.5  |
| 25 | 456759 | BE259150  | Hs.127792 | delta (Drosophila)-like 3                | 7.5  |
|    | 412777 | AI335773  | Hs.270123 | ESTs                                     | 7.4  |
|    | 436607 | AW661783  | Hs.211061 | ESTs                                     | 7.3  |
|    | 432058 | AW665996  | Hs.130729 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 7.3  |
|    | 417061 | AI675944  | Hs.188691 | Homo sapiens cDNA FLJ12033 fis, clone HE | 7.3  |
| 30 | 428976 | AL037824  | Hs.194695 | ras homolog gene family, member l        | 7.2  |
|    | 433244 | AB040943  | Hs.271285 | KIAA1510 protein                         | 7.1  |
|    | 436726 | AA324975  | Hs.128993 | ESTs, Weakly similar to T00079 hypotheti | 7.1  |
|    | 408432 | AW195262  |           | gb:xn67b05.x1 NCL_CGAP_CML1 Homo sapiens | 7.1  |
| 35 | 434164 | AW207019  | Hs.148135 | serine/threonine kinase 33               | 7.0  |
|    | 445873 | AA250970  | Hs.251946 | poly(A)-binding protein, cytoplasmic 1-l | 7.0  |
|    | 439726 | AW449893  | Hs.293707 | ESTs, Weakly similar to S38598 zinc fing | 7.0  |
|    | 432656 | NM_000246 | Hs.3076   | MHC class II transactivator              | 6.8  |
|    | 431117 | AF003522  | Hs.250500 | delta (Drosophila)-like 1                | 6.8  |
|    | 453387 | AI990741  | Hs.252809 | ESTs                                     | 6.8  |
| 40 | 418821 | AA436002  | Hs.183161 | ESTs                                     | 6.6  |
|    | 437034 | AA742643  |           | gb:ny91c01.s1 NCL_CGAP_GCB1 Homo sapiens | 6.6  |
|    | 411252 | AB018549  | Hs.69328  | MD-2 protein                             | 6.5  |
|    | 424687 | J05070    | Hs.151738 | matrix metalloproteinase 9 (gelatinase B | 6.4  |
|    | 452953 | AI932884  | Hs.271741 | ESTs, Weakly similar to A46010 X-linked  | 6.3  |
| 45 | 433532 | AW975367  |           | gb:EST387475 MAGE resequences, MAGN Homo | 6.3  |
|    | 420311 | AW445044  | Hs.38207  | Human DNA sequence from clone RP4-530115 | 6.3  |
|    | 418097 | R45137    | Hs.21868  | ESTs                                     | 6.2  |
|    | 407304 | AA565832  |           | gb:nj32b03.s1 NCL_CGAP_AA1 Homo sapiens  | 6.2  |
|    | 435256 | AF193766  | Hs.13872  | cytokine-like protein C17                | 6.1  |
| 50 | 449448 | D60730    | Hs.57471  | ESTs                                     | 6.1  |
|    | 403790 |           |           |  | 6.0  |
|    | 425517 | AF121179  |           | gb:AF121179 Homo sapiens liver (Chang L- | 6.0  |
|    | 420674 | NM_000055 | Hs.1327   | butyrylcholinesterase                    | 6.0  |
|    | 435542 | AA687376  | Hs.269533 | ESTs                                     | 5.9  |
| 55 | 418216 | AA662240  | Hs.283099 | AF15q14 protein                          | 5.8  |
|    | 439086 | AF085947  |           | gb:Homo sapiens full length insert cDNA  | 5.8  |
|    | 408037 | AW271720  | Hs.42233  | hypothetical protein FLJ10300            | 5.7  |
|    | 412225 | AW902042  |           | gb:QV0-NN1022-170400-193-c02 NN1022 Homo | 5.7  |
|    | 436109 | AA922153  | Hs.132760 | hypothetical protein MGC15729            | 5.7  |
| 60 | 435005 | U80743    | Hs.306094 | trinucleotide repeat containing 12       | 5.7  |
|    | 429149 | AW193360  | Hs.197962 | ESTs, Weakly similar to I38022 hypotheti | 5.7  |
|    | 418113 | AI272141  | Hs.83484  | SRY (sex determining region Y)-box 4     | 5.6  |
|    | 405558 |           |           |  | 5.6  |
|    | 442432 | BE093589  | Hs.38178  | hypothetical protein FLJ23468            | 5.6  |
| 65 | 442547 | AA306997  | Hs.217484 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 5.6  |
|    | 413063 | AL035737  | Hs.75184  | chitinase 3-like 1 (cartilage glycoprote | 5.5  |
|    | 420560 | AW207748  | Hs.59115  | ESTs                                     | 5.5  |
|    | 408096 | BE250162  | Hs.83765  | dihydrofolate reductase                  | 5.5  |
|    | 443539 | AI076182  | Hs.134074 | ESTs, Moderately similar to ALU6_HUMAN A | 5.4  |
| 70 | 426318 | AA375125  | Hs.147112 | Homo sapiens cDNA: FLJ22322 fis, clone H | 5.4  |
|    | 429115 | AA446728  | Hs.289020 | Homo sapiens cDNA FLJ14098 fis, clone MA | 5.3  |
|    | 453900 | AW003582  | Hs.226414 | ESTs, Weakly similar to ALU8_HUMAN ALU S | 5.3  |
|    | 444168 | AW379879  |           | gb:RC1-HT0256-081199-011-f01 HT0256 Homo | 5.3  |
|    | 432789 | D26361    | Hs.3104   | KIAA0042 gene product                    | 5.3  |
| 75 | 437036 | AI571514  | Hs.133022 | ESTs                                     | 5.2  |
|    | 421247 | BE391727  | Hs.102510 | general transcription factor IIH, polype | 5.2  |
|    | 441523 | AW514263  | Hs.301771 | ESTs, Weakly similar to ALUF_HUMAN !!!   | 5.2  |
|    | 451106 | BE382701  | Hs.25960  | v-myc avian myelocytomatosis viral relat | 5.1  |
|    | 457211 | AW972565  | Hs.32399  | ESTs, Weakly similar to S51797 vasodilat | 5.1  |
| 80 | 454157 | AW162906  | Hs.312481 | ESTs, Weakly similar to S66668 hydrogen  | 5.1  |
|    | 423343 | AA324643  | Hs.246106 | ESTs                                     | 5.1  |
|    | 425292 | NM_005824 | Hs.155545 | 37 kDa leucine-rich repeat (LRR) protein | 5.1  |
|    | 406679 | AA070786  |           | gb:zm66b07.r1 Stratogene neuroepithelium | 5.1  |
|    | 442671 | AI005668  | Hs.134779 | EST                                      | 5.1  |

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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
|    | 433001 | AF217513  | Hs.279905 | clone HQ0310 PRO0310p1                   | 5.0 |
|    | 418819 | AA228776  | Hs.191721 | ESTs                                     | 5.0 |
|    | 432946 | U60899    | Hs.279854 | mannosidase, alpha, class 2B, member 1   | 4.9 |
| 5  | 420730 | NM_002691 | Hs.99890  | polymyrase (DNA directed), delta 1, cata | 4.9 |
|    | 441217 | AI922183  | Hs.213246 | ESTs                                     | 4.9 |
|    | 453385 | AW296101  | Hs.252806 | ESTs                                     | 4.8 |
|    | 418203 | X54942    | Hs.83758  | CDC28 protein kinase 2                   | 4.7 |
|    | 450813 | AI739625  | Hs.203376 | ESTs                                     | 4.7 |
| 10 | 444006 | BE395085  | Hs.10086  | type I transmembrane protein Fn14        | 4.7 |
|    | 412530 | AA766268  | Hs.266273 | hypothetical protein FLJ13346            | 4.7 |
|    | 431070 | AW408164  | Hs.249184 | transcription factor 19 (SC1)            | 4.7 |
|    | 429786 | AL080232  | Hs.220696 | Homo sapiens mRNA; cDNA DKFZp586A061 (fr | 4.7 |
|    | 405771 |           |           |  | 4.6 |
| 15 | 457065 | AI476318  | Hs.192480 | ESTs                                     | 4.6 |
|    | 436190 | AK001059  |           | gb:Homo sapiens cDNA FLJ10197 fis, clone | 4.6 |
|    | 400859 |           |           |  | 4.6 |
|    | 435267 | N23797    | Hs.110114 | ESTs                                     | 4.6 |
|    | 443454 | AI057494  | Hs.133421 | ESTs                                     | 4.5 |
| 20 | 452811 | AA937079  | Hs.118983 | hypothetical protein FLJ12150            | 4.5 |
|    | 437267 | AW511443  | Hs.258110 | ESTs                                     | 4.5 |
|    | 435020 | AW505076  | Hs.301855 | DiGeorge syndrome critical region gene 8 | 4.5 |
|    | 454269 | AI961060  | Hs.129908 | KIAA0591 protein                         | 4.5 |
|    | 422106 | D84239    | Hs.111732 | Fc fragment of IgG binding protein       | 4.5 |
| 25 | 422765 | AW409701  | Hs.1578   | baculoviral IAP repeat-containing 5 (sur | 4.5 |
|    | 456534 | X91195    | Hs.100623 | phospholipase C, beta 3, neighbor pseudo | 4.5 |
|    | 423756 | AA828125  |           | gb:cd71a09.s1 NCI_CGAP_Ov2 Homo sapiens  | 4.5 |
|    | 417308 | H60720    | Hs.81892  | KIAA0101 gene product                    | 4.5 |
|    | 422170 | AI791949  | Hs.112432 | anti-Mullerian hormone                   | 4.4 |
| 30 | 429500 | X78565    | Hs.289114 | hexabrachion (tenascin C, cytactin)      | 4.4 |
|    | 406568 | AF088886  | Hs.11590  | cathepsin F                              | 4.4 |
|    | 426812 | AF105365  | Hs.172613 | solute carrier family 12 (potassium/chlo | 4.4 |
|    | 402516 |           |           |  | 4.4 |
| 35 | 432865 | AI753709  | Hs.152484 | ESTs, Weakly similar to I38022 hypotheti | 4.4 |
|    | 413625 | AW451103  | Hs.71371  | ESTs                                     | 4.4 |
|    | 436098 | R20597    | Hs.9739   | glycerol-3-phosphate dehydrogenase 1 (so | 4.4 |
|    | 418333 | W92113    |           | gb:zh48e01.r1 Soares_fetal_liver_spleen_ | 4.4 |
|    | 416933 | BE561850  | Hs.80506  | small nuclear ribonucleoprotein polypept | 4.4 |
|    | 438192 | AI859065  | Hs.337620 | Homo sapiens AFG3L1 isoform 1 mRNA, part | 4.3 |
| 40 | 457374 | AA493662  |           | gb:nh05d12.s1 NCI_CGAP_Thy1 Homo sapiens | 4.3 |
|    | 433159 | AB035898  | Hs.150587 | kinesin-like protein 2                   | 4.3 |
|    | 444386 | BE065183  |           | gb:RC1-BT0314-020200-012-c04 BT0314 Homo | 4.3 |
|    | 453202 | AW085781  | Hs.26270  | hypothetical protein FLJ11588            | 4.3 |
|    | 441020 | W79283    | Hs.35962  | ESTs                                     | 4.3 |
| 45 | 414733 | BE514535  | Hs.77171  | minichromosome maintenance deficient (S, | 4.3 |
|    | 407902 | AL117474  | Hs.41181  | Homo sapiens mRNA; cDNA DKFZp727C191 (fr | 4.3 |
|    | 405701 |           |           |  | 4.3 |
|    | 451659 | BE379761  | Hs.14248  | ESTs                                     | 4.3 |
| 50 | 418845 | AA852985  | Hs.89232  | chromobox homolog 5 (Drosophila HP1 alph | 4.2 |
|    | 433323 | AA805132  | Hs.30701  | ESTs                                     | 4.2 |
|    | 439811 | AA135332  | Hs.71608  | ESTs                                     | 4.2 |
|    | 415406 | T26510    |           | gb:AB282F8R Infant brain, LLNL array of  | 4.2 |
|    | 436282 | R91913    | Hs.272104 | ESTs, Moderately similar to ALU1_HUMAN A | 4.1 |
| 55 | 441269 | AW015206  | Hs.178784 | ESTs                                     | 4.1 |
|    | 418727 | AA227609  | Hs.94834  | ESTs                                     | 4.1 |
|    | 433006 | BE242758  | Hs.190223 | ESTs, Moderately similar to T29285 hypot | 4.1 |
|    | 436480 | AJ271643  | Hs.87469  | putative acid-sensing ion channel        | 4.1 |
|    | 430786 | AA486144  | Hs.31293  | ESTs                                     | 4.1 |
|    | 445372 | N36417    | Hs.144928 | ESTs                                     | 4.1 |
| 60 | 410555 | U92649    | Hs.64311  | a disintegrin and metalloproteinase doma | 4.0 |
|    | 457465 | AW301344  | Hs.122908 | DNA replication factor                   | 4.0 |
|    | 422094 | AF129535  | Hs.272027 | F-box only protein 5                     | 4.0 |
|    | 442029 | AW956698  | Hs.14456  | neural precursor cell expressed, develop | 4.0 |
|    | 459321 | AW044477  | Hs.299538 | ESTs                                     | 4.0 |
| 65 | 421308 | AA687322  | Hs.192843 | leucine zipper protein FKSG14            | 4.0 |
|    | 420567 | AK000812  | Hs.98874  | similar to proline-rich protein 48       | 4.0 |
|    | 447004 | AW296968  | Hs.157539 | ESTs                                     | 4.0 |
|    | 448295 | AI381911  | Hs.334859 | KIAA1814 protein                         | 3.9 |
|    | 439699 | AF086534  | Hs.187561 | ESTs, Moderately similar to ALU1_HUMAN A | 3.9 |
| 70 | 440704 | M69241    | Hs.162    | insulin-like growth factor binding prote | 3.9 |
|    | 453096 | AW294631  | Hs.11325  | ESTs                                     | 3.9 |
|    | 457026 | AA397620  | Hs.48692  | ESTs                                     | 3.9 |
|    | 404642 |           |           |  | 3.9 |
|    | 450375 | AA009647  | Hs.8850   | a disintegrin and metalloproteinase doma | 3.9 |
| 75 | 430132 | AA204686  | Hs.234149 | hypothetical protein FLJ20647            | 3.9 |
|    | 437718 | AI927288  | Hs.196779 | ESTs                                     | 3.9 |
|    | 438490 | AW593272  | Hs.301299 | ESTs                                     | 3.9 |
|    | 429919 | AA460692  | Hs.278945 | hypothetical protein FLJ23024            | 3.9 |
|    | 413604 | R51767    |           | gb:y73g11.1 Soares infant brain 1N1B H   | 3.9 |
| 80 | 425599 | AW366745  | Hs.214140 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 3.9 |
|    | 448796 | AA147829  | Hs.301431 | endothelial zinc finger protein induced  | 3.9 |
|    | 449300 | AI656959  | Hs.222165 | ESTs                                     | 3.8 |
|    | 452203 | X57522    | Hs.158164 | transporter 1, ATP-binding cassette, sub | 3.8 |
|    | 425769 | U72513    | Hs.159486 | Human RPL13-2 pseudogene mRNA, complete  | 3.8 |

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|----|--------|-----------|-----------|--|
|    | 404295 |           |           | 3.8  |
|    | 410361 | BE391804  | Hs.62661  | guanylate binding protein 1, interferon-   |
|    | 428728 | NM_016625 | Hs.191381 | hypothetical protein                       |
|    | 409142 | AL136877  | Hs.50758  | SMC4 (structural maintenance of chromoso   |
| 5  | 430172 | AA468591  | Hs.161889 | ESTs                                       |
|    | 447499 | AW262580  | Hs.147674 | protocadherin beta 16                      |
|    | 405884 |           |           | 3.8  |
|    | 437236 | AW137817  | Hs.244353 | ESTs                                       |
|    | 418883 | BE387036  | Hs.1211   | acid phosphatase 5, tartrate resistant     |
| 10 | 444143 | AW747996  | Hs.160999 | ESTs, Moderately similar to A56194 throm   |
|    | 425529 | NM_014656 | Hs.158282 | KIAA0040 gene product                      |
|    | 425502 | R98895    | Hs.125823 | ESTs                                       |
|    | 419741 | NM_007019 | Hs.93002  | ubiquitin carrier protein E2-C             |
|    | 402424 |           |           | 3.7  |
| 15 | 429469 | M54590    | Hs.27     | glycine dehydrogenase (decarboxylating;    |
|    | 434072 | H70854    | Hs.283059 | Homo sapiens PRO1082 mRNA, complete cds    |
|    | 414872 | U82010    | Hs.77513  | COX10 (yeast) homolog, cytochrome c oxid   |
|    | 426071 | AW138057  | Hs.163835 | ESTs                                       |
|    | 419078 | M93119    | Hs.89584  | insulinoma-associated 1                    |
| 20 | 428037 | N47474    | Hs.89230  | potassium intermediate/small conductance   |
|    | 416547 | H62914    | Hs.268946 | ESTs, Weakly similar to PC4259 fentin      |
|    | 436899 | AA764852  | Hs.291567 | ESTs                                       |
|    | 436722 | AW975977  |           | gb:EST388086 MAGE resequences, MAGN Homo   |
|    | 440652 | AI216751  | Hs.143977 | ESTs                                       |
| 25 | 428450 | NM_014791 | Hs.184339 | KIAA0175 gene product                      |
|    | 452103 | R42764    | Hs.339654 | ESTs, Weakly similar to I38022 hypotheti   |
|    | 409048 | H59990    | Hs.37699  | ESTs                                       |
|    | 439546 | AF088056  |           | gb:Homo sapiens full length insert cDNA    |
|    | 443544 | AI076315  | Hs.16359  | ESTs                                       |
| 30 | 418478 | U38945    | Hs.1174   | cyclin-dependent kinase inhibitor 2A (me   |
|    | 435889 | AI249107  | Hs.269901 | ESTs                                       |
|    | 420301 | AA767526  | Hs.22030  | paired box gene 5 (B-cell lineage specif   |
|    | 438078 | AI016377  | Hs.131693 | ESTs                                       |
|    | 408420 | NM_006915 | Hs.44756  | retinitis pigmentosa 2 (X-linked recessi   |
| 35 | 416871 | H98716    |           | gb:yx13d08.s1 Soares melanocyte 2NbHM Ho   |
|    | 424085 | NM_002914 | Hs.139226 | replication factor C (activator 1) 2 (40   |
|    | 446291 | BE397753  | Hs.14623  | interferon, gamma-inducible protein 30     |
|    | 432281 | AK001239  | Hs.274263 | hypothetical protein FLJ10377              |
|    | 436123 | AA057484  | Hs.35406  | ESTs, Highly similar to unnamed protein    |
| 40 | 411256 | AW834039  |           | gb:QV0-TT0010-091199-053-e09 TT0010 Homo   |
|    | 419239 | AA468183  | Hs.184598 | Homo sapiens cDNA: FLJ23241 fis, clone C   |
|    | 435065 | BE064391  |           | gb:RC4-BT0310-110300-015-b08 BT0310 Homo   |
|    | 435532 | AW291488  | Hs.117305 | Homo sapiens, clone IMAGE:3682908, mRNA    |
|    | 447101 | N72185    | Hs.44189  | ESTs                                       |
| 45 | 410530 | M25809    | Hs.64173  | ATPase, H+ transporting, lysosomal (vacu   |
|    | 422156 | N34524    |           | gb:yy56d10.s1 Soares_multiple_sclerosis_   |
|    | 453616 | NM_003462 | Hs.33846  | dynein, axonemal, light intermediate pol   |
|    | 439743 | AL389956  | Hs.283858 | Homo sapiens mRNA full length insert cDN   |
|    | 453884 | AA355925  | Hs.36232  | KIAA0186 gene product                      |
| 50 | 424954 | NM_000546 | Hs.1846   | tumor protein p53 (Li-Fraumeni syndrome)   |
|    | 420721 | AA927802  | Hs.159471 | ZAP3 protein                               |
|    | 426764 | AA732524  | Hs.151464 | ESTs, Weakly similar to ALUC_HUMAN !!!!    |
|    | 420649 | AI866964  | Hs.124704 | ESTs, Moderately similar to S65657 alpha   |
|    | 448831 | AL080123  | Hs.22182  | zinc finger protein 23 (KOX 16)            |
| 55 | 444371 | BE540274  | Hs.239    | forkhead box M1                            |
|    | 402604 |           |           | 3.4  |
|    | 442407 | AW469584  | Hs.32353  | mitogen-activated protein kinase kinase    |
|    | 414300 | AI304870  | Hs.188680 | ESTs                                       |
| 60 | 444670 | H58373    | Hs.332938 | hypothetical protein MGC5370               |
|    | 414550 | BE379808  |           | gb:601159567T1 NIH_MGC_53 Homo sapiens c   |
|    | 452211 | AI985513  | Hs.233420 | ESTs                                       |
|    | 414416 | AW409985  | Hs.76084  | hypothetical protein MGC2721               |
|    | 449961 | AW265634  | Hs.133100 | ESTs                                       |
| 65 | 413257 | BE075035  |           | gb:PM3-BT0584-260300-002-g05 BT0584 Homo   |
|    | 453857 | AL080235  | Hs.35861  | DKFZP586E1621 protein                      |
|    | 417404 | NM_007350 | Hs.82101  | pleckstrin homology-like domain, family    |
|    | 422846 | BE513934  | Hs.1583   | neutrophil cytosolic factor 1 (47kD, chr   |
|    | 446189 | H85224    | Hs.214013 | ESTs                                       |
|    | 437385 | AA757055  | Hs.164060 | ESTs                                       |
| 70 | 453652 | AW009640  | Hs.28368  | ESTs, Moderately similar to S65657 alpha   |
|    | 408298 | AI745325  | Hs.271923 | Homo sapiens cDNA: FLJ22785 fis, clone K   |
|    | 455778 | BE088746  |           | gb:CM2-BT0593-210300-123-d09 BT0693 Homo   |
|    | 417546 | H65569    | Hs.18845  | ESTs                                       |
|    | 412471 | M63193    | Hs.73946  | endothelial cell growth factor 1 (platelet |
| 75 | 454631 | AW811324  |           | gb:IL3-ST0141-131099-017-A02 ST0141 Homo   |
|    | 454294 | AB000734  | Hs.50640  | JAK binding protein                        |
|    | 457131 | AC002310  | Hs.301463 | Human Chromosome 16 BAC clone CIT987SK-A   |
|    | 410102 | AW248508  | Hs.279727 | Homo sapiens cDNA FLJ14035 fis, clone HE   |
|    | 449676 | AW380579  | Hs.209657 | ESTs                                       |
| 80 | 436211 | AK001581  | Hs.334828 | hypothetical protein FLJ10719; KIAA1794    |
|    | 453746 | AL120611  |           | gb:DKFZp761H119_r1 761 (synonym: hamy2)    |
|    | 452799 | AI948829  | Hs.213786 | ESTs                                       |
|    | 435380 | AA679001  | Hs.192221 | ESTs                                       |



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|----|--------|-----------|-----------|--|-----|
|    | 426746 | J03626    | Hs.2057   | uridine monophosphate synthetase (protat | 3.3 |
|    | 453362 | H14988    | Hs.107375 | ESTs                                     | 3.3 |
|    | 456473 | AI202788  | Hs.25682  | Homo sapiens mRNA for KIAA1863 protein.  | 3.3 |
| 5  | 416426 | AA180256  | Hs.210473 | Homo sapiens cDNA FLJ14872 fis, clone PL | 3.3 |
|    | 445777 | AI580371  | Hs.145384 | ESTs                                     | 3.3 |
|    | 423757 | AL049337  | Hs.132571 | Homo sapiens mRNA; cDNA DKFZp564P016 (fr | 3.3 |
|    | 431941 | AK000106  | Hs.272227 | Homo sapiens cDNA FLJ20099 fis, clone CO | 3.3 |
|    | 404299 |           |           |  | 3.3 |
|    | 404108 |           |           |  | 3.3 |
| 10 | 425189 | H16622    |           | gb:ym26c07.r1 Soares infant brain 1N1B H | 3.3 |
|    | 449318 | AW236021  | Hs.78531  | Homo sapiens, Similar to RIKEN cDNA 5730 | 3.3 |
|    | 450193 | AI916071  | Hs.15607  | Homo sapiens Fanconi anemia complementat | 3.2 |
|    | 427725 | U66839    | Hs.180533 | mitogen-activated protein kinase kinase  | 3.2 |
| 15 | 424051 | AL110203  | Hs.138411 | Homo sapiens mRNA; cDNA DKFZp586J1922 (f | 3.2 |
|    | 418968 | NM_000078 | Hs.89538  | cholesteryl ester transfer protein, plas | 3.2 |
|    | 449248 | M33782    | Hs.23391  | Homo sapiens, Similar to transcription f | 3.2 |
|    | 439416 | W58294    | Hs.56254  | ESTs                                     | 3.2 |
|    | 401596 | AA172106  | Hs.110950 | Rag C protein                            | 3.2 |
|    | 408380 | AF123050  | Hs.44532  | diubiquitin                              | 3.2 |
| 20 | 450325 | AI935962  | Hs.26289  | ESTs                                     | 3.2 |
|    | 428730 | AA625947  | Hs.25750  | ESTs                                     | 3.2 |
|    | 457536 | AA305233  | Hs.278712 | eukaryotic translation initiation factor | 3.2 |
|    | 426836 | N41720    | Hs.172684 | vesicle-associated membrane protein 8 (e | 3.2 |
|    | 442710 | AI015631  | Hs.23210  | ESTs                                     | 3.2 |
| 25 | 435232 | NM_001262 | Hs.4854   | cyclin-dependent kinase inhibitor 2C (p1 | 3.2 |
|    | 430970 | AI018210  | Hs.144083 | ESTs                                     | 3.2 |
|    | 416192 | NM_005036 | Hs.998    | peroxisome proliferative activated recep | 3.2 |
|    | 446676 | H09380    | Hs.300965 | ESTs                                     | 3.2 |
| 30 | 451459 | AI797515  | Hs.270560 | ESTs, Moderately similar to ALU7_HUMAN A | 3.2 |
|    | 407603 | AW955705  | Hs.62604  | Homo sapiens, clone IMAGE:4299322, mRNA, | 3.2 |
|    | 413840 | AI301558  | Hs.146381 | RNA binding motif protein, X chromosome  | 3.2 |
|    | 448751 | BE551203  | Hs.201792 | ESTs                                     | 3.2 |
|    | 432593 | AW301003  | Hs.51483  | ESTs, Weakly similar to hypothetical pro | 3.2 |
| 35 | 458786 | AI457098  | Hs.280848 | ESTs                                     | 3.2 |
|    | 455909 | BE156417  | Hs.278798 | ESTs                                     | 3.2 |
|    | 419311 | AA689591  |           | gb:nv66a12.s1 NCL CGAP_GCB1 Homo sapiens | 3.2 |
|    | 439710 | AF086543  |           | gb:Homo sapiens full length insert cDNA  | 3.2 |
|    | 434559 | AF147315  |           | gb:Homo sapiens full length insert cDNA  | 3.1 |
| 40 | 455800 | R22479    | Hs.167073 | Homo sapiens cDNA FLJ13047 fis, clone NT | 3.1 |
|    | 436703 | AW880614  | Hs.146381 | RNA binding motif protein, X chromosome  | 3.1 |
|    | 414799 | AI752416  | Hs.77326  | insulin-like growth factor binding prote | 3.1 |
|    | 437860 | AA333063  | Hs.279898 | Homo sapiens cDNA: FLJ23165 fis, clone L | 3.1 |
|    | 434182 | W20309    | Hs.118520 | G-protein gamma-12 subunit               | 3.1 |
| 45 | 417900 | BE250127  | Hs.82906  | CDC20 (cell division cycle 20, S. cerevi | 3.1 |
|    | 434769 | AA648884  | Hs.134278 | Homo sapiens cDNA FLJ12676 fis, clone NT | 3.1 |
|    | 414825 | X06370    | Hs.77432  | epidermal growth factor receptor (avian  | 3.1 |
|    | 426413 | AA377823  |           | gb:EST90805 Synovial sarcoma Homo sapien | 3.1 |
|    | 447959 | AI452784  | Hs.270270 | ESTs, Weakly similar to 2109260A B cell  | 3.1 |
| 50 | 404589 |           |           |  | 3.1 |
|    | 421764 | AI681535  | Hs.148135 | serine/threonine kinase 33               | 3.1 |
|    | 419986 | AI345455  | Hs.78915  | GA-binding protein transcription factor, | 3.1 |
|    | 416941 | BE000150  | Hs.48778  | niban protein                            | 3.1 |
|    | 414761 | AU077228  | Hs.77256  | enhancer of zeste (Drosophila) homolog 2 | 3.1 |
| 55 | 449611 | AI970394  | Hs.197075 | ESTs                                     | 3.1 |
|    | 434746 | AA648368  | Hs.295368 | ESTs                                     | 3.1 |
|    | 434274 | AA628539  | Hs.116252 | ESTs, Moderately similar to ALU1_HUMAN A | 3.1 |
|    | 427899 | AA829286  | Hs.332053 | serum amyloid A1                         | 3.1 |
|    | 417642 | BE302665  | Hs.105461 | hypothetical protein FLJ20357            | 3.1 |
| 60 | 452472 | AW957300  | Hs.294142 | ESTs, Weakly similar to C55663 oligodend | 3.1 |
|    | 446131 | NM_000929 | Hs.290    | phospholipase A2, group V                | 3.1 |
|    | 440052 | AI633744  | Hs.195648 | ESTs, Weakly similar to I38022 hypothe   | 3.1 |
|    | 426531 | AA381071  |           | gb:EST94100 Activated T-cells XII Homo s | 3.1 |
|    | 422158 | L10343    | Hs.112341 | protease inhibitor 3, skin-derived (SKAL | 3.1 |
| 65 | 406267 |           |           |  | 3.1 |
|    | 447039 | AV661798  | Hs.282915 | ESTs                                     | 3.1 |
|    | 404802 |           |           |  | 3.1 |
|    | 406927 | M26460    |           | gb:Homo sapiens (clone 104) retinoblasto | 3.1 |
| 70 | 419314 | AW971924  | Hs.87280  | ESTs                                     | 3.0 |
|    | 435894 | AI076667  | Hs.188011 | ESTs                                     | 3.0 |
|    | 432140 | AK000404  | Hs.272688 | hypothetical protein FLJ20397            | 3.0 |
|    | 443426 | AF098158  | Hs.9329   | chromosome 20 open reading frame 1       | 3.0 |
|    | 425202 | AW962282  | Hs.152049 | ESTs, Weakly similar to I38022 hypothe   | 3.0 |
|    | 407047 | X65965    |           | gb:H.sapiens SOD-2 gene for manganese su | 3.0 |
| 75 | 418241 | M26682    | Hs.1149   | LIM domain only 1 (rhombotin 1)          | 3.0 |
|    | 446599 | Z97832    | Hs.15476  | differentially expressed in FDCCP (mouse | 3.0 |
|    | 412950 | BE018581  | Hs.245342 | hypothetical protein FLJ14642            | 3.0 |
|    | 428670 | AA431682  | Hs.134832 | ESTs                                     | 3.0 |
|    | 446975 | BE246446  | Hs.16695  | ubiquitin-activating enzyme E1-like      | 3.0 |
| 80 | 437756 | AA767537  | Hs.197096 | ESTs                                     | 3.0 |
|    | 416084 | L16991    | Hs.79006  | deoxythymidylate kinase (thymidylate kin | 3.0 |
|    | 402374 | AL135225  | Hs.301865 | dopachrome tautomerase (dopachrome delta | 3.0 |
|    | 443885 | H91806    | Hs.15284  | ESTs                                     | 3.0 |
|    | 434008 | AA740878  | Hs.112982 | ESTs                                     | 3.0 |

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|----|--------|----------|-----------|--|-----|
|    | 452568 | AA805634 | Hs.300870 | Homo sapiens mRNA; cDNA DKFZp547M072 (fr | 3.0 |
|    | 414239 | AI288330 | Hs.182330 | ESTs                                     | 3.0 |
|    | 421013 | M62397   | Hs.1345   | mutated in colorectal cancers            | 3.0 |
| 5  | 424635 | AA420687 | Hs.115455 | Homo sapiens cDNA FLJ14259 fis, clone PL | 3.0 |
|    | 410276 | AI554545 | Hs.68301  | ESTs                                     | 3.0 |
|    | 433865 | N29862   | Hs.44104  | ESTs                                     | 3.0 |
|    | 406028 |          |           |  | 3.0 |
|    | 401626 |          |           |  | 3.0 |
| 10 | 415949 | H10562   | Hs.21691  | ESTs                                     | 3.0 |
|    | 418583 | AA604379 | Hs.86211  | hypothetical protein                     | 3.0 |
|    | 417933 | X02308   | Hs.82962  | thymidylate synthetase                   | 3.0 |
|    | 434577 | R37316   | Hs.179769 | Homo sapiens cDNA: FLJ22487 fis, clone H | 3.0 |
|    | 430437 | AI768801 | Hs.169943 | Homo sapiens cDNA FLJ13569 fis, clone PL | 3.0 |
| 15 | 427940 | AA417812 | Hs.38775  | ESTs                                     | 2.9 |
|    | 456060 | C14904   | Hs.45184  | Homo sapiens cDNA FLJ12284 fis, clone MA | 2.9 |
|    | 421988 | AW450481 | Hs.161333 | ESTs                                     | 2.9 |
|    | 448775 | AB025237 | Hs.388    | nudix (nucleoside diphosphate linked moi | 2.9 |
|    | 438598 | AI805943 | Hs.326067 | hypothetical protein MGC5178             | 2.9 |
| 20 | 429612 | AF062649 | Hs.252587 | pituitary tumor-transforming 1           | 2.9 |
|    | 451189 | AA016019 | Hs.40905  | ESTs                                     | 2.9 |
|    | 401558 |          |           |  | 2.9 |
|    | 426207 | BE390657 | Hs.30026  | HSPC182 protein                          | 2.9 |
|    | 404721 |          |           |  | 2.9 |
|    | 401384 |          |           |  | 2.9 |
| 25 | 417288 | AI984792 | Hs.108812 | hypothetical protein FLJ22004            | 2.9 |
|    | 427648 | AI376722 | Hs.180062 | proteasome (prosome, macropain) subunit, | 2.9 |
|    | 435928 | H64345   | Hs.183961 | ESTs                                     | 2.9 |
|    | 431740 | N75450   | Hs.183412 | ESTs, Moderately similar to AF116721 67  | 2.9 |
| 30 | 428242 | H55709   | Hs.2250   | leukemia inhibitory factor (cholinergic  | 2.9 |
|    | 439972 | AI348100 | Hs.124662 | ESTs                                     | 2.9 |
|    | 433112 | AA973801 | Hs.144553 | ESTs, Weakly similar to unnamed protein  | 2.9 |
|    | 423751 | AW235633 | Hs.46525  | ESTs                                     | 2.9 |
|    | 406748 | AW339106 | Hs.217493 | annexin A2                               | 2.9 |
| 35 | 422154 | T79045   | Hs.126927 | ESTs                                     | 2.9 |
|    | 405588 |          |           |  | 2.9 |
|    | 440911 | AA909536 | Hs.143562 | ESTs                                     | 2.9 |
|    | 412420 | AL035668 | Hs.73853  | bone morphogenetic protein 2             | 2.9 |
|    | 445043 | AW014413 | Hs.196066 | ESTs                                     | 2.9 |
| 40 | 410114 | AW590540 | Hs.271280 | ESTs                                     | 2.9 |
|    | 419217 | AA504571 |           | gb:aa60e12.r1 NCI_CGAP_GCB1 Homo sapiens | 2.9 |
|    | 415849 | R20529   | Hs.6806   | ESTs                                     | 2.9 |
|    | 448140 | AF146761 | Hs.20450  | BCM-like membrane protein precursor      | 2.9 |
|    | 453331 | AI240665 | Hs.8895   | ESTs                                     | 2.9 |
| 45 | 432065 | AA401039 | Hs.2903   | protein phosphatase 4 (formerly X), cata | 2.9 |
|    | 438380 | T06430   | Hs.6194   | chondroitin sulfate proteoglycan BEHAB/b | 2.9 |
|    | 454377 | AA076811 |           | gb:7B03C12 Chromosome 7 Fetal Brain cDNA | 2.9 |
|    | 421491 | H99999   | Hs.42736  | ESTs                                     | 2.9 |
|    | 452291 | AF015592 | Hs.28853  | CDC7 (cell division cycle 7, S. cerevisi | 2.8 |
| 50 | 415446 | F08898   | Hs.66075  | ESTs                                     | 2.8 |
|    | 439518 | W76326   |           | gb:zd60d04.r1 Soares_fetal_heart_NbHH19W | 2.8 |
|    | 427221 | L15409   | Hs.174007 | von Hippel-Lindau syndrome               | 2.8 |
|    | 422493 | AW474183 | Hs.250173 | hypothetical protein FLJ13158            | 2.8 |
|    | 419451 | AI907117 | Hs.90535  | syntaxin binding protein 2               | 2.8 |
| 55 | 448789 | BE539108 | Hs.22051  | hypothetical protein MGC15548            | 2.8 |
|    | 424126 | AA335635 | Hs.96917  | ESTs                                     | 2.8 |
|    | 458695 | AV660159 | Hs.282284 | ESTs, Weakly similar to I38022 hypothi   | 2.8 |
|    | 418973 | AA233056 | Hs.191518 | ESTs                                     | 2.8 |
|    | 440471 | AA886146 | Hs.307944 | ESTs                                     | 2.8 |
| 60 | 421016 | AA504583 | Hs.101047 | transcription factor 3 (E2A immunoglobul | 2.8 |
|    | 433647 | AA603367 | Hs.222294 | ESTs                                     | 2.8 |
|    | 415817 | U88967   | Hs.78867  | protein tyrosine phosphatase, receptor-t | 2.8 |
|    | 421723 | AA620400 | Hs.300717 | sodium channel, voltage-gated, type III, | 2.8 |
|    | 434964 | AI638850 | Hs.130746 | ESTs                                     | 2.8 |
| 65 | 432022 | AL162042 | Hs.272348 | Homo sapiens mRNA; cDNA DKFZp761L1212 (f | 2.8 |
|    | 400517 | AF242388 | Hs.149585 | lengsin                                  | 2.8 |
|    | 433023 | AW864793 | Hs.87409  | thrombospondin 1                         | 2.8 |
|    | 448734 | BE614070 | Hs.326416 | Homo sapiens mRNA; cDNA DKFZp564H1916 (f | 2.8 |
|    | 406736 | AI254733 | Hs.182426 | ribosomal protein S2                     | 2.8 |
| 70 | 409207 | AW373564 | Hs.194637 | BANP homolog, SMAR1 homolog              | 2.8 |
|    | 440196 | N72847   | Hs.125221 | ESTs                                     | 2.8 |
|    | 403961 |          |           |  | 2.8 |
|    | 425193 | AW965689 | Hs.22509  | ESTs                                     | 2.8 |
|    | 425268 | AI807883 | Hs.180059 | Homo sapiens cDNA FLJ20653 fis, clone KA | 2.8 |
| 75 | 440483 | AI200836 | Hs.150386 | ESTs                                     | 2.8 |
|    | 412391 | AW947710 |           | gb:RC0-MT0004-130300-011-e07 MT0004 Homo | 2.8 |
|    | 448769 | N66037   | Hs.38173  | ESTs                                     | 2.8 |
|    | 411632 | AW854829 |           | gb:QV2-CT0261-201099-011-01 CT0261 Homo  | 2.8 |
|    | 438221 | AI798853 | Hs.122224 | ESTs, Weakly similar to ALU5_HUMAN ALU S | 2.8 |
| 80 | 457578 | AA578027 |           | gb:n120h01.s1 NCI_CGAP_HSC1 Homo sapiens | 2.8 |
|    | 455510 | AA422029 | Hs.143640 | ESTs, Weakly similar to hyperpolarizatio | 2.8 |
|    | 447769 | AW873704 | Hs.320831 | Homo sapiens cDNA FLJ14597 fis, clone NT | 2.8 |
|    | 427701 | AA411101 | Hs.243886 | nuclear autoantigenic sperm protein (his | 2.8 |
|    | 433800 | AI034361 | Hs.135150 | lung type-I cell membrane-associated gly | 2.8 |

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|    | 439662 | H97552    | Hs.269060 | ESTs                                     | 2.8 |
|    | 425694 | U51333    | Hs.159237 | hexokinase 3 (white cell)                | 2.8 |
|    | 414747 | U30872    | Hs.77204  | centromere protein F (350/400kD, mitosis | 2.8 |
| 5  | 414598 | AI094221  | Hs.135150 | lung type-I cell membrane-associated gly | 2.8 |
|    | 447752 | M73700    | Hs.105938 | lactotransferrin                         | 2.8 |
|    | 408761 | AA057264  | Hs.238936 | ESTs, Weakly similar to (define not ava  | 2.8 |
|    | 453350 | AI917771  | Hs.61790  | hypothetical protein FLJ23338            | 2.7 |
|    | 456629 | AW891965  | Hs.279789 | histone deacetylase 3                    | 2.7 |
| 10 | 439538 | AA837323  | Hs.164047 | ESTs                                     | 2.7 |
|    | 458814 | AI498957  | Hs.170861 | ESTs, Weakly similar to Z195_HUMAN ZINC  | 2.7 |
|    | 456029 | BE255990  | Hs.218329 | hypothetical protein                     | 2.7 |
|    | 451129 | BE072881  |           | gb:RC2-BT0548-200300-012-e09 BT0548 Homo | 2.7 |
|    | 456412 | AW749617  | Hs.280776 | tankyrase, TRF1-interacting ankyrin-rela | 2.7 |
| 15 | 453536 | AA137000  | Hs.62578  | ESTs                                     | 2.7 |
|    | 438378 | AW970529  | Hs.86434  | hypothetical protein FLJ21816            | 2.7 |
|    | 425745 | U44060    | Hs.14427  | Homo sapiens cDNA: FLJ21800 fis, clone H | 2.7 |
|    | 446322 | N23033    | Hs.155814 | ESTs                                     | 2.7 |
|    | 451592 | AI805416  | Hs.213897 | ESTs                                     | 2.7 |
| 20 | 429466 | M85835    | Hs.12827  | ESTs                                     | 2.7 |
|    | 429747 | M87507    | Hs.2490   | caspase 1, apoptosis-related cysteine pr | 2.7 |
|    | 455514 | AW983871  |           | gb:RC1-HN0003-220300-021-h07 HN0003 Homo | 2.7 |
|    | 414732 | AW410976  | Hs.77152  | minichromosome maintenance deficient (S. | 2.7 |
|    | 444207 | AI565004  | Hs.79572  | cathepsin D (lysosomal aspartyl protease | 2.7 |
| 25 | 427421 | AA402414  | Hs.3059   | coatomer protein complex, subunit beta   | 2.7 |
|    | 449655 | AI021987  | Hs.59970  | ESTs                                     | 2.7 |
|    | 422648 | D86983    | Hs.118893 | Melanoma associated gene                 | 2.7 |
|    | 428494 | AA233439  | Hs.184634 | hypothetical protein FLJ20005            | 2.7 |
|    | 406895 | X60648    | Hs.172550 | polypyrimidine tract binding protein (he | 2.7 |
| 30 | 453255 | AA278167  | Hs.19215  | Homo sapiens, clone IMAGE:3605822, mRNA  | 2.7 |
|    | 427348 | NM_014137 | Hs.177258 | PRC0650 protein                          | 2.7 |
|    | 435370 | AI964074  | Hs.225838 | ESTs                                     | 2.7 |
|    | 407862 | BE548267  | Hs.50724  | Homo sapiens cDNA FLJ10934 fis, clone OV | 2.7 |
|    | 411874 | AA096106  | Hs.20403  | ESTs                                     | 2.7 |
| 35 | 421192 | AA833718  | Hs.204529 | KIAA1806 protein                         | 2.7 |
|    | 435899 | W89093    | Hs.189914 | ESTs                                     | 2.7 |
|    | 414603 | R58394    | Hs.25119  | ESTs, Weakly similar to YEX0_YEAST HYPOT | 2.7 |
|    | 453462 | AL037291  | Hs.236605 | ESTs, Moderately similar to ALU4_HUMAN A | 2.7 |
|    | 436554 | AI985810  | Hs.301173 | ESTs                                     | 2.7 |
| 40 | 427528 | AL077143  | Hs.179565 | minichromosome maintenance deficient (S. | 2.7 |
|    | 403881 |           |           |  | 2.7 |
|    | 431779 | AW971178  | Hs.268571 | apolipoprotein C-1                       | 2.7 |
|    | 404984 |           |           |  | 2.7 |
|    | 448275 | BE514434  | Hs.20830  | kinesin-like 2                           | 2.7 |
| 45 | 446839 | BE091926  | Hs.16244  | mitotic spindle coiled-coil related prot | 2.7 |
|    | 411927 | BE274009  | Hs.772    | glycogen synthase 1 (muscle)             | 2.7 |
|    | 404756 |           |           |  | 2.7 |
|    | 447072 | D61594    | Hs.17279  | tyrosylprotein sulfotransferase 1        | 2.7 |
|    | 422176 | H80977    |           | gb:yu89a11.s1 Soares fetal liver spleen  | 2.7 |
| 50 | 439627 | BE621702  | Hs.29076  | hypothetical protein FLJ21841            | 2.7 |
|    | 436532 | AA721522  |           | gb:nv54h12.r1 NCI_CGAP_Ew1 Homo sapiens  | 2.7 |
|    | 412833 | AW960547  | Hs.298262 | ribosomal protein S19                    | 2.7 |
|    | 457245 | AI745498  | Hs.204579 | ESTs                                     | 2.7 |
|    | 446861 | AI696519  | Hs.14427  | Homo sapiens cDNA: FLJ21800 fis, clone H | 2.7 |
| 55 | 453263 | R91778    | Hs.99369  | ESTs                                     | 2.7 |
|    | 459385 | BE380047  |           | gb:601159362F2 NIH_MGC_53 Homo sapiens c | 2.7 |
|    | 438764 | AA824524  | Hs.336452 | ESTs                                     | 2.7 |
|    | 429285 | AI971081  | Hs.20432  | ESTs, Weakly similar to I38022 hypotheti | 2.7 |
|    | 424853 | BE549737  | Hs.132967 | Human EST clone 122887 mariner transposo | 2.7 |
| 60 | 430037 | BE409649  | Hs.227789 | mitogen-activated protein kinase-activat | 2.7 |
|    | 449892 | N73608    | Hs.50309  | ESTs                                     | 2.7 |
|    | 454201 | AB023191  | Hs.44131  | KIAA0974 protein                         | 2.7 |
|    | 452279 | AA286844  | Hs.61260  | hypothetical protein FLJ13164            | 2.7 |
|    | 427954 | J03060    | Hs.247551 | metaxin 1                                | 2.7 |
| 65 | 400371 | U80740    |           |  | 2.7 |
|    | 452449 | AW068658  | Hs.20943  | ESTs                                     | 2.7 |
|    | 431114 | AA492400  | Hs.291015 | ESTs                                     | 2.7 |
|    | 417088 | M54915    | Hs.81170  | pim-1 oncogene                           | 2.7 |
|    | 447674 | BE270640  | Hs.19192  | cyclin-dependent kinase 2                | 2.7 |
| 70 | 403680 |           |           |  | 2.7 |
|    | 454679 | AW813110  |           | gb:CM4-ST0189-051099-021.f05 ST0189 Homo | 2.7 |
|    | 411968 | AI207410  | Hs.69280  | Homo sapiens, clone IMAGE:3636299, mRNA, | 2.6 |
|    | 422240 | R60594    | Hs.29002  | KIAA1706 protein                         | 2.6 |
|    | 424368 | AB037766  | Hs.146085 | KIAA1345 protein                         | 2.6 |
| 75 | 405808 |           |           |  | 2.6 |
|    | 419700 | AF084935  | Hs.92357  | galactokinase 1                          | 2.6 |
|    | 435972 | W95088    | Hs.114198 | ESTs                                     | 2.6 |
|    | 435568 | S70782    | Hs.557    | adrenergic, alpha-1D-, receptor          | 2.6 |
|    | 443725 | AW245680  | Hs.9701   | growth arrest and DNA-damage-inducible,  | 2.6 |
| 80 | 444156 | AW500059  | Hs.86437  | ESTs, Highly similar to AF219140 1 gastr | 2.6 |
|    | 428209 | AA424197  | Hs.98947  | ESTs, Weakly similar to S33496 trypsin [ | 2.6 |
|    | 437640 | AA764893  | Hs.272155 | ESTs, Weakly similar to I38022 hypotheti | 2.6 |
|    | 453948 | AI970797  | Hs.64859  | ESTs                                     | 2.6 |
|    | 415402 | AA164687  | Hs.177576 | mannosyl (alpha-1,3-)glycoprotein beta-  | 2.6 |

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|----|--------|-----------|-----------|--|-----|
|    | 425397 | J04088    | Hs.156346 | topoisomerase (DNA) II alpha (170kD)     | 2.6 |
|    | 418228 | AA962181  | Hs.111219 | ESTs, Moderately similar to ALU1_HUMAN A | 2.6 |
|    | 401324 |           |           |  | 2.6 |
| 5  | 425234 | AW152225  | Hs.165909 | ESTs, Weakly similar to I38022 hypotheti | 2.6 |
|    | 443210 | AI692649  | Hs.9451   | hypothetical protein MGC13168            | 2.6 |
|    | 457244 | AA581385  | Hs.162473 | ESTs, Weakly similar to I38022 hypotheti | 2.6 |
|    | 417144 | AA382104  | Hs.81337  | lectin, galactoside-binding, soluble, 9  | 2.6 |
|    | 433933 | AI754389  | Hs.133494 | Homo sapiens clone TCCCA00164 mRNA sequ  | 2.6 |
| 10 | 437437 | AA226869  | Hs.16520  | hypothetical protein DKFZp762L0311       | 2.6 |
|    | 434206 | AW136973  | Hs.288516 | ESTs, Weakly similar to S59890 mitogen i | 2.6 |
|    | 400992 |           |           |  | 2.6 |
|    | 455530 | AW984744  |           | gb:RC1-HN0015-040400-011-d03 HN0015 Homo | 2.6 |
|    | 436139 | AA765786  | Hs.120936 | ESTs                                     | 2.6 |
|    | 448330 | AL036449  | Hs.207163 | ESTs                                     | 2.6 |
| 15 | 412942 | AL120344  | Hs.75074  | mitogen-activated protein kinase-activat | 2.6 |
|    | 432753 | NM_014075 | Hs.336938 | Homo sapiens PRO0593 mRNA, complete cds  | 2.6 |
|    | 433430 | AI863735  | Hs.186755 | ESTs                                     | 2.6 |
|    | 436693 | AW973223  | Hs.303197 | B-cell CLL/lymphoma 7C                   | 2.6 |
| 20 | 429482 | AF076974  | Hs.203952 | transformation/transcription domain-asso | 2.6 |
|    | 432715 | AA247152  | Hs.200483 | ESTs, Weakly similar to KIAA1074 protein | 2.6 |
|    | 414217 | AI309298  | Hs.279898 | Homo sapiens cDNA: FLJ23165 fis, clone L | 2.6 |
|    | 434165 | AA971328  | Hs.95361  | myosin VIIA (Usher syndrome 1B (autosoma | 2.6 |
|    | 414835 | AA156720  | Hs.185342 | ESTs                                     | 2.6 |
| 25 | 424489 | T48851    | Hs.149250 | D-siglec precursor,                      | 2.6 |
|    | 436496 | AA281959  | Hs.5210   | glia maturation factor, gamma            | 2.6 |
|    | 403797 |           |           |  | 2.6 |
|    | 434573 | AW372340  | Hs.159717 | ESTs                                     | 2.6 |
|    | 418841 | NM_002332 | Hs.89137  | low density lipoprotein-related protein  | 2.6 |
| 30 | 415785 | R82419    | Hs.23603  | ESTs, Moderately similar to ALU8_HUMAN A | 2.6 |
|    | 450608 | AA010365  | Hs.193229 | ESTs                                     | 2.6 |
|    | 425304 | AA463844  | Hs.31339  | fibroblast growth factor 11              | 2.6 |
|    | 432268 | BE311856  | Hs.274230 | 3'-phosphoadenosine 5'-phosphosulfate sy | 2.6 |
|    | 410507 | AA355288  | Hs.40834  | transitional epithelia response protein  | 2.6 |
| 35 | 427343 | AI880044  | Hs.176977 | protein kinase C binding protein 2       | 2.6 |
|    | 420917 | AW135716  | Hs.117330 | ESTs                                     | 2.6 |
|    | 414399 | L47345    | Hs.155202 | transcription elongation factor B (SIII) | 2.6 |
|    | 446089 | AI860021  | Hs.270651 | ESTs, Moderately similar to A47582 B-cel | 2.6 |
|    | 440829 | AF136407  | Hs.7446   | chromosome 6 open reading frame 5        | 2.6 |
|    | 408475 | AA315514  | Hs.47986  | hypothetical protein MGC10940            | 2.6 |
| 40 | 450946 | AA374569  | Hs.127698 | ESTs, Moderately similar to Z109260A B c | 2.6 |
|    | 421462 | AF016495  | Hs.104624 | aquaporin 9                              | 2.6 |
|    | 434846 | AW295389  | Hs.119768 | ESTs                                     | 2.6 |
|    | 422887 | AI751848  | Hs.49215  | ESTs                                     | 2.6 |
| 45 | 417435 | NM_005181 | Hs.82129  | carbonic anhydrase III, muscle specific  | 2.6 |
|    | 437389 | AL359587  | Hs.271586 | hypothetical protein DKFZp762M115        | 2.5 |
|    | 408981 | AW500797  | Hs.49427  | Gem-interacting protein                  | 2.5 |
|    | 432180 | Y18418    | Hs.272822 | RuvB (E coli homolog)-like 1             | 2.5 |
|    | 418079 | R40058    | Hs.6911   | ESTs                                     | 2.5 |
| 50 | 437820 | AA769062  | Hs.323836 | ESTs, Weakly similar to alternatively sp | 2.5 |
|    | 439685 | AW956781  | Hs.293937 | ESTs, Weakly similar to FXD2_HUMAN FORKH | 2.5 |
|    | 425681 | AB018297  | Hs.159183 | KIAA0754 protein                         | 2.5 |
|    | 435177 | AI018174  | Hs.42936  | ESTs                                     | 2.5 |
|    | 437323 | AA371145  | Hs.226627 | leptin receptor                          | 2.5 |
| 55 | 422114 | AW194851  | Hs.111801 | arsenate resistance protein ARS2         | 2.5 |
|    | 448478 | AI523218  | Hs.203456 | ESTs                                     | 2.5 |
|    | 426623 | AA382826  | Hs.132793 | ESTs                                     | 2.5 |
|    | 448764 | AI568607  | Hs.182112 | ESTs                                     | 2.5 |
|    | 458385 | AI051489  | Hs.246214 | ESTs                                     | 2.5 |
| 60 | 403726 | N28939    | Hs.13434  | Homo sapiens clone 24418 mRNA sequence   | 2.5 |
|    | 444888 | AI651039  | Hs.148559 | ESTs                                     | 2.5 |
|    | 456179 | H75490    | Hs.271930 | ESTs                                     | 2.5 |
|    | 424840 | D79987    | Hs.153479 | extra spindle poles, S. cerevisiae, homo | 2.5 |
|    | 406273 | NM_000919 | Hs.83920  | peptidylglycine alpha-amidating monooxyg | 2.5 |
| 65 | 418054 | NM_002318 | Hs.83354  | lysyl oxidase-like 2                     | 2.5 |
|    | 445936 | BE543594  | Hs.61478  | hypothetical protein FLJ22329            | 2.5 |
|    | 454967 | AW848276  |           | gb:IL3-CT0214-150200-074-E06 CT0214 Homo | 2.5 |
|    | 442303 | AA989289  | Hs.129169 | ESTs                                     | 2.5 |
|    | 456583 | AF179897  | Hs.104105 | Meis (mouse) homolog 2                   | 2.5 |
| 70 | 434263 | N34895    | Hs.44648  | ESTs                                     | 2.5 |
|    | 416892 | L24498    | Hs.80409  | growth arrest and DNA-damage-inducible,  | 2.5 |
|    | 424528 | AW073971  | Hs.238954 | ESTs, Weakly similar to KIAA1204 protein | 2.5 |
|    | 406038 | Y14443    | Hs.88219  | zinc finger protein 200                  | 2.5 |
|    | 413495 | Y12395    | Hs.315177 | interferon-related developmental regulat | 2.5 |
| 75 | 423098 | AA321980  | Hs.204682 | ESTs                                     | 2.5 |
|    | 410817 | AI262789  | Hs.93659  | protein disulfide isomerase related prot | 2.5 |
|    | 439841 | AF038961  | Hs.6710   | mannose-6-phosphate utilization defect 1 | 2.5 |
|    | 453828 | AW970960  | Hs.293821 | ESTs                                     | 2.5 |
|    | 445034 | AW293376  | Hs.143659 | ESTs                                     | 2.5 |
| 80 | 449620 | BE407797  | Hs.23794  | checkpoint with forkhead and ring finger | 2.5 |
|    | 406876 | AI382286  | Hs.180842 | ribosomal protein L13                    | 2.5 |
|    | 412370 | AW946614  |           | gb:RC2-ET0021-280400-011-c05 ET0021 Homo | 2.5 |
|    | 423642 | AW452650  | Hs.157148 | hypothetical protein MGC13204            | 2.5 |
|    | 430357 | AW976789  | Hs.165607 | ESTs                                     | 2.5 |

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|    | 414853 | U31116    | Hs.77501  | sarcoglycan, beta (43kD dystrophin-assoc | 2.5 |
|    | 416097 | BE387371  | Hs.118964 | hypothetical protein FLJ20085            | 2.5 |
|    | 428619 | AK002140  | Hs.187378 | hypothetical protein FLJ11278            | 2.5 |
| 5  | 413976 | BE295452  | Hs.75655  | procollagen-proline, 2-oxoglutarate 4-di | 2.5 |
|    | 445223 | AW291553  | Hs.254983 | ESTs                                     | 2.5 |
|    | 423926 | X03833    | Hs.1722   | interleukin 1, alpha                     | 2.5 |
|    | 410165 | BE560228  | Hs.71869  | apoptosis-associated speck-like protein  | 2.5 |
|    | 406474 |           |           | ESTs                                     | 2.5 |
| 10 | 433908 | AW298141  | Hs.157975 | ESTs                                     | 2.5 |
|    | 439755 | AW748482  | Hs.77873  | B7 homolog 3                             | 2.5 |
|    | 437528 | N59646    | Hs.169745 | crumbs (Drosophila) homolog 1            | 2.5 |
|    | 420734 | AW972872  | Hs.293736 | ESTs                                     | 2.5 |
|    | 415346 | Z43108    |           | gb:HSC13E071 normalized infant brain cDN | 2.5 |
| 15 | 419337 | AW291112  | Hs.209978 | ESTs                                     | 2.5 |
|    | 444606 | R09478    | Hs.18041  | ESTs                                     | 2.5 |
|    | 430061 | AB037817  | Hs.230188 | KIAA1396 protein                         | 2.5 |
|    | 413407 | A1356293  | Hs.75339  | inositol polyphosphate phosphatase-like  | 2.5 |
|    | 411965 | BE467339  | Hs.280115 | ESTs                                     | 2.5 |
| 20 | 409278 | AA346683  | Hs.52763  | anaphase-promoting complex subunit 7     | 2.5 |
|    | 403142 |           |           | ESTs                                     | 2.5 |
|    | 401714 |           |           | ESTs                                     | 2.5 |
|    | 425081 | X74794    | Hs.154443 | minichromosome maintenance deficient (S. | 2.5 |
|    | 416505 | H66470    | Hs.16004  | ESTs                                     | 2.5 |
| 25 | 431518 | AA743462  | Hs.165337 | ESTs                                     | 2.5 |
|    | 448623 | BE613468  | Hs.107515 | ESTs, Weakly similar to T00329 hypotheti | 2.5 |
|    | 428301 | AW626666  | Hs.98440  | ESTs, Weakly similar to I38022 hypotheti | 2.5 |
|    | 404366 |           |           | ESTs                                     | 2.5 |
|    | 449733 | R74546    | Hs.29438  | Homo sapiens cDNA FLJ12094 fis, clone HE | 2.5 |
| 30 | 459583 | A1907673  |           | gb:IL-BT152-080399-004 BT152 Homo sapien | 2.5 |
|    | 402856 | AW939659  |           | gb:RC0-DT0076-110100-031-c09 DT0076 Homo | 2.5 |
|    | 420751 | J03019    | Hs.99913  | adrenergic, beta-1-, receptor            | 2.4 |
|    | 436805 | AA731533  | Hs.270751 | ESTs                                     | 2.4 |
|    | 420285 | AA258124  | Hs.293878 | ESTs, Moderately similar to ZN91_HUMAN Z | 2.4 |
| 35 | 453496 | AA442103  | Hs.33084  | solute carrier family 2 (facilitated glu | 2.4 |
|    | 453853 | AL040600  | Hs.188083 | ESTs                                     | 2.4 |
|    | 407909 | AW103986  |           | gb:xd63e06.x1 NCI_CGAP_Ov23 Homo sapiens | 2.4 |
|    | 454630 | BE142075  |           | gb:CM3-HT0137-170999-012-f02 HT0137 Homo | 2.4 |
|    | 451026 | AA013218  | Hs.157492 | cer-d4 (mouse) homolog                   | 2.4 |
| 40 | 420779 | L12398    | Hs.99922  | dopamine receptor D4                     | 2.4 |
|    | 438322 | AA804170  | Hs.221349 | ESTs                                     | 2.4 |
|    | 455908 | BE156306  |           | gb:QV0-HT0367-150200-114-h04 HT0367 Homo | 2.4 |
|    | 419625 | U91616    | Hs.91640  | nuclear factor of kappa light polypeptid | 2.4 |
|    | 440773 | AA352702  | Hs.332541 | Homo sapiens, Similar to RIKEN cDNA 2700 | 2.4 |
| 45 | 450823 | T81223    | Hs.22011  | complement-c1q tumor necrosis factor-rel | 2.4 |
|    | 447247 | AW369351  | Hs.287955 | Homo sapiens cDNA FLJ13090 fis, clone NT | 2.4 |
|    | 429109 | AL008637  | Hs.196352 | neutrophil cytosolic factor 4 (40kD)     | 2.4 |
|    | 451802 | A1817711  | Hs.209374 | ESTs                                     | 2.4 |
|    | 419417 | R92491    | Hs.39429  | ESTs                                     | 2.4 |
| 50 | 407094 | AF000574  | Hs.22405  | leukocyte immunoglobulin-like receptor,  | 2.4 |
|    | 423567 | BE252949  | Hs.69331  | hypothetical protein FLJ13633            | 2.4 |
|    | 427501 | A1369260  | Hs.131743 | ESTs                                     | 2.4 |
|    | 451773 | Z42044    | Hs.26996  | KIAA1278 protein                         | 2.4 |
|    | 436845 | AA732297  | Hs.113928 | ESTs                                     | 2.4 |
| 55 | 431584 | AW296121  | Hs.266263 | Homo sapiens cDNA FLJ14115 fis, clone MA | 2.4 |
|    | 440514 | AA781530  | Hs.127236 | hypothetical protein FLJ12879            | 2.4 |
|    | 423721 | AF176911  | Hs.132004 | cardiotrophin-like cytokine; neurotroph  | 2.4 |
|    | 452125 | BE312642  | Hs.28077  | GDP-mannose pyrophosphorylase B          | 2.4 |
|    | 419508 | AW997938  | Hs.90786  | ATP-binding cassette, sub-family C (CFTR | 2.4 |
| 60 | 453446 | BE299996  |           | gb:600944574F1 NIH_MGC_17 Homo sapiens c | 2.4 |
|    | 419792 | AA250890  | Hs.190037 | ESTs                                     | 2.4 |
|    | 452786 | R61362    | Hs.106642 | ESTs, Weakly similar to T09052 hypotheti | 2.4 |
|    | 410447 | AW816134  |           | gb:MR3-ST0220-290100-016-e04 ST0220 Homo | 2.4 |
|    | 438662 | AA223599  | Hs.6351   | cleavage and polyadenylation specific fa | 2.4 |
| 65 | 402408 |           |           | ESTs                                     | 2.4 |
|    | 443950 | NM_001425 | Hs.9999   | epithelial membrane protein 3            | 2.4 |
|    | 414625 | AA335738  | Hs.76686  | glutathione peroxidase 1                 | 2.4 |
|    | 403048 |           |           | ESTs                                     | 2.4 |
|    | 432088 | AA525454  |           | gb:n185c09.s1 NCI_CGAP_Pr20 Homo sapiens | 2.4 |
| 70 | 431692 | AL021331  | Hs.267749 | unc93 (C.elegans) homolog A              | 2.4 |
|    | 455023 | AW850907  |           | gb:IL3-CT0220-310100-065-H11 CT0220 Homo | 2.4 |
|    | 426249 | F05422    | Hs.168352 | nucleoporin-like protein 1               | 2.4 |
|    | 446795 | A1797713  | Hs.156471 | ESTs                                     | 2.4 |
|    | 414774 | X02419    | Hs.77274  | plasminogen activator, urokinase         | 2.4 |
| 75 | 414252 | AA346483  | Hs.126191 | ESTs                                     | 2.4 |
|    | 417918 | AA209205  | Hs.163754 | hypothetical protein FLJ12606            | 2.4 |
|    | 427550 | BE242818  | Hs.179606 | nuclear RNA helicase, DECD variant of DE | 2.4 |
|    | 404020 |           |           | ESTs                                     | 2.4 |
|    | 407846 | AA426202  | Hs.40403  | Cbp/p300-interacting transactivator, wit | 2.4 |
| 80 | 417222 | A1525424  | Hs.42053  | hypothetical protein MGC2383             | 2.4 |
|    | 443639 | BE269042  | Hs.9651   | proteasome (prosome, macropain) subunit, | 2.4 |
|    | 452706 | AW449390  | Hs.257150 | ESTs, Moderately similar to SUR1_HUMAN S | 2.4 |
|    | 401676 |           |           | ESTs                                     | 2.4 |
|    | 428882 | AA436915  | Hs.131748 | ESTs, Moderately similar to ALU7_HUMAN A | 2.4 |

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|    | 436277 | R88520    | Hs.120917 | ESTs                                     | 2.4 |
|    | 426271 | AF026547  | Hs.169047 | chondroitin sulfate proteoglycan 3 (neur | 2.4 |
|    | 405353 |           |           |  | 2.4 |
|    | 409193 | AA131483  |           | gb:zo08e05.r1 Stratagene neuroepithelium | 2.4 |
| 5  | 431431 | AL096711  | Hs.252953 | Human DNA sequence from clone RP3-403A15 | 2.4 |
|    | 407889 | R34556    | Hs.30800  | ESTs, Weakly similar to S65657 alpha-1C- | 2.4 |
|    | 453335 | AW857376  | Hs.169238 | fucosyltransferase 3 (galactoside 3(4)-L | 2.4 |
|    | 450621 | AW297288  | Hs.55918  | hypothetical protein FLJ11354            | 2.4 |
| 10 | 419652 | AL157485  | Hs.91973  | hypothetical protein                     | 2.4 |
|    | 421151 | BE174431  | Hs.63386  | ESTs                                     | 2.4 |
|    | 437846 | AA773866  | Hs.244569 | esophagus cancer-related gene-2          | 2.4 |
|    | 420681 | AA847602  | Hs.106510 | ESTs, Moderately similar to ALU2_HUMAN A | 2.4 |
|    | 405288 |           |           |  | 2.4 |
| 15 | 453527 | R49570    | Hs.180236 | ESTs                                     | 2.4 |
|    | 429875 | AI091815  |           | gb:qa58b06.s1 Soares_NhHMPu_S1 Homo sapi | 2.4 |
|    | 436360 | AI962796  | Hs.136754 | ESTs                                     | 2.4 |
|    | 418592 | X99226    | Hs.284153 | Fanconi anemia, complementation group A  | 2.4 |
|    | 419991 | AJ000098  | Hs.94210  | eyes absent (Drosophila) homolog 1       | 2.4 |
| 20 | 449539 | W80363    | Hs.58446  | ESTs                                     | 2.4 |
|    | 419870 | AW403911  | Hs.256175 | phosphoprotein associated with GEMs      | 2.4 |
|    | 404584 |           |           |  | 2.4 |
|    | 454276 | AW294996  | Hs.255374 | ESTs                                     | 2.4 |
|    | 423746 | AW361817  | Hs.132370 | NADPH oxidase 1                          | 2.4 |
| 25 | 415558 | AA885143  | Hs.125719 | ESTs                                     | 2.4 |
|    | 428141 | D50402    | Hs.182611 | solute carrier family 11 (proton-coupled | 2.4 |
|    | 406953 | L36847    |           | gb:Human (clone p17/90) rearranged iduro | 2.4 |
|    | 444471 | AB020684  | Hs.11217  | KIAA0877 protein                         | 2.4 |
|    | 451031 | AI360187  | Hs.4254   | ESTs                                     | 2.4 |
| 30 | 455302 | AW997641  |           | gb:RC6-BN0052-170200-011-D06 BN0052 Homo | 2.4 |
|    | 449063 | AI627352  | Hs.236547 | Homo sapiens, clone IMAGE:2905978, mRNA, | 2.4 |
|    | 401048 |           |           |  | 2.4 |
|    | 434420 | AA688278  | Hs.194864 | hypothetical protein FLJ22578            | 2.4 |
|    | 425848 | BE242709  | Hs.159637 | valyl-tRNA synthetase 2                  | 2.4 |
| 35 | 449086 | AI628357  | Hs.208037 | ESTs                                     | 2.4 |
|    | 415238 | R37780    | Hs.21422  | ESTs                                     | 2.4 |
|    | 448337 | AW206453  | Hs.3782   | ESTs                                     | 2.4 |
|    | 416991 | N36389    | Hs.141296 | KIAA0226 gene product                    | 2.3 |
|    | 412600 | L28824    | Hs.74101  | spleen tyrosine kinase                   | 2.3 |
| 40 | 418385 | AW590613  | Hs.301040 | Homo sapiens, clone IMAGE:3357127, mRNA, | 2.3 |
|    | 440769 | BE561793  | Hs.21446  | KIAA1716 protein                         | 2.3 |
|    | 450437 | X13956    | Hs.24998  | hypothetical protein MGC10471            | 2.3 |
|    | 412035 | N78559    | Hs.293629 | hypothetical protein MGC3121             | 2.3 |
|    | 406739 | AI566709  | Hs.182426 | ribosomal protein S2                     | 2.3 |
| 45 | 418506 | AA084248  | Hs.85339  | G protein-coupled receptor 39            | 2.3 |
|    | 410286 | AI739159  | Hs.61898  | DKFZP586N2124 protein                    | 2.3 |
|    | 443740 | R56434    | Hs.21062  | ESTs                                     | 2.3 |
|    | 405605 |           |           |  | 2.3 |
|    | 416913 | AW934714  |           | gb:RC1-DT0001-031299-011-a11 DT0001 Homo | 2.3 |
| 50 | 426509 | M31166    | Hs.2050   | pentaxin-related gene, rapidly induced b | 2.3 |
|    | 445828 | F05802    | Hs.81907  | ESTs                                     | 2.3 |
|    | 457195 | AB011099  | Hs.196647 | KIAA0527 protein                         | 2.3 |
|    | 420372 | AW960049  | Hs.293660 | Homo sapiens, clone IMAGE:3535476, mRNA, | 2.3 |
|    | 423198 | M81933    | Hs.1634   | cell division cycle 25A                  | 2.3 |
| 55 | 457730 | AW753613  |           | gb:RC1-CT0268-060100-013-e01 CT0268 Homo | 2.3 |
|    | 412014 | AI620650  | Hs.43761  | ESTs, Weakly similar to A46010 X-linked  | 2.3 |
|    | 447131 | NM_004585 | Hs.17466  | retinoic acid receptor responder (tazaro | 2.3 |
|    | 446288 | AW189209  | Hs.149708 | ESTs                                     | 2.3 |
|    | 436954 | AA740151  | Hs.130425 | ESTs                                     | 2.3 |
| 60 | 411658 | AW855598  |           | gb:CM1-CT0278-031199-032-e08 CT0278 Homo | 2.3 |
|    | 404240 |           |           |  | 2.3 |
|    | 456094 | H95091    |           | gb:yw57a09.r1 Soares_placenta_8to9weeks_ | 2.3 |
|    | 416951 | AA190926  | Hs.190785 | ESTs, Moderately similar to S65657 alpha | 2.3 |
|    | 406737 | AI356586  |           | gb:qy15h09.x1 NCI_CGAP_Bm23 Homo sapien  | 2.3 |
| 65 | 458453 | AI097452  | Hs.135095 | ESTs                                     | 2.3 |
|    | 452330 | AI879127  | Hs.191979 | KIAA1733 protein                         | 2.3 |
|    | 408523 | AW833259  | Hs.314287 | ESTs                                     | 2.3 |
|    | 455470 | AW947992  |           | gb:PM0-MT0011-240300-001-c09 MT0011 Homo | 2.3 |
|    | 436323 | R17697    | Hs.140963 | ESTs, Weakly similar to I38022 hypotheti | 2.3 |
| 70 | 450000 | AI952797  | Hs.10888  | hypothetical protein FLJ21709            | 2.3 |
|    | 416171 | H23896    | Hs.125790 | leucine-rich repeat-containing 2         | 2.3 |
|    | 419134 | T89863    | Hs.221771 | ESTs                                     | 2.3 |
|    | 445933 | AV655733  | Hs.293860 | spinster-like protein                    | 2.3 |
|    | 422089 | AA523172  | Hs.103135 | ESTs, Weakly similar to SFR4_HUMAN SPLIC | 2.3 |
| 75 | 449911 | AI262106  | Hs.12653  | ESTs                                     | 2.3 |
|    | 417079 | U65590    | Hs.81134  | interleukin 1 receptor antagonist        | 2.3 |
|    | 411742 | AW247593  | Hs.71819  | eukaryotic translation initiation factor | 2.3 |
|    | 435615 | Y15065    | Hs.4975   | potassium voltage-gated channel, KQT-IIk | 2.3 |
|    | 423491 | AA191765  | Hs.129673 | eukaryotic translation initiation factor | 2.3 |
| 80 | 407182 | AA312551  | Hs.230157 | ESTs                                     | 2.3 |
|    | 411448 | AA178955  | Hs.271439 | ESTs, Weakly similar to I38022 hypotheti | 2.3 |
|    | 438644 | AI126162  | Hs.129037 | ESTs                                     | 2.3 |
|    | 432691 | U29725    | Hs.3080   | mitogen-activated protein kinase 7       | 2.3 |
|    | 452198 | AI097560  | Hs.61210  | ESTs, Weakly similar to I38022 hypotheti | 2.3 |

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|    | 411125 | AA151647  | Hs.68877  | cytochrome b-245, alpha polypeptide      | 2.3 |
|    | 404054 |           |           |  | 2.3 |
|    | 430458 | AA479300  | Hs.225706 | ESTs, Weakly similar to i38022 hypoheti  | 2.3 |
|    | 440210 | AW674562  | Hs.125296 | ESTs                                     | 2.3 |
| 5  | 446727 | AB011095  | Hs.16032  | KIAA0523 protein                         | 2.3 |
|    | 453775 | NM_002916 | Hs.35120  | replication factor C (activator 1) 4 (37 | 2.3 |
|    | 438379 | N23018    | Hs.171391 | C-terminal binding protein 2             | 2.3 |
|    | 449919 | AI674685  | Hs.200141 | ESTs                                     | 2.3 |
|    | 415293 | R49462    | Hs.106541 | ESTs                                     | 2.3 |
| 10 | 441126 | NM_000429 | Hs.323715 | methionine adenosyltransferase 1, alpha  | 2.3 |
|    | 408203 | AA053137  | Hs.42390  | nasopharyngeal carcinoma susceptibility  | 2.3 |
|    | 434941 | AW073202  | Hs.334825 | Homo sapiens cDNA FLJ14752 fis, clone NT | 2.3 |
|    | 450748 | AI733093  | Hs.130016 | ESTs                                     | 2.3 |
|    | 404185 |           |           |  | 2.3 |
| 15 | 418327 | U70370    | Hs.84136  | paired-like homeodomain transcription fa | 2.3 |
|    | 451370 | AI791929  | Hs.300782 | ESTs                                     | 2.3 |
|    | 400034 |           |           |  | 2.3 |
|    | 407723 | AW071161  | Hs.252873 | ESTs                                     | 2.3 |
|    | 431320 | AW969474  | Hs.183070 | ESTs                                     | 2.3 |
| 20 | 429271 | AF039850  | Hs.198515 | dead ringer (Drosophila)-like 1          | 2.3 |
|    | 453707 | AW003879  | Hs.126522 | Homo sapiens, clone MGC:16722, mRNA, com | 2.3 |
|    | 419225 | U70073    |           | gb:HSU70073 Human Homo sapiens cDNA clon | 2.3 |
|    | 444656 | AI277924  | Hs.145199 | ESTs                                     | 2.3 |
|    | 405741 |           |           |  | 2.3 |
| 25 | 400917 |           |           |  | 2.3 |
|    | 432567 | AA736777  | Hs.293770 | ESTs                                     | 2.3 |
|    | 437949 | U78519    | Hs.41654  | ESTs, Weakly similar to A46010 X-linked  | 2.3 |
|    | 450514 | AC005785  | Hs.25059  | A kinase (PRKA) anchor protein 8         | 2.3 |
|    | 418400 | BE243026  | Hs.301989 | KIAA0246 protein                         | 2.3 |
| 30 | 444019 | BE173977  | Hs.10098  | putative nucleolar RNA helicase          | 2.3 |
|    | 406326 |           |           |  | 2.3 |
|    | 412077 | NS1107    | Hs.47199  | ESTs, Weakly similar to FLJ00004 protein | 2.3 |
|    | 427647 | W19744    | Hs.180059 | Homo sapiens cDNA FLJ20653 fis, clone KA | 2.3 |
|    | 414528 | AA148950  | Hs.188836 | ESTs                                     | 2.3 |
| 35 | 414854 | BE546797  | Hs.51483  | ESTs, Weakly similar to hypothetical pro | 2.3 |
|    | 420352 | BE258835  |           | gb:601117374F1 NIH_MGC_16 Homo sapiens c | 2.3 |
|    | 439467 | AW292275  | Hs.158365 | ESTs                                     | 2.3 |
|    | 402627 |           |           |  | 2.3 |
| 40 | 451711 | AK000461  | Hs.26890  | cat eye syndrome chromosome region, cand | 2.3 |
|    | 424308 | AW975531  | Hs.154443 | minichromosome maintenance deficient (S. | 2.3 |
|    | 423869 | BE409301  | Hs.134012 | C1q-related factor                       | 2.3 |
|    | 405915 |           |           |  | 2.3 |
|    | 431503 | NM_012129 | Hs.258576 | claudin 12                               | 2.3 |
| 45 | 423306 | W88562    | Hs.108198 | ESTs                                     | 2.3 |
|    | 443232 | AF161521  | Hs.9081   | phenylalanyl-tRNA synthetase beta-subuni | 2.3 |
|    | 433064 | D79991    | Hs.30002  | SH3-containing protein SH3GLB2; KIAA1848 | 2.3 |
|    | 434437 | AI912566  | Hs.187813 | ESTs                                     | 2.3 |
|    | 436191 | BE407866  | Hs.170253 | hypothetical protein FLJ23282            | 2.3 |
| 50 | 420006 | H14429    | Hs.94300  | serologically defined colon cancer antig | 2.3 |
|    | 447942 | F12628    | Hs.334786 | hypothetical protein MGC16040            | 2.3 |
|    | 403166 |           |           |  | 2.3 |
|    | 422119 | AI277829  | Hs.111862 | KIAA0590 gene product                    | 2.3 |
|    | 403751 |           |           |  | 2.3 |
| 55 | 426451 | AI908165  | Hs.169946 | GATA-binding protein 3                   | 2.3 |
|    | 427413 | BE547647  | Hs.177781 | hypothetical protein MGC5618             | 2.3 |
|    | 409091 | AW970386  | Hs.269423 | ESTs                                     | 2.3 |
|    | 440491 | R35252    | Hs.24944  | ESTs, Weakly similar to 2109260A B cell  | 2.3 |
|    | 427722 | AK000123  | Hs.180479 | hypothetical protein FLJ20116            | 2.3 |
|    | 405747 |           |           |  | 2.3 |
| 60 | 438210 | AA780519  | Hs.311601 | EST                                      | 2.3 |
|    | 404652 |           |           |  | 2.3 |
|    | 423524 | AF055989  | Hs.129738 | potassium voltage-gated channel, Shaw-re | 2.2 |
|    | 426793 | X89887    | Hs.172350 | HIR (histone cell cycle regulation defec | 2.2 |
| 65 | 444424 | AI654684  | Hs.196377 | ESTs                                     | 2.2 |
|    | 434031 | BE384165  | Hs.23723  | pseudouridylate synthase 1               | 2.2 |
|    | 427650 | AW501245  | Hs.252259 | ribosomal protein S3                     | 2.2 |
|    | 435220 | D50030    | Hs.104    | HGF activator                            | 2.2 |
|    | 438279 | AA805166  | Hs.154762 | HIV-1 rev binding protein 2              | 2.2 |
| 70 | 424668 | D83702    | Hs.151573 | cryptochrome 1 (photolyase-like)         | 2.2 |
|    | 429961 | BE246829  | Hs.226770 | DKFZP566C0424 protein                    | 2.2 |
|    | 442065 | AI831229  | Hs.128417 | hypothetical protein FLJ14009            | 2.2 |
|    | 415198 | AW009480  | Hs.943    | natural killer cell transcript 4         | 2.2 |
|    | 420536 | AL117455  | Hs.275438 | histone deacetylase 7A                   | 2.2 |
| 75 | 411263 | BE297802  | Hs.69360  | kinesin-like 6 (mitotic centromere-assoc | 2.2 |
|    | 443753 | AW367578  | Hs.134749 | ESTs                                     | 2.2 |
|    | 423243 | AA351938  | Hs.23964  | sin3-associated polypeptide, 18kD        | 2.2 |
|    | 446572 | AV659151  | Hs.282961 | ESTs                                     | 2.2 |
|    | 412247 | AF022375  | Hs.73793  | vascular endothelial growth factor       | 2.2 |
| 80 | 421040 | AA715026  | Hs.135280 | ESTs                                     | 2.2 |
|    | 426212 | S71824    | Hs.167988 | neural cell adhesion molecule 1          | 2.2 |
|    | 455584 | BE007420  |           | gb:PM3-BN0142-200300-001-c04 BN0142 Homo | 2.2 |
|    | 406851 | AA609784  | Hs.180255 | major histocompatibility complex, class  | 2.2 |
|    | 444153 | AK001610  | Hs.10414  | hypothetical protein FLJ10748            | 2.2 |

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|    |        |           |           |  |     |
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|    | 419575 | U43431    | Hs.91175  | topoisomerase (DNA) III alpha            | 2.2 |
|    | 418672 | L44284    | Hs.159743 | ESTs                                     | 2.2 |
|    | 456261 | AA210718  | Hs.104157 | ESTs, Weakly similar to KIAA0694 protein | 2.2 |
|    | 415737 | AA167626  | Hs.118743 | ESTs                                     | 2.2 |
| 5  | 447554 | AI391598  | Hs.36119  | ESTs, Weakly similar to ALU1_HUMAN ALU S | 2.2 |
|    | 405159 |           |           |  | 2.2 |
|    | 442177 | AW661820  | Hs.211413 | ESTs                                     | 2.2 |
|    | 446139 | H77395    | Hs.39749  | ESTs                                     | 2.2 |
| 10 | 458339 | AW976853  | Hs.172843 | ESTs                                     | 2.2 |
|    | 401876 |           |           |  | 2.2 |
|    | 439566 | AF086387  |           | gb:Homo sapiens full length insert cDNA  | 2.2 |
|    | 425079 | H09963    | Hs.2257   | vitronectin (serum spreading factor, som | 2.2 |
|    | 441837 | AA361743  | Hs.179881 | core-binding factor, beta subunit        | 2.2 |
|    | 430644 | AB015419  | Hs.247710 | preprolactin-releasing peptide           | 2.2 |
| 15 | 431474 | AL133990  | Hs.190642 | ESTs                                     | 2.2 |
|    | 407739 | NM_002285 | Hs.38070  | lymphoid nuclear protein related to AF4  | 2.2 |
|    | 424244 | AV647184  | Hs.143601 | hypothetical protein hCLA-iso            | 2.2 |
|    | 438057 | AW294544  | Hs.125785 | ESTs, Weakly similar to CORB MOUSE CORNI | 2.2 |
|    | 412715 | NM_000947 | Hs.74519  | primase, polypeptide 2A (58kD)           | 2.2 |
| 20 | 422365 | AF035537  | Hs.115521 | REV3 (yeast homolog)-like, catalytic sub | 2.2 |
|    | 404170 |           |           |  | 2.2 |
|    | 406902 | M32074    |           | gb:Human retinoic acid receptor gamma 2  | 2.2 |
|    | 437902 | AA770599  | Hs.144055 | ESTs                                     | 2.2 |
|    | 401012 |           |           |  | 2.2 |
| 25 | 446502 | AI302654  | Hs.208024 | ESTs                                     | 2.2 |
|    | 442554 | AW467376  | Hs.129640 | ESTs                                     | 2.2 |
|    | 443021 | AA368546  | Hs.8904   | Ig superfamily protein                   | 2.2 |
|    | 421141 | AW117261  | Hs.125914 | ESTs                                     | 2.2 |
| 30 | 443070 | BE388662  | Hs.8984   | Homo sapiens chromosome 14 BAC 98L12     | 2.2 |
|    | 446566 | H95741    | Hs.17914  | membrane-spanning 4-domains, subfamily A | 2.2 |
|    | 427695 | R88483    | Hs.172862 | ESTs                                     | 2.2 |
|    | 426503 | AA380153  |           | gb:EST93093 Skin tumor I Homo sapiens cD | 2.2 |
|    | 431468 | AW248431  | Hs.256526 | nuclear prelamin A recognition factor    | 2.2 |
| 35 | 416185 | AW975861  | Hs.47367  | KIAA1785 protein                         | 2.2 |
|    | 437319 | BE410958  | Hs.56406  | Homo sapiens cDNA FLJ13549 fis, clone PL | 2.2 |
|    | 402064 |           |           |  | 2.2 |
|    | 413335 | AI613318  | Hs.48442  | ESTs                                     | 2.2 |
|    | 408212 | AA297567  | Hs.43728  | hypothetical protein                     | 2.2 |
|    | 406169 |           |           |  | 2.2 |
| 40 | 451099 | R52795    | Hs.25954  | interleukin 13 receptor, alpha 2         | 2.2 |
|    | 407335 | AA631047  | Hs.158761 | Homo sapiens cDNA FLJ13054 fis, clone NT | 2.2 |
|    | 409715 | W42591    | Hs.23892  | ESTs                                     | 2.2 |
|    | 431921 | N46466    | Hs.58879  | ESTs                                     | 2.2 |
| 45 | 443823 | BE089782  | Hs.9877   | hypothetical protein                     | 2.2 |
|    | 432458 | AI968598  | Hs.78768  | malignant cell expression-enhanced gene/ | 2.2 |
|    | 419726 | U50330    | Hs.1274   | bone morphogenetic protein 1             | 2.2 |
|    | 423178 | AI033140  | Hs.124983 | Homo sapiens mRNA; cDNA DKFZp564C142 (fr | 2.2 |
|    | 451089 | AA903705  | Hs.4190   | Homo sapiens cDNA: FLJ23269 fis, clone C | 2.2 |
| 50 | 415216 | AI825905  | Hs.193211 | Homo sapiens cDNA FLJ11421 fis, clone HE | 2.2 |
|    | 442242 | AV647908  | Hs.90424  | Homo sapiens cDNA: FLJ23285 fis, clone H | 2.2 |
|    | 441830 | AA383104  | Hs.42954  | hypothetical protein DKFZp564D0372       | 2.2 |
|    | 406660 | X65371    | Hs.172550 | polypyrimidine tract binding protein (he | 2.2 |
|    | 443378 | AW392550  | Hs.9280   | proteasome (prosome, macropain) subunit, | 2.2 |
| 55 | 432558 | R97268    | Hs.177269 | ESTs                                     | 2.2 |
|    | 408146 | R45621    | Hs.81057  | hypothetical protein MGC2718             | 2.2 |
|    | 419865 | NM_007020 | Hs.93502  | U1-snRNP binding protein homolog (70kD)  | 2.2 |
|    | 439444 | AI277652  | Hs.54578  | ESTs, Weakly similar to I38022 hypothi   | 2.2 |
|    | 438407 | AI457122  | Hs.129673 | eukaryotic translation initiation factor | 2.2 |
| 60 | 450184 | W31096    | Hs.237617 | Homo sapiens, clone IMAGE:3447394, mRNA, | 2.2 |
|    | 409130 | BE076601  | Hs.75658  | phosphorylase, glycogen; brain           | 2.2 |
|    | 428844 | AW972635  | Hs.301904 | hypothetical protein FLJ12671            | 2.2 |
|    | 429489 | AF008203  | Hs.204039 | aristless-like homeobox 3                | 2.2 |
|    | 433042 | AW193534  | Hs.281895 | Homo sapiens cDNA FLJ11660 fis, clone HE | 2.2 |
| 65 | 440658 | H29142    | Hs.143032 | ESTs, Weakly similar to neuronal thread  | 2.2 |
|    | 408204 | AA454501  | Hs.43666  | protein tyrosine phosphatase type IVA, m | 2.2 |
|    | 427498 | NM_003926 | Hs.178728 | methyl-CpG binding domain protein 3      | 2.2 |
|    | 408006 | H57654    | Hs.303345 | ESTs, Weakly similar to I38022 hypothi   | 2.2 |
|    | 445703 | AV654845  | Hs.27     | glycine dehydrogenase (decarboxylating;  | 2.2 |
| 70 | 431446 | AW294929  | Hs.255369 | Homo sapiens cDNA FLJ10265 fis, clone HE | 2.2 |
|    | 456660 | AA909249  | Hs.112282 | solute carrier family 30 (zinc transport | 2.2 |
|    | 433099 | NM_002504 | Hs.3187   | nuclear transcription factor, X-box bind | 2.2 |
|    | 415857 | AA866115  | Hs.127797 | Homo sapiens cDNA FLJ11381 fis, clone HE | 2.2 |
|    | 415245 | N59650    | Hs.27252  | ESTs                                     | 2.2 |
| 75 | 443657 | R14973    |           | gb:yf42f10.s1 Soares fetal liver spleen  | 2.2 |
|    | 402521 | AW501216  | Hs.108945 | KIAA0515 protein                         | 2.2 |
|    | 414819 | BE177320  | Hs.156148 | hypothetical protein FLJ13231            | 2.2 |
|    | 446530 | AV658909  | Hs.282642 | ESTs                                     | 2.2 |
|    | 415797 | AI291896  | Hs.72800  | ESTs                                     | 2.2 |
| 80 | 414812 | X72755    | Hs.77367  | monokine induced by gamma interferon     | 2.2 |
|    | 453028 | AB006532  | Hs.31442  | RecQ protein-like 4                      | 2.2 |
|    | 412133 | U83460    | Hs.73614  | solute carrier family 31 (copper transpo | 2.2 |
|    | 407881 | AW072003  | Hs.40968  | heparan sulfate (glucosamine) 3-O-sulfot | 2.2 |
|    | 437033 | AW248364  | Hs.5409   | RNA polymerase I subunit                 | 2.2 |



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|    | 422732 | AA577455  | Hs.24937  | transformer-2 alpha (htra-2 alpha)       | 2.2 |
|    | 416388 | AI417358  | Hs.73677  | ESTs                                     | 2.2 |
|    | 452849 | AF044924  | Hs.30792  | hook2 protein                            | 2.2 |
| 5  | 446615 | BE513202  | Hs.15589  | PPAR binding protein                     | 2.2 |
|    | 428361 | NM_015905 | Hs.183858 | transcriptional intermediary factor 1    | 2.2 |
|    | 446279 | AA490770  | Hs.182382 | ESTs                                     | 2.2 |
|    | 422938 | NM_001809 | Hs.1594   | centromere protein A (17kD)              | 2.2 |
|    | 403969 |           |           |  | 2.2 |
| 10 | 410423 | AW402432  | Hs.63489  | protein tyrosine phosphatase, non-recept | 2.2 |
|    | 429736 | AF125304  | Hs.212680 | tumor necrosis factor receptor superfami | 2.2 |
|    | 447091 | AW089648  | Hs.157779 | ESTs, Weakly similar to CA17_HUMAN COLLA | 2.2 |
|    | 422017 | NM_003877 | Hs.110776 | STAT induced STAT inhibitor-2            | 2.2 |
|    | 426728 | NM_007118 | Hs.171957 | triple functional domain (PTPRF interact | 2.2 |
| 15 | 438726 | AB033103  | Hs.6385   | KIAA1277 protein                         | 2.2 |
|    | 453315 | BE544203  | Hs.24831  | ESTs                                     | 2.2 |
|    | 423244 | AL039379  | Hs.209602 | ESTs, Weakly similar to ubiquitous TPR m | 2.2 |
|    | 433610 | AA806822  | Hs.112547 | ESTs                                     | 2.2 |
|    | 429451 | BE409861  | Hs.202833 | heme oxygenase (decycling) 1             | 2.2 |
| 20 | 417980 | R32235    |           | gb:yh67R08.r1 Soares placenta Nb2HP Homo | 2.2 |
|    | 406347 |           |           |  | 2.2 |
|    | 414406 | BE297904  |           | gb:601177814F1 NIH_MGC_17 Homo sapiens c | 2.2 |
|    | 401827 |           |           |  | 2.2 |
|    | 446913 | AA430650  | Hs.16529  | transmembrane 4 superfamily member (tetr | 2.2 |
| 25 | 452294 | AI871925  | Hs.117895 | ESTs, Moderately similar to A47582 B-cel | 2.2 |
|    | 404084 |           |           |  | 2.2 |
|    | 456786 | AK002084  | Hs.132851 | hypothetical protein FLJ11222            | 2.2 |
|    | 435031 | AI632091  | Hs.116877 | ESTs                                     | 2.2 |
|    | 442609 | AL020996  | Hs.8518   | selenoprotein N                          | 2.1 |
| 30 | 439732 | AW629604  | Hs.167641 | hypothetical protein from EUROIMAGE 1703 | 2.1 |
|    | 421506 | BE302796  | Hs.105097 | thymidine kinase 1, soluble              | 2.1 |
|    | 439253 | AF086064  | Hs.332252 | ESTs                                     | 2.1 |
|    | 409669 | AW177551  | Hs.220255 | hypothetical protein MGC13098            | 2.1 |
|    | 429574 | BE268321  | Hs.208912 | hypothetical protein MGC861              | 2.1 |
| 35 | 437470 | AL390147  | Hs.134742 | hypothetical protein DKFZp547D065        | 2.1 |
|    | 408945 | AW015089  | Hs.4964   | DKFZP586J1624 protein                    | 2.1 |
|    | 447687 | AI627947  | Hs.150186 | hypothetical protein DKFZp566K1946       | 2.1 |
|    | 459584 | AI910884  | Hs.207898 | ESTs                                     | 2.1 |
|    | 439130 | AA306090  | Hs.124707 | ESTs                                     | 2.1 |
| 40 | 428180 | AI129767  | Hs.182874 | guanine nucleotide binding protein (G pr | 2.1 |
|    | 442028 | AI239437  | Hs.48945  | ESTs                                     | 2.1 |
|    | 430968 | AW972830  |           | gb:EST384925 MAGE resequences, MAGL Homo | 2.1 |
|    | 443609 | AV650231  | Hs.282941 | ESTs, Highly similar to A Chain A, Human | 2.1 |
|    | 417164 | AA338283  | Hs.81361  | heterogeneous nuclear ribonucleoprotein  | 2.1 |
| 45 | 444534 | AW271626  | Hs.42294  | ESTs                                     | 2.1 |
|    | 438391 | AI262248  | Hs.25027  | ESTs                                     | 2.1 |
|    | 442003 | AW297497  | Hs.201891 | ESTs                                     | 2.1 |
|    | 456278 | BE300369  | Hs.289038 | hypothetical protein MGC4126             | 2.1 |
|    | 416976 | BE243985  | Hs.80680  | major vault protein                      | 2.1 |
| 50 | 417810 | D28419    | Hs.82609  | hydroxymethylbilane synthase             | 2.1 |
|    | 445242 | BE156478  | Hs.21108  | ESTs, Weakly similar to ALU1_HUMAN ALU S | 2.1 |
|    | 452712 | AW838616  |           | gb:RCS-LT0054-140200-013-D01 LT0054 Homo | 2.1 |
|    | 434926 | BE543269  | Hs.50252  | mitochondrial ribosomal protein L32      | 2.1 |
|    | 421564 | AB007864  | Hs.105850 | KIAA0404 protein                         | 2.1 |
| 55 | 424927 | AW973666  | Hs.153850 | hypothetical protein C321D2.4            | 2.1 |
|    | 432742 | AA564453  | Hs.162339 | ESTs                                     | 2.1 |
|    | 435958 | H98180    | Hs.117975 | ESTs                                     | 2.1 |
|    | 421531 | AA713505  | Hs.291769 | ESTs                                     | 2.1 |
|    | 410431 | BE261320  | Hs.158196 | transcriptional adaptor 3 (ADA3, yeast h | 2.1 |
| 60 | 420503 | AI570943  | Hs.337546 | ESTs                                     | 2.1 |
|    | 448127 | AI478416  | Hs.282883 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 2.1 |
|    | 452897 | BE066058  | Hs.269233 | ESTs, Moderately similar to I78885 serin | 2.1 |
|    | 447112 | H17800    | Hs.7154   | ESTs                                     | 2.1 |
|    | 406577 |           |           |  | 2.1 |
| 65 | 437162 | AW005505  | Hs.5464   | thyroid hormone receptor coactivating pr | 2.1 |
|    | 451460 | AI797550  | Hs.209652 | ESTs                                     | 2.1 |
|    | 447402 | H54520    | Hs.18490  | hypothetical protein FLJ20452            | 2.1 |
|    | 435828 | AA700705  | Hs.13852  | ESTs                                     | 2.1 |
|    | 436396 | AI683487  | Hs.152213 | wingless-type MMTV integration site fami | 2.1 |
| 70 | 420582 | BE047878  | Hs.99093  | Homo sapiens chromosome 19, cosmid R2837 | 2.1 |
|    | 452020 | AA722012  | Hs.255757 | ESTs, Weakly similar to AT2A_HUMAN POTEN | 2.1 |
|    | 415586 | Z45481    |           | gb:HSC2QE041 normalized infant brain cDN | 2.1 |
|    | 452620 | AA436504  | Hs.119286 | ESTs                                     | 2.1 |
|    | 457066 | BE244613  | Hs.158272 | ESTs, Weakly similar to CA13 MOUSE COLLA | 2.1 |
| 75 | 435472 | AW972330  | Hs.283022 | triggering receptor expressed on myeloid | 2.1 |
|    | 431741 | AA514783  | Hs.191701 | ESTs                                     | 2.1 |
|    | 446840 | AW294828  | Hs.209203 | ESTs                                     | 2.1 |
|    | 440818 | AI147060  | Hs.146726 | ESTs                                     | 2.1 |
|    | 410174 | AA306007  | Hs.59461  | DKFZP434C245 protein                     | 2.1 |
| 80 | 400822 |           |           |  | 2.1 |
|    | 412760 | AW379030  | Hs.41324  | ESTs                                     | 2.1 |
|    | 410653 | BE383768  | Hs.65238  | 95 kDa retinoblastoma protein binding pr | 2.1 |
|    | 426925 | NM_001196 | Hs.315689 | Homo sapiens cDNA: FLJ22373 fis, clone H | 2.1 |
|    | 424242 | AA337476  | Hs.293984 | hypothetical protein MGC13102            | 2.1 |

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| 5  | 452560 | BE077084  | Hs.336432 | ESTs                                     | 2.1 |
|    | 456437 | AI924228  | Hs.115185 | ESTs, Moderately similar to PC4259 ferri | 2.1 |
|    | 458922 | BE501831  | Hs.282053 | ESTs                                     | 2.1 |
|    | 439231 | AW581935  | Hs.141480 | Homo sapiens mRNA; cDNA DKFZp434N079 (fr | 2.1 |
|    | 419488 | AA316241  | Hs.90691  | nucleophosmin/nucleoplasmin 3            | 2.1 |
| 10 | 411829 | AW865749  |           | gb:QV3-SN0021-100500-185-c03 SN0021 Homo | 2.1 |
|    | 457192 | AL135682  | Hs.22452  | Homo sapiens mRNA for KIAA1737 protein,  | 2.1 |
|    | 422128 | AW881145  |           | gb:QV0-OT0033-010400-182-a07 OT0033 Homo | 2.1 |
|    | 452571 | W31518    | Hs.34665  | ESTs                                     | 2.1 |
|    | 423699 | H41850    | Hs.131846 | PCAF associated factor 65 alpha          | 2.1 |
| 15 | 406610 |           |           |  | 2.1 |
|    | 453638 | AW814996  |           | gb:MR1-ST0206-170400-024-n09 ST0206 Homo | 2.1 |
|    | 418856 | AA362858  |           | gb:EST72900 Ovary II Homo sapiens cDNA 5 | 2.1 |
|    | 437623 | D63880    | Hs.5719   | chromosome condensation-related SMC-asso | 2.1 |
|    | 410908 | AA121686  | Hs.10592  | ESTs                                     | 2.1 |
| 20 | 420221 | N25991    | Hs.43725  | ESTs                                     | 2.1 |
|    | 424739 | AA346108  | Hs.221610 | ESTs                                     | 2.1 |
|    | 425398 | AL049689  | Hs.155369 | hypothetical protein similar to tenascin | 2.1 |
|    | 424901 | Z11933    | Hs.182505 | POU domain, class 3, transcription facto | 2.1 |
|    | 411096 | U80034    | Hs.68583  | mitochondrial intermediate peptidase     | 2.1 |
| 25 | 415635 | F13168    |           | gb:HSC3JF101 normalized infant brain cDN | 2.1 |
|    | 418181 | U37012    | Hs.83727  | cleavage and polyadenylation specific fa | 2.1 |
|    | 407103 | AA424881  | Hs.255301 | hypothetical protein MGC13170            | 2.1 |
|    | 454389 | AW752571  |           | gb:IL3-CT0213-170100-055-F02 CT0213 Homo | 2.1 |
|    | 400021 |           |           |  | 2.1 |
| 30 | 439228 | N51700    |           | gb:yy72d01.s1 Soares_multiple_sclerosis_ | 2.1 |
|    | 456505 | AA504595  | Hs.111418 | ESTs                                     | 2.1 |
|    | 405258 |           |           |  | 2.1 |
|    | 444645 | AI184564  | Hs.101654 | ESTs                                     | 2.1 |
|    | 430246 | AI269069  | Hs.109268 | hypothetical protein FLJ12552            | 2.1 |
| 35 | 458687 | AW024815  | Hs.170088 | GLUT4 enhancer factor                    | 2.1 |
|    | 403857 |           |           |  | 2.1 |
|    | 400258 |           |           |  | 2.1 |
|    | 422221 | AA306649  | Hs.169370 | FYN oncogene related to SRC, FGR, YES    | 2.1 |
|    | 441054 | AA913591  | Hs.126480 | ESTs                                     | 2.1 |
| 40 | 452700 | AI859390  | Hs.288940 | five-span transmembrane protein M83      | 2.1 |
|    | 454606 | AW809752  |           | gb:MR4-ST0124-181299-020-b06 ST0124 Homo | 2.1 |
|    | 448954 | AB014564  | Hs.22616  | KIAA0664 protein                         | 2.1 |
|    | 443148 | AI034357  | Hs.211194 | ESTs, Weakly similar to ALU8_HUMAN ALU S | 2.1 |
|    | 453486 | AL039201  | Hs.173554 | ubiquinol-cytochrome c reductase core pr | 2.1 |
| 45 | 437695 | AA769202  | Hs.192142 | ESTs                                     | 2.1 |
|    | 425449 | X52056    | Hs.157441 | spleen focus forming virus (SFFV) provir | 2.1 |
|    | 447270 | AC002551  | Hs.331    | general transcription factor IIIC, polyp | 2.1 |
|    | 435677 | AA694142  | Hs.293726 | ESTs, Weakly similar to TSGA RAT TESTIS  | 2.1 |
|    | 436382 | AW977063  | Hs.250181 | ESTs                                     | 2.1 |
| 50 | 435837 | AI689210  | Hs.187276 | Homo sapiens cDNA FLJ11431 fis, clone HE | 2.1 |
|    | 458287 | AA987556  | Hs.12867  | ESTs                                     | 2.1 |
|    | 423794 | BE551781  | Hs.231895 | ESTs                                     | 2.1 |
|    | 408049 | AW076098  | Hs.74316  | desmoplakin (DPI, DPII)                  | 2.1 |
|    | 402721 |           |           |  | 2.1 |
| 55 | 451999 | AW176401  | Hs.27424  | DEAD/H (Asp-Glu-Ala-Asp/His) box polypep | 2.1 |
|    | 417541 | AI992191  | Hs.180040 | hypothetical protein FLJ22439            | 2.1 |
|    | 414857 | AW402389  | Hs.920    | modulator recognition factor I           | 2.1 |
|    | 435760 | AF231922  | Hs.213004 | chromosome 21 open reading frame 62      | 2.1 |
|    | 428086 | AL110193  | Hs.224137 | hypothetical protein                     | 2.1 |
| 60 | 447853 | AI434204  | Hs.164285 | ESTs, Weakly similar to AFG1_YEAST AFG1  | 2.1 |
|    | 419034 | NM_002110 | Hs.89555  | hemopoietic cell kinase                  | 2.1 |
|    | 431019 | NM_005249 | Hs.2714   | forkhead box G1B                         | 2.1 |
|    | 421064 | AI245432  | Hs.101382 | tumor necrosis factor, alpha-induced pro | 2.1 |
|    | 416435 | AI431301  | Hs.179703 | KIAA0129 gene product                    | 2.1 |
| 65 | 437014 | AA808757  | Hs.222531 | ESTs, Weakly similar to S59501 interlero | 2.1 |
|    | 459369 | T83080    |           | gb:yd40e03.r1 Soares fetal liver spleen  | 2.1 |
|    | 402239 |           |           |  | 2.1 |
|    | 412280 | AW205116  | Hs.272814 | hypothetical protein DKFZp434E1723       | 2.1 |
|    | 426012 | AA367507  | Hs.75874  | pregnancy-associated plasma protein A    | 2.1 |
| 70 | 438885 | AI886558  | Hs.184987 | ESTs                                     | 2.1 |
|    | 426076 | AW962714  |           | gb:EST374787 MAGE resequences, MAGG Homo | 2.1 |
|    | 404561 |           |           |  | 2.1 |
|    | 442932 | AA457211  | Hs.8858   | bromodomain adjacent to zinc finger doma | 2.1 |
|    | 408175 | W29089    | Hs.19066  | hypothetical protein DKFZp667O2416       | 2.1 |
| 75 | 423867 | AA331886  |           | gb:EST35757 Embryo, 8 week I Homo sapien | 2.1 |
|    | 458604 | W37944    | Hs.4007   | Sarcolemmal-associated protein           | 2.1 |
|    | 409650 | T08490    | Hs.288969 | HSCARG protein                           | 2.1 |
|    | 401729 |           |           |  | 2.1 |
|    | 433675 | AW977653  | Hs.75319  | ribonucleotide reductase M2 polypeptide  | 2.1 |
| 80 | 456741 | W37608    | Hs.184492 | ESTs                                     | 2.1 |
|    | 417037 | BE083936  | Hs.80976  | antigen identified by monoclonal antibod | 2.1 |
|    | 415079 | R43179    | Hs.22895  | hypothetical protein FLJ23548            | 2.1 |
|    | 439262 | AA832333  | Hs.333045 | ESTs                                     | 2.1 |
|    | 403108 |           |           |  | 2.1 |
|    | 436718 | AW015227  | Hs.289053 | hypothetical protein FLJ14733            | 2.1 |
|    | 440696 | AI762757  | Hs.187660 | putative Rab5 GDP/GTP exchange factor ho | 2.1 |
|    | 409745 | AA077391  |           | gb:7B14E12 Chromosome 7 Fetal Brain cDNA | 2.1 |

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|    | 453485 | BE620712  | Hs.33026  | hypothetical protein PP2447              | 2.1 |
|    | 418177 | N44967    | Hs.5663   | ESTs                                     | 2.1 |
|    | 457292 | AI921270  | Hs.334882 | hypothetical protein FLJ14251            | 2.1 |
|    | 454434 | AA083558  | Hs.261286 | ESTs                                     | 2.1 |
| 5  | 406085 |           |           |  | 2.1 |
|    | 424441 | X14850    | Hs.147097 | H2A histone family, member X             | 2.1 |
|    | 422726 | U11690    | Hs.1572   | faciogenital dysplasia (Aarskog-Scott sy | 2.1 |
|    | 424576 | BE154142  | Hs.96833  | ESTs                                     | 2.1 |
| 10 | 423560 | AL045228  | Hs.130831 | Homo sapiens mRNA; cDNA DKFZp434L137 (fr | 2.1 |
|    | 403509 | AF231919  | Hs.18759  | KIAA0539 gene product                    | 2.1 |
|    | 441940 | AW298115  | Hs.128152 | ESTs                                     | 2.1 |
|    | 439190 | AW978693  | Hs.293811 | ESTs                                     | 2.1 |
|    | 417791 | AW965339  | Hs.111471 | ESTs                                     | 2.1 |
|    | 423701 | AA329856  | Hs.143022 | ESTs                                     | 2.1 |
| 15 | 427239 | BE270447  | Hs.174070 | ubiquitin carrier protein                | 2.1 |
|    | 459642 | BE243103  |           | gb:TCAAP2E0949 Pediatric acute myelogeno | 2.1 |
|    | 450385 | AI631024  | Hs.24948  | synuclein, alpha interacting protein (sy | 2.1 |
|    | 425159 | NM_004341 | Hs.154868 | carbamoyl-phosphate synthetase 2, aspart | 2.1 |
| 20 | 425591 | AW294734  | Hs.279727 | Homo sapiens cDNA FLJ14035 fis, clone HE | 2.1 |
|    | 445101 | T75202    | Hs.12314  | Homo sapiens mRNA; cDNA DKFZp586C1019 (f | 2.1 |
|    | 412811 | H06382    | Hs.21400  | ESTs                                     | 2.1 |
|    | 426369 | AF134157  | Hs.169487 | Kreiser (mouse) maf-related leucine zip  | 2.1 |
|    | 435924 | AW029203  | Hs.191952 | ESTs                                     | 2.1 |
|    | 418388 | R72332    | Hs.29258  | Homo sapiens cDNA FLJ11364 fis, clone HE | 2.1 |
| 25 | 452235 | AL039743  | Hs.28514  | testes development-related NYD-SP21      | 2.1 |
|    | 452313 | Y00486    | Hs.28914  | adenine phosphoribosyltransferase        | 2.1 |
|    | 450704 | H85157    | Hs.40696  | ESTs                                     | 2.1 |
|    | 427539 | AA405205  | Hs.97960  | ESTs, Weakly similar to T51146 ring-box  | 2.1 |
| 30 | 402028 |           |           |  | 2.1 |
|    | 405362 |           |           |  | 2.1 |
|    | 414718 | H95348    | Hs.107987 | ESTs                                     | 2.1 |
|    | 433424 | R68252    | Hs.163566 | ESTs                                     | 2.1 |
|    | 444875 | AI200759  | Hs.44737  | ESTs                                     | 2.0 |
| 35 | 449523 | NM_000579 | Hs.54443  | chemokine (C-C motif) receptor 5         | 2.0 |
|    | 456072 | H54381    |           | gb:yq89a03.s1 Soares fetal liver spleen  | 2.0 |
|    | 436331 | AI239495  | Hs.120189 | ESTs                                     | 2.0 |
|    | 448418 | Z43704    | Hs.21192  | Homo sapiens clone 25155 mRNA sequence   | 2.0 |
|    | 447250 | AI878909  | Hs.17883  | protein phosphatase 1G (formerly 2C), ma | 2.0 |
| 40 | 448192 | R43915    | Hs.4958   | ESTs                                     | 2.0 |
|    | 448966 | AW372914  | Hs.86149  | phosphoinositol 3-phosphate-binding prot | 2.0 |
|    | 408605 | AF025374  | Hs.46465  | T-cell, immune regulator 1               | 2.0 |
|    | 410790 | AW803357  |           | gb:IL2-UM0079-090300-050-A08 UM0079 Homo | 2.0 |
|    | 436872 | X15624    |           | gb:Human H1 RNA                          | 2.0 |
| 45 | 432238 | AL133057  | Hs.274135 | Homo sapiens mRNA; cDNA DKFZp434K1815 (f | 2.0 |
|    | 446307 | T50083    | Hs.9094   | ESTs                                     | 2.0 |
|    | 436588 | AA759233  | Hs.126506 | ESTs                                     | 2.0 |
|    | 452487 | AW207659  | Hs.6630   | Homo sapiens cDNA FLJ13329 fis, clone OV | 2.0 |
|    | 430420 | AW140027  | Hs.26373  | Homo sapiens cDNA: FLJ23449 fis, clone H | 2.0 |
| 50 | 432036 | AF224266  | Hs.272373 | interleukin 20                           | 2.0 |
|    | 414460 | L00727    | Hs.898    | dystrophin myotonia-protein kinase       | 2.0 |
|    | 433507 | AI817336  | Hs.191791 | ESTs                                     | 2.0 |
|    | 427964 | AA418082  | Hs.98286  | ESTs, Weakly similar to T20655 hypotheti | 2.0 |
|    | 443108 | W86975    | Hs.203707 | ESTs                                     | 2.0 |
| 55 | 434504 | AI887341  | Hs.121590 | hypothetical protein FLJ12827            | 2.0 |
|    | 454310 | AW818390  | Hs.175613 | homolog of Xenopus Claspin               | 2.0 |
|    | 443566 | AI290284  | Hs.159872 | ESTs                                     | 2.0 |
|    | 449722 | BE280074  | Hs.23960  | cyclin B1                                | 2.0 |
|    | 452682 | AA456193  | Hs.9071   | progesterone membrane binding protein    | 2.0 |
| 60 | 412362 | AW945484  | Hs.184252 | ESTs, Weakly similar to ALU8_HUMAN ALU S | 2.0 |
|    | 429341 | X73874    | Hs.2393   | phosphorylase kinase, alpha 1 (muscle)   | 2.0 |
|    | 435863 | AF255346  | Hs.62919  | Jun dimerization protein p21SNFT         | 2.0 |
|    | 400774 | R58524    | Hs.2186   | eukaryotic translation elongation factor | 2.0 |
|    | 453944 | AW975369  | Hs.292570 | Homo sapiens, clone IMAGE:3502107, mRNA, | 2.0 |
| 65 | 419227 | BE537383  | Hs.89739  | cholinergic receptor, nicotinic, beta po | 2.0 |
|    | 448529 | T26460    | Hs.22550  | ESTs                                     | 2.0 |
|    | 443206 | AB011420  | Hs.9075   | serine/threonine kinase 17a [apoptosis-i | 2.0 |
|    | 439360 | AA448488  | Hs.336629 | ribosomal protein L44                    | 2.0 |
|    | 436660 | AI658870  | Hs.184513 | ESTs                                     | 2.0 |
| 70 | 449030 | AI365582  | Hs.57100  | Homo sapiens mRNA for FLJ00016 protein,  | 2.0 |
|    | 411048 | AK001742  | Hs.67991  | hypothetical protein DKFZp434G0522       | 2.0 |
|    | 406624 | AF052762  |           | gb:Homo sapiens clone csneg8-1 immunoglo | 2.0 |
|    | 450666 | T99968    | Hs.18799  | ESTs, Weakly similar to I38022 hypotheti | 2.0 |
|    | 446143 | BE245342  | Hs.306079 | sec61 homolog                            | 2.0 |
| 75 | 437698 | R61837    | Hs.7990   | ESTs, Moderately similar to I84505 calci | 2.0 |
|    | 426607 | AA382330  | Hs.124223 | ESTs                                     | 2.0 |
|    | 449246 | AW411209  | Hs.23363  | hypothetical protein FLJ10983            | 2.0 |
|    | 422564 | AI148006  | Hs.222120 | ESTs                                     | 2.0 |
|    | 432682 | AI376400  | Hs.159588 | ESTs                                     | 2.0 |
| 80 | 422140 | BE295918  | Hs.112193 | mutS (E. coli) homolog 5                 | 2.0 |
|    | 408215 | BE614290  | Hs.43812  | syntxin 10                               | 2.0 |
|    | 417129 | AI381800  | Hs.300684 | calcitonin gene-related peptide-receptor | 2.0 |
|    | 442772 | AW503680  | Hs.5957   | Homo sapiens clone 24416 mRNA sequence   | 2.0 |
|    | 434928 | AW015595  | Hs.4267   | Homo sapiens clones 24714 and 24715 mRNA | 2.0 |

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|    | 411380 | AW841619  |           | gb:RC1-CN0017-120200-012-b09 CN0017 Homo   | 2.0 |
|    | 430603 | AA148164  | Hs.247280 | HBV associated factor                      | 2.0 |
|    | 425905 | AB032959  | Hs.318584 | novel C3HC4 type Zinc finger (ring finger) | 2.0 |
| 5  | 401125 |           |           |  | 2.0 |
|    | 412939 | AW411491  | Hs.2186   | eukaryotic translation elongation factor   | 2.0 |
|    | 448740 | BE250632  | Hs.8026   | sestrin 2                                  | 2.0 |
|    | 454390 | AB020713  | Hs.56966  | KIAA0906 protein                           | 2.0 |
|    | 415012 | NM_004383 | Hs.77793  | c-src tyrosine kinase                      | 2.0 |
| 10 | 410407 | X66839    | Hs.63287  | carbonic anhydrase IX                      | 2.0 |
|    | 403478 |           |           |  | 2.0 |
|    | 456485 | AI393037  | Hs.97871  | Homo sapiens, clone IMAGE:3845253, mRNA,   | 2.0 |
|    | 430294 | AI539226  | Hs.32976  | guanine nucleotide binding protein 4       | 2.0 |
|    | 411669 | BE612676  | Hs.303116 | stromal cell-derived factor 2-like 1       | 2.0 |
|    | 451944 | AW445218  | Hs.210876 | ESTs                                       | 2.0 |
| 15 | 436395 | AJ227900  |           | gb:Homo sapiens partial mRNA; ID EE2-16B   | 2.0 |
|    | 456457 | AA252905  | Hs.194477 | E3 ubiquitin ligase SMURF2                 | 2.0 |
|    | 449123 | D50920    | Hs.23106  | KIAA0130 gene product                      | 2.0 |
|    | 409214 | AW405967  | Hs.333388 | Homo sapiens, clone IMAGE:3957135, mRNA,   | 2.0 |
| 20 | 437619 | AW351491  | Hs.334853 | hypothetical protein FLJ23544              | 2.0 |
|    | 453348 | BE272318  | Hs.8595   | hypothetical protein FLJ12438              | 2.0 |
|    | 424382 | AA351898  | Hs.23539  | ESTs                                       | 2.0 |
|    | 447079 | AA280057  | Hs.105280 | ESTs, Weakly similar to dJ963K23.2 [H.s]   | 2.0 |
|    | 449501 | AI652924  | Hs.231942 | ESTs                                       | 2.0 |
| 25 | 422893 | X98411    | Hs.121555 | myosin IF                                  | 2.0 |
|    | 412125 | Y17114    | Hs.73393  | eyes absent (Drosophila) homolog 4         | 2.0 |
|    | 434845 | BE267057  | Hs.325321 | hypothetical protein R32184_1              | 2.0 |
|    | 410422 | AL042014  | Hs.334698 | Homo sapiens, clone MGC:15203, mRNA, com   | 2.0 |
|    | 430255 | AK000703  | Hs.323822 | Homo sapiens mRNA for KIAA1551 protein,    | 2.0 |
| 30 | 451656 | BE327088  | Hs.212752 | ESTs                                       | 2.0 |
|    | 442068 | BE312873  | Hs.314932 | ESTs                                       | 2.0 |
|    | 446846 | AW197626  | Hs.271901 | ESTs, Moderately similar to S08686 finger  | 2.0 |
|    | 442690 | AI014727  | Hs.160047 | ESTs, Weakly similar to B28095 line-1 pr   | 2.0 |
|    | 454277 | AW295069  | Hs.31743  | ESTs, Weakly similar to Z157_HUMAN ZINC    | 2.0 |
| 35 | 426910 | AA470023  | Hs.190089 | ESTs, Moderately similar to ALU1_HUMAN A   | 2.0 |
|    | 402798 |           |           |  | 2.0 |
|    | 404554 |           |           |  | 2.0 |

TABLE 25B:

|    |             |                                       |
|----|-------------|---------------------------------------|
| 40 | Pkey:       | Unique Eos probeset identifier number |
|    | CAT number: | Gene cluster number                   |
|    | Accession:  | Genbank accession numbers             |

|    |        |            |   |
|----|--------|------------|---|
|    | Pkey   | CAT Number | Accession   |
| 45 | 407909 | 1025254_1  | AW103986 BE156395 BE156391 BE156190 BE156184 BE156388 BE156394  |
|    | 408432 | 1059667_1  | AW195262 R27868 AW811262  |
|    | 409193 | 110747_1   | AA131483 AA065156 AA076448  |
|    | 409745 | 115237_1   | AA077391 AI347618 AI361453 AI088754 AW207491 AW960912 AA921874 AA266833 AA150722 BE152353 AW188822 BE152450             |
|    | 410447 | 1203929_1  | AW816134 BE063456 AW748795 BE150839   |
| 50 | 410790 | 1221131_1  | AW803357 AW803423 AW812233 R06814   |
|    | 411256 | 1236790_1  | AW834039 AW834040 AW834047 AW845410 BE003128 AW852479   |
|    | 411380 | 1242343_1  | AW841619 AW851958 AW851851 AW851985   |
|    | 411632 | 1252361_1  | AW854829 AW854805 AW854841 AW854825 AW854822 AW854830 AW854835 AW854826   |
|    | 411658 | 1252987_1  | AW855598 AW855608 BE148763 BE148764 AW855645 AW855615 AW855596 AW855610 AW855601 AW855605                               |
| 55 | 411829 | 1260309_1  | AW865749 BE179419 BE179492  |
|    | 412225 | 1284108_1  | AW902042 N77591   |
|    | 412370 | 1291952_1  | AW946614 AW946622 AW946663 AW946667 AW946615 AW946619   |
|    | 412391 | 1292625_1  | AW947710 AW947698 AW947697 AW947713   |
|    | 413257 | 1355963_1  | BE075035 BE074999 BE075006 BE075005 BE075032 BE075008 BE075037  |
| 60 | 413604 | 1379715_1  | R51767 BE152515 Z44834 H23397   |
|    | 414406 | 1443333_1  | BE297904 BE294312   |
|    | 414550 | 1460990_1  | BE379808  |
|    | 415346 | 1534581_1  | Z43108 F06295 R13085  |
|    | 415406 | 1536026_1  | T26510 F07926 R53367  |
| 65 | 415586 | 1540116_1  | Z45481 F12393 T74437  |
|    | 415635 | 1540853_1  | F13168 R21289 T77628  |
|    | 416871 | 1626761_1  | H98716 N90792 N24283  |
|    | 416913 | 163001_1   | AW934714 BE161007 BE162500 AW749902 AW749864 BE162498 BE161005 AA190449 AW513465 BE161006 BE162499                      |
|    | 417980 | 1712954_1  | R32235 R32247 R32219  |
| 70 | 418333 | 173_2      | W92113 AA702794 BE044316 W91984 AA679375 T94184 AA679335 BE503126 AW502118 BE467367 AA584550 AW139964 R93353 AW088477   |
|    |        |            | AI887845 AW502624 W81697 W81696 AA447817 AA447667 F13631 AW268271 AA055366 AW629027 AA677404 AA831618 AI124782 AA889402 |
|    |        |            | AA765804 AA765530 AA055698 AA594019 AI267368 AA456946 R93354 AF264624 AW668618 AA601493                                 |
|    | 418856 | 179649_1   | AA362858 AW863761 AA229428  |
|    | 419217 | 182954_1   | AA504571 AA235243 AA411737 AW969068 AA406543  |
| 75 | 419225 | 1830274_1  | U70073  |
|    | 419311 | 183793_1   | AA689591 AW974261 AA236240 AI077451 AA631399 AW974262   |
|    | 420352 | 192979_1   | BE258835 AW968316 AA258918 AW843305 R14744 AI580388 BE071923 R36280   |
|    | 422128 | 211994_1   | AW881145 AA490718 M85637 AA304575 T06067 AA331991   |
| 80 | 422156 | 212379_1   | N34524 AA305071 AW954803 AA502335 AI433430 AI203597 AW026670 AW265323 AW850787 AA317554 AW993643 AW835572 AW385512      |
|    |        |            | AI334966 W32951 H62656 H53902 R88904 AW835732   |
|    | 422176 | 212714_1   | H80977 BE147695 AA305496 AW962366 AA436754  |
|    | 423756 | 231725_1   | AA828125 AA834883 AA330555  |
|    | 423867 | 232732_1   | AA331886 AW962659 AW962655 T89841   |
|    | 425189 | 247825_1   | H16622 R17322 AA351959  |

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5 425517 252729\_1 AF121179 BE162736 AA358827  
 426076 260504\_1 AW962714 AA369277 AA369278  
 426413 266650\_1 AA377823 AW954494 AI022688  
 426503 268283\_1 AA380153 AA380233 AW963529  
 426531 268760\_1 AA381071 AA381084 AA380862  
 429875 310034\_1 AI091815 AA460162 AA460761  
 430968 326269\_1 AW972830 AA527647 AA489820 AA570362  
 432088 341195\_1 AA525454 H74039 R89502 T77379  
 10 433532 368950\_1 AW975367 AA598607 AA742735  
 434559 38889\_1 AF147315 AW173079 T53029  
 435065 399329\_1 BE064391 BE064395 AA663613 N99644  
 436190 41555\_1 AK001059 AA633055  
 436395 41905\_1 AJ227900 AI094933 AW051119 F00947  
 15 436532 421802\_1 AA721522 AW975443 T93070  
 436722 425758\_1 AW975977 AA729469 AA747132  
 436872 42851\_1 X15624  
 437034 431713\_1 AA742643 AA808575 AW976668  
 439086 46852\_1 AF085947 H70981 H78989  
 20 439228 47001\_1 NS1700 AF086051 NS1792  
 439518 47334\_1 W76326 AF086341 W72300  
 439546 47360\_1 AF088056 W76297 W72448  
 439566 47387\_1 AF086387 W77884 W72711  
 439710 47550\_1 AF086543 W96291 W96225  
 25 443657 576685\_1 R14973 R14967 AI081006  
 444168 593829\_1 AW379879 AI126285 H12014  
 444386 604004\_1 BE065183 AI144398 BE065367  
 451129 859870\_1 BE072881 BE072946 AI762181  
 452712 928309\_1 AW838616 AW838650 BE144343 AI914520 AW888910 BE184854 BE184784  
 30 453446 967533\_1 BE299996 BE297115 BE270415 BE295214 BE296526  
 453638 975649\_1 AW814996 AL047199 AW850979  
 453746 979731\_1 AL120611 BE006190 BE006189  
 454377 114761\_1 AA076811 AW814764  
 454389 115682\_1 AW752571 AW847602 AA077979  
 35 454606 1226149\_2 AW809752 AW810271 AW809944 AW810319 AW810215 AW810368 AW810167  
 454630 1227352\_1 BE142075 BE142148 BE142189 AW816249 BE142147 BE142002 BE142406 BE142094 BE142020 BE142074 BE142347 BE142000 BE142375  
 454631 1227443\_1 AW811324 AW811325 AW811326 AW811333 AW811329 AW811328 AW811332 AW811339 AW811335  
 454679 1228929\_1 AW813110 AW813113  
 40 454967 1247021\_1 AW848276 AW848416 AW848160 AW847945 AW847947 AW848063 AW848113  
 455023 1249188\_1 AW850907 AW850901 AW850877  
 455302 1276542\_1 AW997641 AW891777  
 455470 1292849\_1 AW947992 AW947967 AW947950 AW947957 AW947953 AW947973 AW947966 AW947971 AW947947 AW947970 AW947995 AW947979 AW947952  
 455514 1321649\_1 AW947956  
 45 455530 1322298\_1 AW983871 BE090302 AW983867 AW983845 AW983860 AW983853 AW983852  
 455584 1334741\_1 AW984744 AW984759  
 455778 1364506\_1 BE007420 BE007419 BE007421 BE007422  
 455908 1382301\_1 BE088746 BE088802 BE088755 BE088876 BE088947 BE088881 BE088952  
 456072 1470256\_1 BE156306 BE156188 BE156298 BE156377 BE156374  
 50 456094 1504780\_1 H54381 H54463 BE393262  
 457374 328758\_1 H95091 C01228  
 457578 359618\_1 AA493662 AW897396 BE154814  
 457730 393905\_1 AA578027  
 457730 393905\_1 AW753613 AW753857 BE150374 BE150693 BE150394 AA808851 AA650159 AA654653 BE150419

55 TABLE 25C:  
 Pkey: Unique number corresponding to an Eos probeset  
 Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA  
 sequence of human chromosome 22" Dunham, et al. (1999) Nature 402:489-495.  
 60 Strand: Indicates DNA strand from which exons were predicted.  
 NL\_position: Indicates nucleotide positions of predicted exons.

| Pkey   | Ref     | Strand | NL_position                         |
|--------|---------|--------|-------------------------------------|
| 400822 | 7465000 | Plus   | 186223-186402,186878-187275         |
| 400859 | 9757499 | Minus  | 91888-92018,98131-98294,99474-99570 |
| 400917 | 7283186 | Minus  | 173258-173631                       |
| 400992 | 8096828 | Plus   | 140390-140822                       |
| 401012 | 7230838 | Minus  | 736-1137                            |
| 401048 | 7232177 | Plus   | 132430-132761                       |
| 401125 | 8570296 | Minus  | 126863-126984                       |
| 401324 | 9863791 | Plus   | 234057-234174                       |
| 401384 | 6850939 | Minus  | 58360-58545                         |
| 401558 | 7139678 | Plus   | 103510-104090                       |
| 401626 | 8575943 | Minus  | 238100-238432                       |
| 401676 | 9965536 | Plus   | 3891-4691                           |
| 401714 | 6715702 | Plus   | 96484-96681                         |
| 401729 | 8134856 | Minus  | 90651-90878                         |
| 401827 | 2262095 | Plus   | 94725-94860,98452-98660             |
| 401876 | 8099107 | Plus   | 95913-96641                         |
| 402028 | 7139781 | Plus   | 88749-89237                         |
| 402064 | 8117294 | Plus   | 100159-100350,100445-100912         |
| 402239 | 7690131 | Plus   | 38175-38304,42133-42266             |
| 402408 | 9796239 | Minus  | 110326-110491                       |
| 402424 | 9796344 | Minus  | 64925-65073                         |

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|    |        |         |       |   |
|----|--------|---------|-------|---|
|    | 402516 | 9798099 | Minus | 195342-195511   |
|    | 402604 | 9909420 | Plus  | 20393-20767   |
|    | 402627 | 9931216 | Plus  | 12136-12272,16487-16628,17654-17798,18494-18621,18933-19089,20669-20790,21134-21298,22866-22973,23686-23820,26626-26895,29279-29469 |
| 5  | 402721 | 8969253 | Minus | 144428-144715   |
|    | 402798 | 3355547 | Plus  | 23596-23867   |
|    | 402856 | 9801288 | Minus | 90119-90411   |
|    | 403048 | 4210991 | Plus  | 44275-44592,49656-49955   |
|    | 403108 | 8980955 | Plus  | 93253-93667   |
| 10 | 403142 | 9444521 | Plus  | 89286-90131   |
|    | 403166 | 9838127 | Minus | 67762-67940,68695-68856,70394-70507   |
|    | 403478 | 9958258 | Plus  | 116458-116564   |
|    | 403680 | 7331517 | Minus | 157184-157415   |
|    | 403751 | 7229815 | Minus | 158794-160929   |
| 15 | 403790 | 8084957 | Minus | 87826-87947,89835-90002   |
|    | 403797 | 8099896 | Minus | 123055-125008   |
|    | 403857 | 7708910 | Minus | 2524-3408   |
|    | 403881 | 7710245 | Minus | 107250-107585,108924-109213   |
|    | 403961 | 7595976 | Minus | 110393-110603   |
| 20 | 403969 | 8569909 | Plus  | 31237-31375,32405-32506   |
|    | 404020 | 8655966 | Minus | 174449-174663   |
|    | 404054 | 3548785 | Plus  | 66713-69175   |
|    | 404084 | 9944055 | Plus  | 2795-2969   |
| 25 | 404108 | 8247074 | Minus | 63603-64942   |
|    | 404170 | 9930793 | Plus  | 168836-169248   |
|    | 404185 | 4572584 | Minus | 129171-129327   |
|    | 404240 | 5002624 | Minus | 116132-116407,116653-116922   |
|    | 404295 | 9856663 | Minus | 75747-75947   |
| 30 | 404299 | 5738652 | Minus | 3826-4025   |
|    | 404366 | 9964977 | Plus  | 96589-96801   |
|    | 404554 | 7243881 | Plus  | 42637-42839   |
|    | 404561 | 9795980 | Minus | 69039-70100   |
|    | 404584 | 9857511 | Plus  | 138651-139153   |
|    | 404589 | 9931665 | Minus | 32824-32985   |
| 35 | 404642 | 9796810 | Plus  | 102999-103145   |
|    | 404652 | 9796969 | Minus | 108172-108296   |
|    | 404721 | 9856648 | Minus | 173763-174294   |
|    | 404756 | 7706327 | Plus  | 82849-83627   |
| 40 | 404802 | 4581357 | Minus | 30093-30600   |
|    | 404984 | 6939882 | Plus  | 87221-87505   |
|    | 405159 | 9966252 | Plus  | 79659-79804   |
|    | 405258 | 7329310 | Plus  | 129930-130076   |
|    | 405288 | 6139075 | Minus | 126268-126436   |
| 45 | 405353 | 2811095 | Plus  | 118525-118892   |
|    | 405362 | 2337862 | Minus | 105008-105142,105980-106091,140445-140556,142519-142641   |
|    | 405558 | 1621110 | Plus  | 4502-4644,5983-6083   |
|    | 405588 | 5002511 | Plus  | 46180-46366   |
|    | 405605 | 5836195 | Minus | 117070-117270   |
| 50 | 405701 | 4263751 | Plus  | 93243-93364   |
|    | 405741 | 9966947 | Minus | 156747-156875,156936-157208   |
|    | 405747 | 8469069 | Minus | 153933-154060   |
|    | 405771 | 7018349 | Plus  | 91191-91254,91510-91589   |
|    | 405808 | 9929207 | Plus  | 109758-111166   |
| 55 | 405884 | 6758747 | Plus  | 62383-62683   |
|    | 405915 | 7712162 | Minus | 43717-43859   |
|    | 406028 | 8312303 | Minus | 177469-177829   |
|    | 406085 | 9123888 | Plus  | 18665-18843   |
|    | 406169 | 6684220 | Minus | 12620-14251   |
| 60 | 406267 | 7528342 | Minus | 2570-2731   |
|    | 406326 | 9212385 | Plus  | 84508-84655   |
|    | 406347 | 9255981 | Plus  | 90900-91091   |
|    | 406474 | 9795567 | Plus  | 52758-53211   |
|    | 406577 | 7711730 | Plus  | 11377-11509   |
| 65 | 406610 | 8312225 | Plus  | 13096-13334   |

TABLE 26A: ABOUT 582 GENES SIGNIFICANTLY DOWN-REGULATED IN GLIOBLASTOMA COMPARED TO NORMAL ADULT CNS TISSUES

Table 26A lists about 582 genes significantly down-regulated in glioblastoma compared to normal adult CNS tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" normal CNS to "average" glioblastoma was greater than or equal to 3. The "average" normal CNS level was set to the 75<sup>th</sup> percentile amongst various normal CNS tissues. The "average" glioblastoma level was set to the 85<sup>th</sup> percentile amongst various tumor samples. In order to remove gene-specific background levels of non-specific hybridization, the 10<sup>th</sup> percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemptar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 R1: Ratio of 75<sup>th</sup> percentile normal central nervous system tissue to 85<sup>th</sup> percentile tumor

|    |        |          |           |  |       |
|----|--------|----------|-----------|--|-------|
| 80 | Pkey   | ExAccn   | UnigenelD | Unigene Title                            | R1    |
|    | 453655 | AW960427 | Hs.79059  | transforming growth factor, beta recepto | 136.7 |
|    | 417275 | X63578   | Hs.295449 | parvalbumin                              | 29.0  |
|    | 430829 | AW451999 | Hs.194024 | ESTs                                     | 25.7  |
|    | 410657 | AF063228 | Hs.65248  | dynein, cytoplasmic, intermediate polype | 22.6  |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
| 5  | 419954 | D14720    | Hs.93883  | myelin protein zero (Charcot-Marie-Tooth | 21.2 |
|    | 459247 | N46243    | Hs.110373 | ESTs, Highly similar to T42626 secreted  | 18.5 |
|    | 416133 | NM_001683 | Hs.89512  | ATPase, Ca++ transporting, plasma membra | 15.5 |
|    | 416018 | AW138239  | Hs.78977  | proprotein convertase subtilisin/kexin 1 | 15.2 |
|    | 417167 | AW206437  | Hs.4290   | ESTs                                     | 14.8 |
| 10 | 433940 | H05129    | Hs.7459   | cyclic AMP-regulated phosphoprotein, 21  | 13.4 |
|    | 413324 | V00571    | Hs.75294  | corticotropin releasing hormone          | 13.1 |
|    | 439830 | AA846666  | Hs.151489 | ESTs, Weakly similar to XE7_HUMAN PROTEI | 12.6 |
|    | 408068 | AW148652  | Hs.167398 | ESTs                                     | 12.6 |
|    | 412636 | NM_004415 | Hs.74315  | desmoplakin (DPI, DP11)                  | 12.5 |
| 15 | 429096 | AB011106  | Hs.196012 | KIAA0534 protein                         | 12.2 |
|    | 412638 | AA910199  | Hs.203838 | ESTs                                     | 12.2 |
|    | 423690 | AA329648  | Hs.23804  | ESTs, Weakly similar to PN0099 son3 prot | 12.1 |
|    | 456844 | AI264155  | Hs.152981 | CDP-diacylglycerol synthase (phosphatida | 11.9 |
|    | 418318 | U47732    | Hs.84072  | transmembrane 4 superfamily member 3     | 10.9 |
| 20 | 442593 | R39804    | Hs.31961  | ESTs                                     | 10.8 |
|    | 446353 | AI290919  | Hs.153661 | ESTs                                     | 10.4 |
|    | 420290 | AW977318  | Hs.194480 | ESTs                                     | 10.3 |
|    | 414220 | BE298094  |           | gb:601118231F1 NIH_MGC_17 Homo sapiens c | 10.3 |
|    | 414290 | AI568801  | Hs.71721  | ESTs                                     | 10.2 |
| 25 | 426365 | AA376667  | Hs.10283  | RNA binding motif protein 8B             | 10.0 |
|    | 414937 | R38698    | Hs.12382  | ESTs                                     | 10.0 |
|    | 419643 | F06066    | Hs.91791  | chromosome 11 open reading frame 25      | 9.5  |
|    | 407173 | T64349    |           | gb:yc10d08.s1 Stratagene lung (937210) H | 9.5  |
|    | 412454 | R55745    | Hs.167330 | ESTs                                     | 9.5  |
| 30 | 439366 | AF100143  | Hs.6540   | fibroblast growth factor 13              | 9.4  |
|    | 415315 | F12240    | Hs.250655 | prothymosin, alpha (gene sequence 28)    | 9.3  |
|    | 441790 | AW294909  | Hs.132208 | ESTs                                     | 9.2  |
|    | 448117 | H49129    | Hs.172982 | ESTs                                     | 9.1  |
|    | 400661 |           |           |  | 9.0  |
| 35 | 433558 | AA833757  | Hs.201769 | ESTs, Weakly similar to T24435 hypotheti | 9.0  |
|    | 412453 | R20205    | Hs.167330 | ESTs                                     | 9.0  |
|    | 408920 | AL120071  | Hs.48998  | fibronectin leucine rich transmembrane p | 8.9  |
|    | 409031 | AA376836  | Hs.76728  | ESTs                                     | 8.7  |
|    | 428106 | BE620016  | Hs.182470 | PTD010 protein                           | 8.3  |
| 40 | 446544 | AI631932  | Hs.7047   | ESTs, Weakly similar to Unknown [H.sapie | 8.2  |
|    | 423479 | NM_014326 | Hs.129208 | death-associated protein kinase 2        | 8.2  |
|    | 439480 | AL038511  | Hs.125316 | ESTs, Weakly similar to S33990 finger pr | 8.2  |
|    | 418036 | Z37976    | Hs.83337  | latent transforming growth factor beta b | 8.0  |
|    | 456490 | U83171    | Hs.97203  | small inducible cytokine subfamily A (Cy | 8.0  |
| 45 | 410200 | AA082557  | Hs.101915 | Stargardt disease 3 (autosomal dominant) | 8.0  |
|    | 414602 | AW630088  | Hs.76550  | Homo sapiens mRNA; cDNA DKFZp564B1264 (f | 8.0  |
|    | 408428 | NM_014787 | Hs.44896  | DnaJ (Hsp40) homolog, subfamily B, membe | 7.9  |
|    | 437073 | AI885608  | Hs.94122  | ESTs                                     | 7.9  |
|    | 408434 | AW195317  | Hs.107716 | hypothetical protein FLJ22344            | 7.9  |
| 50 | 438150 | AA037534  | Hs.79059  | transforming growth factor, beta recepto | 7.9  |
|    | 440209 | H05049    | Hs.22269  | neurexin 3                               | 7.8  |
|    | 408119 | W26213    | Hs.101672 | ESTs, Weakly similar to T00331 hypotheti | 7.8  |
|    | 417421 | AL138201  | Hs.82120  | nuclear receptor subfamily 4, group A, m | 7.8  |
|    | 410587 | AA370706  | Hs.86412  | chromosome 9 open reading frame 5        | 7.8  |
| 55 | 429611 | AI889077  | Hs.211388 | Homo sapiens BAC clone CTB-60N22 from 7q | 7.7  |
|    | 405800 |           |           |  | 7.7  |
|    | 421750 | AK000768  | Hs.107872 | hypothetical protein FLJ20761            | 7.7  |
|    | 426356 | BE536836  | Hs.98582  | hypothetical protein FKSG32              | 7.7  |
|    | 423440 | R25234    | Hs.143434 | contactin 1                              | 7.7  |
| 60 | 445148 | AI214510  | Hs.146304 | ESTs                                     | 7.6  |
|    | 416294 | D86980    | Hs.79170  | KIAA0227 protein                         | 7.6  |
|    | 424087 | N69333    | Hs.143434 | contactin 1                              | 7.6  |
|    | 437479 | R61866    | Hs.101277 | ESTs                                     | 7.5  |
|    | 405071 |           |           |  | 7.5  |
| 65 | 421224 | AW402154  | Hs.125812 | ESTs                                     | 7.4  |
|    | 442025 | AW887434  | Hs.11810  | CDA11 protein                            | 7.4  |
|    | 459476 | BE185844  |           | gb:IL5-HT0731-110500-087-c08 HT0731 Homo | 7.2  |
|    | 430573 | AA744550  | Hs.136345 | ESTs                                     | 7.1  |
|    | 401836 |           |           |  | 7.1  |
| 70 | 448958 | AB020651  | Hs.22653  | KIAA0844 protein                         | 7.1  |
|    | 430152 | AB001325  | Hs.234642 | aquaporin 3                              | 7.1  |
|    | 419474 | AW968619  | Hs.155849 | ESTs                                     | 7.1  |
|    | 401780 |           |           |  | 7.1  |
|    | 446052 | AA358760  |           | gb:EST67699 Fetal lung II Homo sapiens c | 7.0  |
| 75 | 423605 | AF047826  | Hs.129887 | cadherin 19, type 2                      | 7.0  |
|    | 433098 | AW190593  | Hs.151143 | ESTs                                     | 7.0  |
|    | 449511 | AI436187  | Hs.296261 | guanine nucleotide binding protein (G pr | 6.9  |
|    | 451285 | AW137912  | Hs.227583 | Homo sapiens chromosome X map Xp11.23 L- | 6.8  |
|    | 428414 | AI049980  | Hs.184216 | DKFZP564C152 protein                     | 6.8  |
| 80 | 419273 | BE271180  | Hs.293490 | ESTs, Weakly similar to I38022 hypotheti | 6.8  |
|    | 443155 | R54485    | Hs.23772  | ESTs                                     | 6.8  |
|    | 450561 | R49674    | Hs.25909  | ESTs                                     | 6.8  |
|    | 433068 | NM_006456 | Hs.288215 | sialyltransferase                        | 6.8  |
|    | 440729 | AA904739  | Hs.128204 | ESTs                                     | 6.8  |
|    | 448426 | BE018315  | Hs.280776 | tankyrase, TRF1-interacting ankyrin-refa | 6.7  |
|    | 423589 | AA328082  | Hs.209569 | ESTs                                     | 6.6  |
|    | 415681 | AI379882  | Hs.72630  | ESTs                                     | 6.5  |

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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
|    | 413510 | F13044    |           | gb:HSC3HH101 normalized infant brain cDN | 6.4 |
|    | 427992 | Y15014    | Hs.181353 | UDP-Gal:betaGlcNAc beta 1,3-galactosyltr | 6.4 |
|    | 453344 | BE349075  | Hs.44571  | ESTs                                     | 6.4 |
| 5  | 450642 | R39773    | Hs.7130   | copine IV                                | 6.4 |
|    | 432251 | AW972983  | Hs.232165 | polycythemia rubra vera 1; cell surface  | 6.4 |
|    | 429322 | D86984    | Hs.199243 | KIAA0231 protein                         | 6.4 |
|    | 444927 | AW016637  | Hs.199425 | ESTs                                     | 6.4 |
|    | 447482 | AB033059  | Hs.18705  | KIAA1233 protein                         | 6.4 |
| 10 | 400332 | S66407    | Hs.248032 | FLT4                                     | 6.3 |
|    | 440703 | AL137663  | Hs.7378   | Homo sapiens mRNA; cDNA DKFZp434G227 (fr | 6.3 |
|    | 446129 | AW244073  | Hs.145946 | ESTs                                     | 6.3 |
|    | 454076 | AW204712  | Hs.61957  | ESTs                                     | 6.3 |
|    | 425526 | AA359933  |           | gb:EST69040 Fetal lung II Homo sapiens c | 6.3 |
| 15 | 421913 | AI934365  | Hs.109439 | osteoglycin (osteoinductive factor, mime | 6.3 |
|    | 434273 | AA913143  | Hs.26303  | ESTs                                     | 6.2 |
|    | 408480 | AI350337  | Hs.164568 | fibroblast growth factor 7 (keratinocyte | 6.2 |
|    | 451301 | AI769514  | Hs.209890 | EST                                      | 6.2 |
|    | 430754 | AW862610  | Hs.157068 | ESTs                                     | 6.2 |
|    | 438356 | AA805530  | Hs.48527  | ESTs                                     | 6.2 |
| 20 | 422743 | BE304678  | Hs.119598 | ribosomal protein L3                     | 6.2 |
|    | 453355 | AW295374  | Hs.31412  | Homo sapiens cDNA FLJ11422 fis, clone HE | 6.2 |
|    | 426388 | AW081394  | Hs.97103  | ESTs                                     | 6.2 |
|    | 452502 | AI904296  |           | gb:PM-BT046-220199-286_1 BT046 Homo sapi | 6.1 |
|    | 402546 |           |           |  | 6.1 |
| 25 | 457534 | AI761307  | Hs.232226 | ESTs                                     | 6.1 |
|    | 408165 | AL137573  | Hs.43143  | Homo sapiens mRNA; cDNA DKFZp564A2463 (f | 6.1 |
|    | 404958 |           |           |  | 6.1 |
|    | 432501 | BE546532  | Hs.25682  | Homo sapiens mRNA for KIAA1863 protein,  | 6.1 |
| 30 | 442979 | AW440782  | Hs.174743 | ESTs                                     | 6.1 |
|    | 422262 | AL022315  | Hs.113987 | lectin, galactoside-binding, soluble, 2  | 6.0 |
|    | 408713 | NM_001248 | Hs.47042  | ectonucleoside triphosphate diphosphohyd | 6.0 |
|    | 454065 | BE394588  |           | gb:601311808F1 NIH_MGC_44 Homo sapiens c | 6.0 |
|    | 430004 | U27768    | Hs.227571 | regulator of G-protein signalling 4      | 5.9 |
| 35 | 401521 |           |           |  | 5.9 |
|    | 425087 | R62424    | Hs.126059 | ESTs                                     | 5.9 |
|    | 446298 | AF187813  | Hs.14637  | kidney- and liver-specific gene          | 5.9 |
|    | 417761 | R13727    | Hs.21435  | ESTs                                     | 5.9 |
|    | 424806 | AA382523  | Hs.105689 | MSTP031 protein                          | 5.9 |
| 40 | 441695 | T12411    | Hs.183745 | hypothetical protein FLJ13456            | 5.9 |
|    | 457483 | AB034694  | Hs.272558 | endomucin-1                              | 5.9 |
|    | 417175 | R44558    | Hs.94002  | ESTs                                     | 5.8 |
|    | 437483 | AL390174  |           | gb:Homo sapiens mRNA; cDNA DKFZp547J184  | 5.8 |
|    | 436427 | AI344378  | Hs.143399 | ESTs                                     | 5.8 |
| 45 | 411939 | AI365585  | Hs.146246 | ESTs                                     | 5.8 |
|    | 459053 | AI807052  | Hs.210361 | ESTs                                     | 5.7 |
|    | 411052 | AW814950  |           | gb:MR1-ST0205-130400-023-d06 ST0206 Homo | 5.7 |
|    | 431063 | Z98949    | Hs.326843 | hypothetical protein bk125H2.1           | 5.7 |
|    | 450382 | AA397658  | Hs.60257  | Homo sapiens cDNA FLJ13598 fs, clone PL  | 5.7 |
| 50 | 408478 | NM_000806 | Hs.45740  | gamma-aminobutyric acid (GABA) A recepto | 5.7 |
|    | 442676 | AI733585  | Hs.130897 | ESTs                                     | 5.7 |
|    | 446443 | AV659082  | Hs.134228 | ESTs                                     | 5.7 |
|    | 400865 |           |           |  | 5.7 |
|    | 459080 | AW192083  | Hs.290855 | ESTs                                     | 5.6 |
| 55 | 407952 | AI215902  | Hs.88845  | ESTs, Highly similar to T50835 hypotheti | 5.6 |
|    | 431984 | AL080239  | Hs.272284 | Human DNA sequence from clone GS1-256O22 | 5.6 |
|    | 425705 | AF007833  | Hs.159265 | kruppel-related zinc finger protein hckr | 5.6 |
|    | 442238 | AW135374  | Hs.270949 | ESTs, Moderately similar to F41925 hypot | 5.6 |
|    | 422994 | AW891802  | Hs.296276 | ESTs                                     | 5.6 |
| 60 | 457148 | AF091035  | Hs.184627 | KIAA0118 protein                         | 5.6 |
|    | 428356 | AL046991  | Hs.10338  | ESTs                                     | 5.6 |
|    | 415927 | AL120168  | Hs.78919  | Kell blood group precursor (McLeod pheno | 5.5 |
|    | 402092 |           |           |  | 5.5 |
|    | 440526 | AI832243  | Hs.211471 | ESTs                                     | 5.5 |
| 65 | 444409 | AI792140  | Hs.49265  | ESTs                                     | 5.5 |
|    | 417877 | AI025829  | Hs.86320  | ESTs                                     | 5.4 |
|    | 458238 | AW071521  | Hs.333541 | beta-amyloid binding protein precursor   | 5.4 |
|    | 430702 | U56979    | Hs.250651 | H factor 1 (complement)                  | 5.4 |
|    | 456189 | H91010    | Hs.44940  | ESTs                                     | 5.4 |
| 70 | 427424 | AA402453  | Hs.113011 | ESTs                                     | 5.4 |
|    | 437354 | AA749215  | Hs.291886 | ESTs                                     | 5.4 |
|    | 455617 | BE078070  |           | gb:CM1-BT0614-160300-149-f02 BT0614 Homo | 5.4 |
|    | 429290 | AF203032  | Hs.198760 | neurofilament, heavy polypeptide (200kD) | 5.3 |
|    | 427861 | AA813185  | Hs.98183  | ESTs                                     | 5.3 |
| 75 | 408556 | U49516    | Hs.46362  | 5-hydroxytryptamine (serotonin) receptor | 5.3 |
|    | 444209 | AI753134  | Hs.146494 | ESTs                                     | 5.3 |
|    | 422831 | R02504    | Hs.332943 | ESTs                                     | 5.3 |
|    | 403180 |           |           |  | 5.3 |
| 80 | 418026 | BE379727  | Hs.83213  | fatty acid binding protein 4, adipocyte  | 5.3 |
|    | 430339 | W28608    | Hs.239625 | integral membrane protein 2B             | 5.2 |
|    | 431596 | T34708    | Hs.272927 | Sec23 (S. cerevisiae) homolog A          | 5.2 |
|    | 431930 | AB035301  | Hs.272211 | cadherin 7, type 2                       | 5.2 |
|    | 437403 | AI208149  | Hs.121196 | ESTs                                     | 5.2 |
|    | 438285 | AA782845  | Hs.22790  | ESTs                                     | 5.2 |



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|    | 439901 | N73885    | Hs.124169 | ESTs                                     | 5.2 |
|    | 438507 | AA809052  | Hs.211275 | ESTs                                     | 5.2 |
|    | 449222 | AW293984  | Hs.197621 | ESTs                                     | 5.2 |
| 5  | 402334 | AK001507  | Hs.306084 | Homo sapiens clone FLB6914 PRO1821 mRNA, | 5.2 |
|    | 419042 | T81429    | Hs.221065 | ESTs                                     | 5.2 |
|    | 436777 | AA731199  | Hs.293130 | ESTs                                     | 5.2 |
|    | 445071 | AI280246  | Hs.149504 | ESTs                                     | 5.1 |
|    | 408016 | AW136827  | Hs.256096 | ESTs                                     | 5.1 |
|    | 412047 | AA934589  | Hs.49696  | ESTs                                     | 5.1 |
| 10 | 436953 | AW959074  | Hs.23648  | Homo sapiens cDNA FLJ13097 fis, clone NT | 5.1 |
|    | 436773 | AW078629  | Hs.82110  | PC4 and SFRS1 interacting protein 1      | 5.1 |
|    | 409263 | AA069573  | Hs.50319  | ESTs                                     | 5.1 |
|    | 453830 | AA534296  | Hs.20953  | ESTs                                     | 5.1 |
|    | 459580 | AA022888  | Hs.176065 | ESTs                                     | 5.1 |
| 15 | 417616 | R07728    | Hs.268668 | ESTs                                     | 5.1 |
|    | 423457 | F08208    | Hs.283844 | similar to rat tricarboxylate carrier-li | 5.1 |
|    | 441535 | AL135735  | Hs.7885   | phosphatidylinositol binding clathrin as | 5.0 |
|    | 416490 | AF090116  | Hs.79348  | regulator of G-protein signalling 7      | 5.0 |
| 20 | 417284 | N62889    | Hs.107242 | Homo sapiens cDNA FLJ12965 fis, clone NT | 5.0 |
|    | 447135 | T58148    |           | gb:yb98g06.s1 Stratagene lung (937210) H | 5.0 |
|    | 448605 | AL109678  | Hs.21597  | Homo sapiens mRNA full length insert cDN | 5.0 |
|    | 442240 | AI791883  | Hs.292719 | ESTs                                     | 4.9 |
|    | 459399 | BE407712  | Hs.153998 | creatine kinase, mitochondrial 1 (ubiqui | 4.9 |
|    | 427972 | AA864870  | Hs.181304 | putative gene product                    | 4.9 |
| 25 | 432944 | AA570687  | Hs.38512  | ESTs                                     | 4.9 |
|    | 440198 | BE560093  |           | gb:601345159F1 NIH_MGC_8 Homo sapiens cD | 4.9 |
|    | 444047 | AI097452  | Hs.135095 | ESTs                                     | 4.9 |
|    | 416040 | AW819158  | Hs.289044 | Homo sapiens cDNA FLJ12048 fis, clone HE | 4.9 |
| 30 | 444922 | AI921750  | Hs.144871 | Homo sapiens cDNA FLJ13752 fis, clone PL | 4.8 |
|    | 436670 | AI690021  | Hs.201536 | ESTs                                     | 4.8 |
|    | 448072 | AI459306  | Hs.24908  | ESTs                                     | 4.8 |
|    | 408936 | AL138043  | Hs.293549 | ESTs                                     | 4.8 |
|    | 412622 | AW664708  | Hs.171959 | ESTs                                     | 4.8 |
| 35 | 414943 | D80647    | Hs.124193 | ESTs                                     | 4.8 |
|    | 429254 | H10133    | Hs.91846  | hypothetical protein DKFZp761C121        | 4.8 |
|    | 453567 | AI742835  | Hs.33368  | hypothetical protein FLJ11175            | 4.8 |
|    | 407906 | AA369665  | Hs.41185  | Homo sapiens mRNA; cDNA DKFZp564O1262 (f | 4.8 |
|    | 441028 | AI333660  | Hs.17558  | Homo sapiens cDNA FLJ14446 fis, clone HE | 4.7 |
| 40 | 405130 |           |           |  | 4.7 |
|    | 455225 | AW996689  |           | gb:OV3-BN0046-150400-151-g09 BN0046 Homo | 4.7 |
|    | 446218 | AV657159  |           | gb:AV657159 GLC Homo sapiens cDNA clone  | 4.7 |
|    | 443347 | AI052543  | Hs.133244 | melanoma-derived leucine zipper, extra-n | 4.7 |
|    | 402176 |           |           |  | 4.7 |
| 45 | 416577 | BE063207  | Hs.79381  | grancalcin                               | 4.7 |
|    | 436221 | AK001781  | Hs.296543 | Homo sapiens cDNA FLJ10919 fis, clone OV | 4.7 |
|    | 420480 | AL137361  | Hs.98173  | hypothetical protein                     | 4.7 |
|    | 400800 | Y10262    | Hs.46925  | eyes absent (Drosophila) homolog 3       | 4.6 |
|    | 435161 | AF124150  | Hs.272091 | ESTs                                     | 4.6 |
| 50 | 404793 |           |           |  | 4.6 |
|    | 430895 | U66581    | Hs.248121 | G protein-coupled receptor 22            | 4.6 |
|    | 438571 | AW020775  | Hs.56022  | ESTs                                     | 4.6 |
|    | 445924 | AI264671  | Hs.164166 | ESTs                                     | 4.6 |
|    | 444585 | AW170015  | Hs.6594   | ESTs                                     | 4.6 |
| 55 | 421044 | AF061871  | Hs.311736 | Human DNA sequence from clone RP1-238D15 | 4.6 |
|    | 418274 | AI458587  | Hs.128677 | Human DNA sequence from clone RP1-50O24  | 4.6 |
|    | 425475 | W56339    | Hs.107057 | ESTs                                     | 4.6 |
|    | 434311 | BE543469  | Hs.266263 | Homo sapiens cDNA FLJ14115 fis, clone MA | 4.5 |
|    | 414272 | AI651603  | Hs.46988  | ESTs                                     | 4.5 |
|    | 445235 | AI564022  | Hs.138207 | ESTs                                     | 4.5 |
| 60 | 414327 | BE408145  | Hs.185254 | ESTs, Weakly similar to T24435 hypothe   | 4.5 |
|    | 414630 | BE410857  |           | gb:601301177F1 NIH_MGC_21 Homo sapiens c | 4.5 |
|    | 414456 | H74314    |           | gb:yu56e10.r1 Soares fetal liver spleen  | 4.5 |
|    | 401024 |           |           |  | 4.5 |
| 65 | 414699 | AI815523  | Hs.76930  | synuclein, alpha (non A4 component of am | 4.5 |
|    | 423449 | AI497900  | Hs.33067  | ESTs                                     | 4.5 |
|    | 405138 |           |           |  | 4.5 |
|    | 413544 | BE147225  |           | gb:PM2-HT0225-031299-003-f11 HT0225 Homo | 4.5 |
|    | 453880 | AI803166  | Hs.28462  | ESTs, Weakly similar to I38022 hypothe   | 4.5 |
| 70 | 433521 | T66087    | Hs.112482 | Homo sapiens unknown mRNA sequence       | 4.4 |
|    | 441184 | AA922009  | Hs.150269 | ESTs                                     | 4.4 |
|    | 429876 | AB028977  | Hs.225974 | KIAA1054 protein                         | 4.4 |
|    | 445481 | AW661846  | Hs.148836 | ESTs                                     | 4.4 |
|    | 452340 | NM_002202 | Hs.505    | ISL1 transcription factor, LIM/homeodoma | 4.4 |
| 75 | 404769 |           |           |  | 4.4 |
|    | 444331 | AW193342  | Hs.24144  | ESTs                                     | 4.4 |
|    | 429726 | AW628326  | Hs.27151  | ESTs                                     | 4.4 |
|    | 449093 | AB035356  | Hs.22998  | neurexin 1                               | 4.4 |
|    | 451959 | AA056203  | Hs.27337  | hypothetical protein FLJ20623            | 4.4 |
| 80 | 415716 | N59294    | Hs.179662 | nucleosome assembly protein 1-like 1     | 4.4 |
|    | 417888 | R23053    |           | gb:yh31a05.r1 Soares placenta Nb2HP Homo | 4.4 |
|    | 419656 | AB002314  | Hs.92025  | KIAA0316 gene product                    | 4.4 |
|    | 425864 | U56420    | Hs.159903 | olfactory receptor, family 5, subfamily  | 4.4 |
|    | 435078 | AW518888  | Hs.40937  | ESTs                                     | 4.4 |

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|----|--------|-----------|-----------|--|-----|
|    | 413493 | BE144444  |           | gb:MR0-HT0168-141199-002-409 HT0168 Homo | 4.3 |
|    | 432712 | AB016247  | Hs.288031 | sterol-C5-desaturase (fungal ERG3, delta | 4.3 |
|    | 459650 | R25754    | Hs.301185 | ESTs                                     | 4.3 |
|    | 404828 |           |           |  | 4.3 |
| 5  | 423782 | AI472209  | Hs.323117 | ESTs                                     | 4.3 |
|    | 426867 | AA460967  | Hs.22668  | ESTs                                     | 4.3 |
|    | 426802 | AA385182  | Hs.46699  | ESTs                                     | 4.3 |
|    | 457353 | X65633    | Hs.248144 | melanocortin 2 receptor (adrenocorticotr | 4.3 |
| 10 | 412112 | BE180342  |           | gb:RC3-HT0622-130400-012-a07 HT0622 Homo | 4.3 |
|    | 401522 | N47812    | Hs.306198 | CGI-35 protein                           | 4.3 |
|    | 419055 | AI365384  | Hs.11571  | Homo sapiens cDNA FLJ11570 fis, clone HE | 4.3 |
|    | 410171 | H07892    | Hs.12431  | ESTs                                     | 4.3 |
|    | 419564 | U08989    | Hs.91139  | solute carrier family 1 (neuronal/epithe | 4.3 |
| 15 | 458789 | AL157468  | Hs.325825 | Homo sapiens cDNA FLJ20848 fis, clone AD | 4.3 |
|    | 455040 | AW852286  |           | gb:QV0-CT0225-100400-187-d08 CT0225 Homo | 4.3 |
|    | 438533 | AI440266  | Hs.170673 | ESTs, Weakly similar to T24832 hypotheti | 4.3 |
|    | 459005 | AA447679  | Hs.144558 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 4.2 |
|    | 418489 | U76421    | Hs.85302  | adenosine deaminase, RNA-specific, B1 (h | 4.2 |
| 20 | 433389 | AF038171  |           | gb:Homo sapiens clone Z3671 mRNA sequenc | 4.2 |
|    | 454356 | AW390363  | Hs.11522  | hypothetical protein from Xq28           | 4.2 |
|    | 442339 | BE299668  | Hs.227591 | ESTs, Weakly similar to 1901303A Leu zip | 4.2 |
|    | 421249 | AA285362  |           | gb:HTH277 HTCCL1 Homo sapiens cDNA 5'/3' | 4.2 |
|    | 443998 | AI620661  | Hs.296276 | ESTs                                     | 4.2 |
| 25 | 452197 | AW023595  | Hs.232048 | ESTs                                     | 4.2 |
|    | 451117 | AA015752  | Hs.205173 | ESTs                                     | 4.2 |
|    | 404501 | AW247252  | Hs.75514  | nucleoside phosphorylase                 | 4.2 |
|    | 410378 | R23324    | Hs.41693  | DnaJ (Hsp40) homolog, subfamily B, membe | 4.2 |
|    | 422528 | AB011182  | Hs.118087 | KIAA0610 protein                         | 4.2 |
| 30 | 440323 | AA970614  | Hs.127992 | ESTs                                     | 4.1 |
|    | 425767 | AF054176  | Hs.159483 | chromosome 1 open reading frame 7        | 4.1 |
|    | 434460 | AA478486  | Hs.3852   | KIAA0368 protein                         | 4.1 |
|    | 410362 | H04811    | Hs.93164  | proprotein convertase subtilisin/kexin t | 4.1 |
|    | 413121 | T96090    | Hs.142678 | ESTs                                     | 4.1 |
| 35 | 409403 | AA668224  | Hs.6634   | Homo sapiens cDNA: FLJ22547 fis, clone H | 4.1 |
|    | 450235 | AA007512  | Hs.17538  | ESTs                                     | 4.1 |
|    | 449754 | H00820    | Hs.30977  | ESTs, Weakly similar to B34087 hypotheti | 4.1 |
|    | 421813 | BE048255  |           | gb:tz49b05.y1 NCI_CGAP_Bm52 Homo sapien  | 4.1 |
| 40 | 408496 | AI683802  | Hs.136182 | ESTs                                     | 4.1 |
|    | 430261 | AA305127  | Hs.237225 | hypothetical protein HT023               | 4.1 |
|    | 434101 | AA625205  | Hs.259599 | KIAA1622 protein                         | 4.1 |
|    | 451837 | T92157    | Hs.16970  | ESTs                                     | 4.1 |
|    | 411772 | BE170301  |           | gb:QV4-HT0536-040500-193-f05 HT0536 Homo | 4.1 |
|    | 437630 | AI252782  | Hs.153026 | SWAP-70 protein                          | 4.1 |
| 45 | 430212 | AA469153  |           | gb:nc67f04.s1 NCI_CGAP_Pr1 Homo sapiens  | 4.0 |
|    | 400216 |           |           |  | 4.0 |
|    | 429830 | AI537278  | Hs.225841 | DKFZP434D193 protein                     | 4.0 |
|    | 453165 | S74727    | Hs.32042  | aspartoacylase (aminoacylase 2, Canavan  | 4.0 |
|    | 418047 | R37633    | Hs.4847   | ESTs                                     | 4.0 |
| 50 | 405354 |           |           |  | 4.0 |
|    | 427931 | AW206512  | Hs.186996 | ESTs                                     | 4.0 |
|    | 428775 | AA434579  | Hs.143691 | ESTs                                     | 4.0 |
|    | 449422 | AA001373  | Hs.59821  | ESTs                                     | 4.0 |
|    | 453864 | AW021407  | Hs.21068  | hypothetical protein                     | 4.0 |
| 55 | 456407 | AW968614  |           | gb:EST380690 MAGE resequences, MAGJ Homo | 4.0 |
|    | 441869 | NM_003947 | Hs.8004   | huntingtin-associated protein interactin | 4.0 |
|    | 420784 | T65158    | Hs.102399 | ESTs, Moderately similar to S65657 alpha | 4.0 |
|    | 425195 | AA352026  | Hs.94319  | VPS10 domain receptor protein            | 4.0 |
|    | 429628 | H09604    | Hs.13268  | ESTs                                     | 4.0 |
| 60 | 410087 | F12079    | Hs.332579 | ESTs                                     | 4.0 |
|    | 409840 | AW502122  |           | gb:U1-HF-BR0p-ajr-c-08-D-U1.r1 NIH_MGC_5 | 4.0 |
|    | 452854 | AA437061  | Hs.14060  | prokineticin 1 precursor                 | 4.0 |
|    | 419910 | AA662913  | Hs.190173 | ESTs, Weakly similar to A46010 X-linked  | 4.0 |
|    | 427443 | AA402713  | Hs.97872  | ESTs                                     | 4.0 |
| 65 | 414990 | C17758    | Hs.221652 | Homo sapiens cDNA FLJ14323 fis, clone PL | 3.9 |
|    | 412678 | AA115575  | Hs.114914 | ESTs                                     | 3.9 |
|    | 405629 |           |           |  | 3.9 |
|    | 420299 | AI056871  | Hs.15276  | ESTs                                     | 3.9 |
|    | 453098 | Z25935    | Hs.86379  | ESTs                                     | 3.9 |
| 70 | 435752 | AF230801  |           | gb:Homo sapiens growth hormone receptor  | 3.9 |
|    | 441005 | Z41305    | Hs.303172 | Homo sapiens mRNA; cDNA DKFZp547G133 (fr | 3.9 |
|    | 414516 | AI307802  | Hs.135560 | ESTs, Weakly similar to T43458 hypotheti | 3.9 |
|    | 442257 | AW503831  | Hs.323370 | Human EST clone 25267 mariner transposon | 3.9 |
|    | 422563 | BE299342  | Hs.19348  | hypothetical protein FLJ13119            | 3.9 |
| 75 | 406697 | M21388    | Hs.123017 | Human unproductively rearranged Ig mu-ch | 3.9 |
|    | 443850 | AW014723  | Hs.334612 | ESTs                                     | 3.9 |
|    | 412677 | AW029608  | Hs.17384  | ESTs                                     | 3.9 |
|    | 422788 | AL117352  | Hs.120828 | Human DNA sequence from clone RP5-876B10 | 3.9 |
|    | 405377 |           |           |  | 3.9 |
| 80 | 414376 | BE393856  | Hs.66915  | ESTs, Weakly similar to 16.7Kd protein [ | 3.9 |
|    | 453341 | AI758912  | Hs.296341 | adenylyl cyclase-associated protein 2    | 3.9 |
|    | 431960 | AW241821  | Hs.301927 | c6.1A                                    | 3.9 |
|    | 416854 | H40164    | Hs.80296  | Purkinje cell protein 4                  | 3.9 |
|    | 427264 | AA400117  | Hs.125747 | ESTs                                     | 3.9 |

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|----|--------|-----------|-----------|--|-----|
|    | 422746 | NM_004484 | Hs.119651 | glypican 3                               | 3.9 |
|    | 452346 | BE243534  |           | gb:TCBAP1D0885 Pediatric pre-B cell acut | 3.9 |
|    | 414666 | NM_004466 | Hs.76828  | glypican 5                               | 3.8 |
| 5  | 418217 | A1910647  | Hs.13442  | ESTs                                     | 3.8 |
|    | 419118 | AA234223  | Hs.139204 | ESTs                                     | 3.8 |
|    | 445017 | A1205493  | Hs.176860 | ESTs                                     | 3.8 |
|    | 405867 |           |           |  | 3.8 |
|    | 422760 | BE409561  |           | gb:601299865F1 NIH_MGC_21 Homo sapiens c | 3.8 |
| 10 | 453863 | X02544    | Hs.572    | orosomuroid 1                            | 3.8 |
|    | 457821 | H47166    | Hs.124322 | ESTs, Weakly similar to A47582 B-cell gr | 3.8 |
|    | 457330 | AB013818  | Hs.247220 | peroxisome biogenesis factor 10          | 3.8 |
|    | 435600 | AL047034  | Hs.119747 | ESTs                                     | 3.8 |
|    | 456083 | U46922    | Hs.77252  | fragile histidine triad gene             | 3.8 |
| 15 | 413341 | H78472    | Hs.191325 | ESTs, Weakly similar to T18967 hypotheti | 3.8 |
|    | 449057 | AB037784  | Hs.22941  | KIAA1363 protein                         | 3.8 |
|    | 421855 | F06504    | Hs.27384  | ESTs, Moderately similar to ALU4_HUMAN A | 3.8 |
|    | 414764 | AW013887  | Hs.72047  | ESTs                                     | 3.8 |
|    | 404391 |           |           |  | 3.7 |
| 20 | 433629 | R13140    | Hs.13359  | ESTs                                     | 3.7 |
|    | 424738 | A1963740  | Hs.46826  | ESTs                                     | 3.7 |
|    | 401315 |           |           |  | 3.7 |
|    | 407706 | AA191085  | Hs.26612  | ESTs, Moderately similar to S23650 retro | 3.7 |
|    | 440530 | AA888646  | Hs.174187 | ESTs                                     | 3.7 |
| 25 | 433930 | AA620338  | Hs.273781 | ESTs                                     | 3.7 |
|    | 409662 | AW452320  | Hs.279726 | ESTs                                     | 3.7 |
|    | 437268 | A1754847  | Hs.227571 | regulator of G-protein signalling 4      | 3.7 |
|    | 445688 | A1248205  | Hs.153244 | ESTs                                     | 3.7 |
|    | 408593 | R19566    | Hs.197617 | ESTs                                     | 3.7 |
| 30 | 417091 | AA193283  | Hs.291990 | ESTs                                     | 3.7 |
|    | 448556 | AW885606  | Hs.5064   | ESTs                                     | 3.7 |
|    | 423135 | N67655    | Hs.26411  | ESTs                                     | 3.7 |
|    | 400135 |           |           |  | 3.7 |
|    | 459150 | BE155356  |           | gb:PM1-HT0350-160300-009-d06 HT0350 Homo | 3.7 |
| 35 | 457221 | AW383197  | Hs.218260 | ESTs                                     | 3.7 |
|    | 451660 | A1807927  | Hs.249601 | ESTs                                     | 3.7 |
|    | 401600 | BE247275  | Hs.151787 | U5 snRNP-specific protein, 116 kD        | 3.7 |
|    | 446818 | A1342668  | Hs.279765 | ESTs                                     | 3.7 |
|    | 447795 | AW295151  | Hs.163612 | ESTs                                     | 3.7 |
| 40 | 427562 | R56424    | Hs.26534  | ESTs                                     | 3.6 |
|    | 412258 | AA376768  | Hs.324841 | hypothetical protein FLJ22622            | 3.6 |
|    | 454339 | AW381980  |           | gb:QV4-HT0316-091199-028-d05 HT0316 Homo | 3.6 |
|    | 439274 | AF086092  | Hs.48372  | ESTs                                     | 3.6 |
|    | 452381 | H23329    | Hs.290880 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 3.6 |
| 45 | 422897 | AA679784  | Hs.4290   | ESTs                                     | 3.6 |
|    | 429656 | X05608    | Hs.211584 | neurofilament, light polypeptide (68kD)  | 3.6 |
|    | 421908 | AW935200  | Hs.285814 | sprouty (Drosophila) homolog 4           | 3.6 |
|    | 407978 | AW385129  | Hs.41717  | phosphodiesterase 1A, calmodulin-depende | 3.6 |
|    | 426452 | AW614271  | Hs.121647 | ESTs, Highly similar to AC006014 8 simil | 3.6 |
|    | 400685 |           |           |  | 3.6 |
| 50 | 417154 | A1674701  | Hs.21388  | ESTs                                     | 3.6 |
|    | 447176 | Z42549    | Hs.160893 | ESTs                                     | 3.6 |
|    | 423893 | AL031709  | Hs.134846 | Human DNA sequence from clone 316G12 on  | 3.6 |
|    | 449231 | BE410360  | Hs.298573 | KIAA1720 protein                         | 3.6 |
| 55 | 411607 | AW853498  |           | gb:RC1-CT0252-170200-025-h02 CT0252 Homo | 3.6 |
|    | 405977 |           |           |  | 3.6 |
|    | 441470 | BE503874  | Hs.301986 | ESTs                                     | 3.6 |
|    | 423668 | NM_005256 | Hs.129818 | growth arrest-specific 2                 | 3.6 |
| 60 | 441235 | A1884586  | Hs.135570 | Homo sapiens cDNA: FLJ21268 fis, clone C | 3.6 |
|    | 450236 | AW162998  | Hs.24684  | KIAA1376 protein                         | 3.6 |
|    | 425364 | AF052150  | Hs.155959 | Homo sapiens clone 24533 mRNA sequence   | 3.6 |
|    | 426775 | AA384564  | Hs.108829 | ESTs                                     | 3.6 |
|    | 414831 | M31158    | Hs.77439  | protein kinase, cAMP-dependent, regulato | 3.6 |
|    | 416876 | AW501916  | Hs.117897 | ESTs                                     | 3.6 |
|    | 400878 |           |           |  | 3.6 |
| 65 | 425153 | AW023193  | Hs.27046  | ESTs                                     | 3.6 |
|    | 432222 | A1204995  |           | gb:an03c03.x1 Stratagene schizo brain S1 | 3.5 |
|    | 415047 | F13142    |           | gb:HSC3JD031 normalized infant brain cDN | 3.5 |
|    | 401532 |           |           |  | 3.5 |
| 70 | 446495 | D60923    | Hs.153460 | ESTs                                     | 3.5 |
|    | 431325 | AW026751  | Hs.5794   | ESTs, Weakly similar to 2109260A B cell  | 3.5 |
|    | 445898 | AF070623  | Hs.13423  | Homo sapiens clone 24468 mRNA sequence   | 3.5 |
|    | 455901 | BE155527  |           | gb:PM1-HT0350-190400-013-b08 HT0350 Homo | 3.5 |
|    | 416421 | AA134006  | Hs.79306  | eukaryotic translation initiation factor | 3.5 |
| 75 | 455697 | BE067952  |           | gb:CM0-BT0365-061299-122-g09 BT0365 Homo | 3.5 |
|    | 405678 |           |           |  | 3.5 |
|    | 418207 | C14685    | Hs.34772  | ESTs                                     | 3.5 |
|    | 425383 | D83407    | Hs.156007 | Down syndrome critical region gene 1-lik | 3.5 |
|    | 417027 | AA192306  | Hs.23926  | triadin                                  | 3.5 |
| 80 | 408367 | AK001178  | Hs.44424  | homolog of rat orphan transporter v7-3   | 3.5 |
|    | 417702 | R09935    | Hs.191146 | ESTs                                     | 3.5 |
|    | 445687 | W80382    | Hs.149297 | ESTs                                     | 3.5 |
|    | 408776 | AA057365  | Hs.63356  | ESTs, Weakly similar to I38022 hypotheti | 3.5 |
|    | 413164 | BE068494  |           | gb:MR1-BT0371-050500-009-a12 BT0371 Homo | 3.5 |

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|    | 414593 | BE386764  |           | gb:601273249F1 NIH_MGC_20 Homo sapiens c | 3.5 |
|    | 453220 | AB033089  | Hs.32452  | Homo sapiens mRNA for KIAA1263 protein,  | 3.5 |
|    | 415621 | AI648602  | Hs.55468  | ESTs                                     | 3.5 |
| 5  | 454437 | AI248173  | Hs.191460 | hypothetical protein MGC12936            | 3.5 |
|    | 446066 | AI343931  | Hs.149383 | ESTs                                     | 3.5 |
|    | 423374 | AB037770  | Hs.127656 | KIAA1349 protein                         | 3.5 |
|    | 419347 | C15944    | Hs.90005  | superiorcervical ganglia, neural specif  | 3.5 |
|    | 418516 | NM_006218 | Hs.85701  | phosphoinositide-3-kinase, catalytic, al | 3.5 |
| 10 | 451776 | W45679    | Hs.169854 | hypothetical protein SP192               | 3.5 |
|    | 432305 | M62402    | Hs.274313 | insulin-like growth factor binding prote | 3.5 |
|    | 456995 | T89832    | Hs.170278 | ESTs                                     | 3.5 |
|    | 403323 |           |           |  | 3.5 |
|    | 425022 | M95724    | Hs.154207 | centromere protein C 1                   | 3.5 |
| 15 | 439394 | AA149250  | Hs.56105  | ESTs                                     | 3.4 |
|    | 433803 | AI823593  | Hs.27688  | ESTs                                     | 3.4 |
|    | 450715 | AI266484  | Hs.31570  | ESTs, Weakly similar to KIAA1324 protein | 3.4 |
|    | 411474 | AW848427  |           | gb:IL3-CT0214-150200-075-H10 CT0214 Homo | 3.4 |
|    | 415076 | NM_000857 | Hs.77890  | guanylate cyclase 1, soluble, beta 3     | 3.4 |
| 20 | 423826 | U20325    | Hs.1707   | cocaine- and amphetamine-regulated trans | 3.4 |
|    | 459495 | BE544158  |           | gb:601076707F1 NIH_MGC_12 Homo sapiens c | 3.4 |
|    | 427173 | BE255017  | Hs.97540  | ESTs                                     | 3.4 |
|    | 408112 | AW451982  | Hs.248613 | ESTs                                     | 3.4 |
|    | 446092 | N33522    | Hs.145894 | ESTs                                     | 3.4 |
| 25 | 416868 | AI656856  | Hs.292597 | ESTs                                     | 3.4 |
|    | 458234 | BE551408  | Hs.127196 | ESTs                                     | 3.4 |
|    | 419555 | AA244416  |           | gb:nc07d11.s1 NCL CGAP_Pr1 Homo sapiens  | 3.4 |
|    | 414314 | BE312991  |           | gb:601150275F1 NIH_MGC_19 Homo sapiens c | 3.4 |
|    | 400425 | AY004252  | Hs.287385 | PR domain containing 12                  | 3.4 |
| 30 | 414366 | BE549143  |           | gb:601076456F1 NIH_MGC_12 Homo sapiens c | 3.4 |
|    | 434053 | AW445136  | Hs.134946 | ESTs                                     | 3.4 |
|    | 449997 | AI683052  | Hs.201577 | KIAA1829 protein                         | 3.4 |
|    | 433461 | AI636047  | Hs.197623 | ESTs                                     | 3.4 |
|    | 428006 | AA418743  | Hs.98306  | KIAA1862 protein                         | 3.4 |
| 35 | 424695 | U58331    | Hs.151899 | sarcoglycan, delta (35kD dystrophin-asso | 3.4 |
|    | 443294 | AI733625  | Hs.133053 | ESTs                                     | 3.4 |
|    | 428212 | AW444451  | Hs.134812 | ESTs                                     | 3.4 |
|    | 457673 | AA551569  | Hs.272034 | hypothetical protein PRO2822             | 3.4 |
|    | 446390 | AA233393  | Hs.14992  | hypothetical protein FLJ11151            | 3.3 |
| 40 | 428536 | AI143139  | Hs.2288   | visinin-like 1                           | 3.3 |
|    | 426597 | AA382250  | Hs.145601 | ESTs                                     | 3.3 |
|    | 410366 | AI267589  | Hs.302689 | hypothetical protein                     | 3.3 |
|    | 458258 | AW406546  | Hs.127971 | ESTs                                     | 3.3 |
|    | 401738 |           |           |  | 3.3 |
| 45 | 409039 | T97490    | Hs.50002  | small inducible cytokine subfamily A (Cy | 3.3 |
|    | 425785 | T27017    | Hs.159528 | Homo sapiens clone 24400 mRNA sequence   | 3.3 |
|    | 433328 | AW298159  | Hs.23644  | ESTs, Weakly similar to S65824 reverse t | 3.3 |
|    | 414541 | BE293116  | Hs.76392  | aldehyde dehydrogenase 1 family, member  | 3.3 |
|    | 434998 | AW975157  | Hs.26037  | ESTs                                     | 3.3 |
| 50 | 456359 | AI967991  | Hs.93574  | homeo box D3                             | 3.3 |
|    | 426527 | NM_001037 | Hs.170238 | sodium channel, voltage-gated, type I, b | 3.3 |
|    | 454267 | AA437199  | Hs.656    | cell division cycle 25C                  | 3.3 |
|    | 400302 | N48056    | Hs.1915   | folate hydrolase (prostate-specific memb | 3.3 |
|    | 434077 | AF116659  | Hs.321151 | Homo sapiens PRO1412 mRNA, complete cds  | 3.3 |
| 55 | 436602 | AI793222  | Hs.166817 | ESTs                                     | 3.3 |
|    | 449204 | AB000099  | Hs.23251  | Down syndrome critical region gene 4     | 3.3 |
|    | 417935 | R53697    | Hs.170044 | ESTs                                     | 3.3 |
|    | 423310 | AA325225  | Hs.124023 | Homo sapiens cDNA FLJ14218 fis, clone NT | 3.3 |
|    | 436624 | T64297    | Hs.5241   | fatty acid binding protein 1, liver      | 3.3 |
| 60 | 453406 | AI192987  | Hs.61784  | hypothetical protein FLJ14451            | 3.3 |
|    | 420164 | AW339037  | Hs.24908  | ESTs                                     | 3.3 |
|    | 447826 | AW779317  | Hs.258556 | ESTs                                     | 3.3 |
|    | 419875 | AA853410  | Hs.93557  | proenkephalin                            | 3.3 |
|    | 444612 | AW138111  | Hs.22902  | ESTs                                     | 3.3 |
| 65 | 418504 | BE159718  | Hs.85335  | Homo sapiens mRNA; cDNA DKFZp564D1462 (f | 3.2 |
|    | 415242 | R45986    | Hs.295014 | ESTs                                     | 3.2 |
|    | 418188 | AW139413  | Hs.151880 | ESTs                                     | 3.2 |
|    | 430355 | NM_006219 | Hs.239818 | phosphoinositide-3-kinase, catalytic, be | 3.2 |
|    | 421640 | AW966652  |           | gb:EST378726 MAGE resequences, MAGI Homo | 3.2 |
| 70 | 432359 | AA076049  | Hs.274415 | Homo sapiens cDNA FLJ10229 fis, clone HE | 3.2 |
|    | 408806 | AW847814  | Hs.289005 | Homo sapiens cDNA: FLJ21532 fis, clone C | 3.2 |
|    | 400409 | AF153341  | Hs.283954 | Homo sapiens winged helix/forkhead trans | 3.2 |
|    | 446015 | T30968    | Hs.13531  | hypothetical protein FLJ10971            | 3.2 |
|    | 425495 | AA358454  | Hs.78026  | ESTs, Weakly similar to similar to ankyr | 3.2 |
| 75 | 403092 |           |           |  | 3.2 |
|    | 452971 | AI873878  | Hs.91789  | ESTs                                     | 3.2 |
|    | 454186 | BE141030  |           | gb:MR0-HT0067-201099-002-h11 HT0067 Homo | 3.2 |
|    | 401485 |           |           |  | 3.2 |
|    | 401949 |           |           |  | 3.2 |
| 80 | 457452 | AW972675  |           | gb:EST384766 MAGE resequences, MAGI Homo | 3.2 |
|    | 454100 | AI693231  | Hs.126043 | chromosome 21 open reading frame 51      | 3.2 |
|    | 448440 | AA173467  | Hs.62402  | p21/Cdc42/Rac1-activated kinase 1 (yeast | 3.2 |
|    | 421200 | AA284811  | Hs.264433 | ESTs                                     | 3.2 |
|    | 430142 | NM_000437 | Hs.234392 | platelet-activating factor acetylhydrola | 3.2 |

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|    | 433197 | AB040889  | Hs.281022 | KIAA1456 protein                         | 3.2 |
|    | 443509 | AV645470  |           | gb:AV645470 GLC Homo sapiens cDNA clone  | 3.2 |
|    | 440827 | A1733110  | Hs.128128 | ESTs                                     | 3.2 |
| 5  | 432799 | NM_016161 | Hs.278960 | alpha-1,4-N-acetylglucosaminyltransferas | 3.2 |
|    | 409257 | AW370362  |           | gb:RC1-BT0255-181099-012-d07 BT0255 Homo | 3.2 |
|    | 459235 | BE246010  | Hs.271468 | Homo sapiens mRNA for FLJ00038 protein,  | 3.2 |
|    | 416789 | AA223439  | Hs.79933  | cyclin I                                 | 3.2 |
|    | 429809 | AL162010  | Hs.223603 | Homo sapiens mRNA; cDNA DKFZp761D09121 ( | 3.2 |
| 10 | 420156 | AW449258  | Hs.6187   | ESTs                                     | 3.2 |
|    | 455577 | BE006341  |           | gb:RC2-BN0127-240300-011-b05 BN0127 Homo | 3.2 |
|    | 400617 | AF151064  | Hs.35069  | hypothetical protein                     | 3.2 |
|    | 437129 | AL049327  | Hs.302057 | Homo sapiens mRNA; cDNA DKFZp564E016 (fr | 3.2 |
|    | 451820 | AW058357  | Hs.337353 | ESTs                                     | 3.2 |
|    | 457535 | AA609685  | Hs.278672 | membrane component, chromosome 11, surfa | 3.2 |
| 15 | 419956 | AL137939  | Hs.40096  | ESTs                                     | 3.1 |
|    | 456235 | AA203637  |           | gb:zx58b12.r1 Soares_fetal_liver_spleen_ | 3.1 |
|    | 423930 | AA332697  | Hs.42721  | ESTs                                     | 3.1 |
|    | 403796 |           |           |  | 3.1 |
| 20 | 414085 | AA114016  | Hs.75746  | aldehyde dehydrogenase 1 family, member  | 3.1 |
|    | 445886 | AI793176  | Hs.145596 | ESTs                                     | 3.1 |
|    | 414401 | AI760159  | Hs.124833 | ESTs                                     | 3.1 |
|    | 441573 | BE563966  | Hs.6529   | ESTs, Weakly similar to I78885 serine/th | 3.1 |
|    | 450725 | R71389    | Hs.175951 | ESTs                                     | 3.1 |
| 25 | 458805 | AI282933  | Hs.23294  | hypothetical protein FLJ14393            | 3.1 |
|    | 417868 | AI078534  | Hs.122592 | ESTs                                     | 3.1 |
|    | 458391 | AI792628  | Hs.133273 | ESTs                                     | 3.1 |
|    | 423346 | AI267677  | Hs.127416 | synaptotagmin 1                          | 3.1 |
|    | 454486 | AW857077  |           | gb:RC1-CT0302-140300-016-f04 CT0302 Homo | 3.1 |
| 30 | 408341 | AW182952  | Hs.249957 | ESTs                                     | 3.1 |
|    | 410669 | AW805749  | Hs.318885 | superoxide dismutase 2, mitochondrial    | 3.1 |
|    | 404907 |           |           |  | 3.1 |
|    | 434910 | AI333863  | Hs.215474 | ESTs, Moderately similar to alternativel | 3.1 |
|    | 436990 | AI149729  | Hs.120557 | ESTs                                     | 3.1 |
| 35 | 441921 | AI733376  | Hs.164478 | hypothetical protein FLJ21939 similar to | 3.1 |
|    | 454673 | AW812807  |           | gb:RC3-ST0186-070100-016-c04 ST0186 Homo | 3.1 |
|    | 429470 | AI878901  | Hs.203862 | guanine nucleotide binding protein (G pr | 3.1 |
|    | 404345 | AA730407  | Hs.159156 | protocadherin 11                         | 3.1 |
|    | 408217 | AI433201  | Hs.279860 | tumor protein, translationally-controlle | 3.1 |
| 40 | 417313 | AA195602  |           | gb:zr32f09.r1 Soares_NhHMPu_S1 Homo sapi | 3.1 |
|    | 427322 | AK002017  | Hs.176227 | hypothetical protein FLJ11155            | 3.1 |
|    | 411003 | AA181018  | Hs.13056  | hypothetical protein FLJ13920            | 3.1 |
|    | 425339 | AA936330  | Hs.198113 | ESTs                                     | 3.1 |
|    | 426716 | NM_006379 | Hs.171921 | sema domain, immunoglobulin domain (lg). | 3.1 |
| 45 | 449078 | AK001256  | Hs.22975  | KIAA1576 protein                         | 3.1 |
|    | 429608 | U49250    | Hs.210862 | T-box, brain, 1                          | 3.1 |
|    | 442308 | AA989402  | Hs.111    | fibroblast growth factor 9 (glia-activat | 3.1 |
|    | 428465 | AW970976  | Hs.293653 | ESTs                                     | 3.1 |
|    | 411666 | AF106564  | Hs.71346  | neurofilament 3 (150kD medium)           | 3.1 |
| 50 | 447965 | AW292577  | Hs.94445  | ESTs                                     | 3.1 |
|    | 413918 | AW015898  | Hs.71245  | ESTs                                     | 3.1 |
|    | 419682 | H13139    | Hs.92282  | paired-like homeodomain transcription fa | 3.1 |
|    | 425810 | AI923627  | Hs.31903  | ESTs                                     | 3.1 |
|    | 427865 | AA416931  | Hs.126065 | ESTs                                     | 3.1 |
| 55 | 429060 | AW139155  | Hs.194995 | hypothetical protein DKFZp434O0320       | 3.1 |
|    | 430708 | U78308    | Hs.278485 | olfactory receptor, family 1, subfamily  | 3.1 |
|    | 448084 | AI467800  | Hs.271000 | ESTs, Weakly similar to I38022 hypotheti | 3.1 |
|    | 454506 | AW847346  |           | gb:RC0-CT0205-240999-021-e01 CT0205 Homo | 3.1 |
|    | 414629 | AA345824  | Hs.76688  | carboxylesterase 1 (monocytemacrophage   | 3.0 |
| 60 | 422963 | M79141    | Hs.13234  | ESTs                                     | 3.0 |
|    | 417696 | BE241624  | Hs.82401  | CD69 antigen (p60, early T-cell activati | 3.0 |
|    | 448175 | BE296174  | Hs.225160 | hypothetical protein FLJ13102            | 3.0 |
|    | 414686 | BE409757  | Hs.23189  | ESTs, Moderately similar to TBB2_HUMAN T | 3.0 |
|    | 458360 | AI027207  | Hs.132253 | ESTs                                     | 3.0 |
| 65 | 451829 | AW964081  | Hs.247377 | ESTs                                     | 3.0 |
|    | 445179 | AI949743  | Hs.224768 | ESTs                                     | 3.0 |
|    | 433090 | AI720050  | Hs.145362 | immortalization-upregulated protein      | 3.0 |
|    | 432018 | AA524447  | Hs.152377 | ESTs                                     | 3.0 |
|    | 407988 | N47760    | Hs.285107 | hypothetical protein FLJ13397            | 3.0 |
|    | 405911 |           |           |  | 3.0 |
| 70 | 418808 | AI821836  | Hs.10359  | ESTs                                     | 3.0 |
|    | 431900 | AW972048  | Hs.192534 | ESTs                                     | 3.0 |
|    | 452893 | H18017    | Hs.22869  | ESTs, Moderately similar to KIAA1395 pro | 3.0 |
|    | 423952 | AW877787  | Hs.136102 | KIAA0853 protein                         | 3.0 |
| 75 | 412000 | AW576555  | Hs.15780  | ATP-binding cassette, sub-family A (ABC1 | 3.0 |
|    | 405793 |           |           |  | 3.0 |
|    | 410711 | AB002316  | Hs.65746  | KIAA0318 protein                         | 3.0 |
|    | 411279 | AW884776  |           | gb:QV4-OT0067-010300-121-d01 OT0067 Homo | 3.0 |
|    | 423957 | AW978309  | Hs.136235 | Homo sapiens cDNA FLJ13542 fis, clone PL | 3.0 |
| 80 | 427071 | AA397958  | Hs.192719 | ESTs                                     | 3.0 |
|    | 434961 | AW974956  |           | gb:EST387061 MAGE resequences, MAGN Homo | 3.0 |

TABLE 26B:

Pkey: Unique Ecos probeset identifier number

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| CAT number: |              | Gene cluster number   |  |
|-------------|--------------|---|--|
| Accession:  |              | Genbank accession numbers   |  |
| Pkey        | CAT Number   | Accession   |  |
| 5           | 409257       | 1112994_1   | AW370362 AW809101  |
|             | 409840       | 1156071_1   | AW502122 AW502125 AW501663 AW501720  |
|             | 411052       | 1230374_1   | AW814950 R98513 H69459 BE176242 H54583   |
|             | 411279       | 1237516_1   | AW884776 AW935737 AW835261 AW835247 AW835246 AW835263 AW835240 AW835258  |
| 10          | 411474       | 1247047_2   | AW848427 AW848890 AW848159 AW848118 AW848634 AW848285 AW848086 AW848485 AW848283 AW848162  |
|             | 411607       | 1251251_1   | AW853498 AW853442 AW853590 AW853433 AW853592   |
|             | 411772       | 1257386_1   | BE170301 AW861539 AW904851 BE154336 BE154090 BE154275  |
|             | 412112       | 1277883_1   | BE180342 BE180347 AW901900 BE180222 BE180218 BE180226 BE180413 BE180416 AW901899 BE180228 AW901897 BE180224 AW901898<br>BE180223 BE180219 BE180346 BE180343 BE180418 BE180225 BE180221 BE180341 AW901894 BE180217 BE180227 AW901891 BE180345<br>AW893614 AW893615 H85799 H83501 BE180220   |
| 15          | 413164       | 1351422_1   | BE068494 BE068414 BE068332 BE068347 BE068706 BE068623 BE068450 BE068480 BE068350 BE068295 BE068498 BE068765 BE068328<br>BE068778 BE068671 BE068526 BE068493 BE068433 BE068740 BE068306 BE068631 BE068580 BE068445 BE068567 BE068521 BE068549<br>BE068392 BE068307 BE068692 BE068473 BE068754 BE068476 BE068685 BE068626 BE068591 BE068745 BE068434 BE068759 BE068628<br>BE068723 BE068529 BE068689 BE068383 BE068422 BE068470 BE068522 BE068618 BE068354 BE068748 BE068683 BE068303 BE068602<br>BE068739 BE068374 BE068302 BE068625 BE068596 BE068663 BE068429 BE068605 BE068693 BE068672 BE068401 BE068579 BE068329<br>BE068390 BE068419 BE068393 BE068447 BE068675 BE068311 BE068540 BE068301 BE068543 BE068719 BE068369 BE068324 BE068588<br>BE068568 BE068317 BE068384 BE068547 BE068674 BE068436 BE068321 BE068361 BE068676 BE068499 BE068299 BE068352 BE068410<br>BE068293 BE068418 BE068552 BE068598 BE068327 BE068550 BE068712 BE068661 BE068733 BE068525 BE068752 BE068357 BE068330<br>BE068565 BE068538 BE068340 BE068537 BE068761 BE068632 BE068758 |
| 20          |              |   | BE144444 BE144430  |
| 25          | 413493       | 1373555_1   | F13044 T77009 BE145525 BE145493  |
|             | 413510       | 1374377_1   | BE147225 BE147205 BE147234   |
|             | 413544       | 1375671_1   | BE298094 BE267860  |
|             | 414220       | 1426940_1   | BE312991 BE272945  |
|             | 414314       | 1435028_1   | BE549143 BE390613 BE277344   |
| 30          | 414366       | 1438636_1   | H74314 BE299593  |
|             | 414456       | 1447655_1   | BE386764 BE387560  |
|             | 414593       | 1464909_1   | BE410857 BE390605  |
|             | 414630       | 1468083_1   | F13142 Z42926 F06135 F06147 H08517 D51360 T75341   |
|             | 415047       | 1517450_1   | AA195602 W01148 N40632   |
| 35          | 417313       | 166644_1  | R23053 R79884 R76271   |
|             | 417888       | 1706092_1   | AA244416 AA244401  |
|             | 419555       | 185884_1  | AA285362 AW752386 AW847156 AA285373 AW879575 AW879558  |
|             | 421249       | 200649_1  | AW966652 AW966653 AA294989 AA385977  |
|             | 421640       | 204833_1  | BE048255 AA313083 AA298419   |
| 40          | 421813       | 207654_1  | BE409561 BE162756 AW732798   |
|             | 422760       | 221034_1  | AA359933 AA358889 AW955306 AW962995 AW837746 AW837755 AW837697   |
|             | 425526       | 252776_1  | AA469153 A1718503 AA469225   |
|             | 430212       | 314437_1  | A1204995 AW827539 AW969908 AW440776 AA528756   |
|             | 432222       | 343347_1  | AF038171 Z43209 F07347   |
| 45          | 433389       | 36497_1   | AW974956 AW781075 AA654944   |
|             | 434961       | 396357_1  | AF230801 AF230800 AA401795 AA398260  |
|             | 435752       | 41050_1   | AL390174 AW898817  |
|             | 437483       | 43756_1   | BE560093   |
|             | 440198       | 48824_-2  | AV645470 T84636 T82805   |
| 50          | 443509       | 57199_1   | AA358760 AA158850 AW062737 AW062738 AV656291   |
|             | 446052       | 65988_1   | AV657159 BE145509 BE145512 BE145505 BE145507   |
|             | 446218       | 66686_1   | T58148 AW516579 AW059603   |
|             | 447135       | 70963_1   | BE243534 BE243752 A1880228 L44326  |
|             | 452346       | 912206_1  | A1904296 BE007223 R30687   |
| 55          | 452502       | 919733_1  | BE394588 AW024754 BE183166 BE183167  |
|             | 454065       | 998401_1  | BE141030 BE141474 BE141467 BE141753 BE141024 BE141761 AW177583 AW177579 AW177582 AW177585 AW177587 AW807582 AW177581   |
|             | 454186       | 1049791_1   | BE141477 BE141520 BE141456 BE141492 BE141028 BE141775 BE141489 BE141751 AW177599 BE141750 AW177597 BE141512 BE141460<br>BE141749 AW177598  |
| 60          | 454339       | 1122972_1   | AW381980 BE152244 BE152235 BE152238 BE152232   |
|             | 454486       | 1215703_1   | AW857077 AW861268 AW847383 AW795787  |
|             | 454506       | 1219857_1   | AW847346 AW847395 AW847408 AW847385 AW847342 AW847396 AW847339 AW801718 AW801787   |
|             | 454673       | 1228669_1   | AW812807 AW812815 AW812802   |
|             | 455040       | 1250028_1   | AW852286 AW851934 AW852096 AW852274  |
| 65          | 455225       | 1262318_1   | AW996689 AW996380 AW996453 BE085650 AW868687 BE085595  |
|             | 455577       | 1333898_1   | BE006341 BE006307 BE006311   |
|             | 455617       | 1346117_1   | BE078070 BE061030 BE077927   |
|             | 455697       | 1351148_1   | BE067952 BE067945 BE067943 BE067949 BE067954 BE067944 BE067953 BE067956 BE067946   |
|             | 455901       | 1381569_1   | BE155527 BE155503 BE155188 BE155126  |
| 70          | 456235       | 168686_1  | AA203637 AA832266 H67452   |
|             | 456407       | 184986_1  | AW968614 AA243209 AA281411   |
|             | 457452       | 339381_1  | AW972675 AA541366 AA523039   |
|             | 459150       | 919196_1  | BE155356 BE153488 BE153461 BE155059 BE155210 BE155413 BE153577 BE153688 BE155063 BE155347 A1903640 BE155492  |
| 75          | TABLE 26C:   |   |  |
|             | Pkey:        | Unique number corresponding to an Eos probeset  |  |
|             | Ref:         | Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495. |  |
|             | Strand:      | Indicates DNA strand from which exons were predicted.   |  |
| 80          | NT_position: | Indicates nucleotide positions of predicted exons.  |  |
|             | Pkey         | Ref   | Strand NT_position   |
|             | 400651       | 8118474   | Plus 84912-85187   |
|             | 400685       | 8118768   | Minus 72969-73050,73713-73800  |

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|    |        |         |       |   |
|----|--------|---------|-------|---|
|    | 400865 | 1945037 | Minus | 44482-45526   |
|    | 400878 | 9864757 | Plus  | 31493-32842   |
|    | 401024 | 8117489 | Plus  | 60551-60802   |
| 5  | 401315 | 9212516 | Minus | 198960-199619   |
|    | 401485 | 7341723 | Plus  | 68009-68209,68841-69077   |
|    | 401521 | 7705251 | Plus  | 9127-9234   |
|    | 401532 | 7798785 | Plus  | 124414-124950,125050-125418   |
|    | 401738 | 2982169 | Minus | 41547-41757   |
| 10 | 401780 | 7249190 | Minus | 28397-28617,28920-29045,29135-29296,29411-29567,29705-29787,30224-30573 |
|    | 401836 | 7534063 | Plus  | 71981-72084   |
|    | 401949 | 3492889 | Plus  | 160728-161660   |
|    | 402092 | 7249154 | Minus | 107533-108094   |
|    | 402176 | 7543687 | Minus | 10-750  |
| 15 | 402546 | 7637348 | Plus  | 24673-25170   |
|    | 403092 | 8954241 | Plus  | 174720-175016,175104-175406,175508-175813                               |
|    | 403180 | 7523976 | Minus | 63603-63759   |
|    | 403323 | 8348082 | Minus | 120366-120845   |
|    | 403796 | 8099896 | Minus | 75073-77664   |
| 20 | 404391 | 3135305 | Minus | 26030-26173,27852-27997   |
|    | 404769 | 8099713 | Minus | 175801-176823   |
|    | 404793 | 7232206 | Minus | 61087-61590   |
|    | 404828 | 6580415 | Minus | 26291-27253   |
|    | 404907 | 7331453 | Minus | 102880-103828   |
| 25 | 404958 | 7407941 | Minus | 2731-4531   |
|    | 405071 | 7708797 | Minus | 11115-11552   |
|    | 405130 | 8516045 | Plus  | 150235-150449   |
|    | 405138 | 8576241 | Plus  | 90303-90516   |
|    | 405354 | 2642452 | Plus  | 52213-53089   |
| 30 | 405377 | 5649375 | Plus  | 216656-216848   |
|    | 405629 | 4508116 | Minus | 101678-101866   |
|    | 405678 | 4079670 | Plus  | 151821-152027   |
|    | 405793 | 1405887 | Minus | 89197-89453   |
|    | 405800 | 2791346 | Plus  | 19271-19813   |
| 35 | 405867 | 6758731 | Minus | 74553-75173   |
|    | 405911 | 6758795 | Plus  | 101008-101643   |
|    | 405977 | 8247789 | Minus | 135548-136177   |

TABLE 27A: ABOUT 533 CNS-ENRICHED GENES SIGNIFICANTLY DOWN-REGULATED IN GLIOBLASTOMA COMPARED TO NORMAL ADULT CNS TISSUES

Table 27A lists about 533 CNS-enriched genes significantly down-regulated in glioblastoma compared to normal adult CNS tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" normal CNS to "average" glioblastoma was greater than or equal to 2. The "average" normal CNS level was set to the 75<sup>th</sup> percentile amongst various normal CNS tissues. The "average" glioblastoma level was set to the 85<sup>th</sup> percentile amongst various tumor samples. To enrich for CNS specific genes, the ratio of "average" CNS to "average" non-CNS normal adult tissues was calculated to be greater than or equal to 2. The "average" CNS level was set to the 85<sup>th</sup> percentile amongst various CNS tissues. The "average" normal non-CNS adult tissue level was set to the 85<sup>th</sup> percentile amongst various non-CNS normal tissues. In order to remove gene-specific background levels of non-specific hybridization, the 10<sup>th</sup> percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratios were evaluated.

Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 R1: Ratio of 75<sup>th</sup> percentile normal central nervous system tissue to 85<sup>th</sup> percentile tumor  
 R2: Ratio of 85<sup>th</sup> percentile central nervous system tissue to 85<sup>th</sup> percentile normal body tissue

|    |        |           |           |  |      |      |
|----|--------|-----------|-----------|--|------|------|
|    | Pkey   | ExAccn    | UnigenelD | Unigene Title  | R1   | R2   |
| 55 | 417275 | X63578    | Hs.295449 | parvalbumin  | 29.0 | 30.0 |
|    | 430829 | AW451999  | Hs.194024 | ESTs   | 25.7 | 6.2  |
|    | 410657 | AF063228  | Hs.65248  | dynein, cytoplasmic, intermediate polypeptide          | 22.6 | 25.8 |
|    | 419954 | D14720    | Hs.93883  | myelin protein zero (Charcot-Marie-Tooth)              | 21.2 | 30.3 |
| 60 | 416133 | NM_001683 | Hs.89512  | ATPase, Ca <sup>++</sup> transporting, plasma membrane | 15.5 | 16.8 |
|    | 416018 | AW138239  | Hs.78977  | proprotein convertase subtilisin/kexin type 1          | 15.2 | 18.0 |
|    | 417167 | AW206437  | Hs.4290   | ESTs   | 14.8 | 17.7 |
|    | 433940 | H05129    | Hs.7459   | cyclic AMP-regulated phosphoprotein, 21                | 13.4 | 18.1 |
|    | 413324 | V00571    | Hs.75294  | corticotropin releasing hormone                        | 13.1 | 18.0 |
|    | 439830 | AA846666  | Hs.151489 | ESTs, Weakly similar to XE7_HUMAN PROTEIN              | 12.6 | 16.5 |
| 65 | 408068 | AW148652  | Hs.167398 | ESTs   | 12.6 | 16.9 |
|    | 429096 | AB011106  | Hs.196012 | KIAA0534 protein                                       | 12.2 | 21.1 |
|    | 412638 | AA910199  | Hs.203838 | ESTs   | 12.2 | 16.0 |
|    | 442593 | R39804    | Hs.31961  | ESTs   | 10.8 | 15.0 |
|    | 446353 | AI290919  | Hs.153661 | ESTs   | 10.4 | 13.2 |
| 70 | 426365 | AA376667  | Hs.10283  | RNA binding motif protein 8B                           | 10.0 | 5.9  |
|    | 414937 | R38698    | Hs.12382  | ESTs   | 10.0 | 10.8 |
|    | 419643 | F06066    | Hs.91791  | chromosome 11 open reading frame 25                    | 9.5  | 10.9 |
|    | 412454 | R55745    | Hs.167330 | ESTs   | 9.5  | 14.1 |
|    | 439366 | AF100143  | Hs.6540   | fibroblast growth factor 13                            | 9.4  | 12.3 |
| 75 | 441790 | AW294909  | Hs.132208 | ESTs   | 9.2  | 3.2  |
|    | 448117 | H49129    | Hs.172982 | ESTs   | 9.1  | 12.8 |
|    | 433558 | AA833757  | Hs.201769 | ESTs, Weakly similar to T24435 hypothetical            | 9.0  | 14.7 |
|    | 412453 | R20205    | Hs.167330 | ESTs   | 9.0  | 13.7 |
| 80 | 408920 | AL120071  | Hs.48998  | fibronectin leucine rich transmembrane protein         | 8.9  | 17.3 |
|    | 409031 | AA376836  | Hs.76728  | ESTs   | 8.7  | 8.6  |
|    | 446544 | AI631932  | Hs.7047   | ESTs, Weakly similar to Unknown [H.sapiens]            | 8.2  | 20.0 |
|    | 439480 | AL038511  | Hs.125316 | ESTs, Weakly similar to S33990 finger protein          | 8.2  | 8.3  |
|    | 410200 | AA082557  | Hs.101915 | Stargardt disease 3 (autosomal dominant)               | 8.0  | 8.9  |

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|    |        |           |           |  |     |      |
|----|--------|-----------|-----------|--|-----|------|
|    | 408428 | NM_014787 | Hs.44896  | DnaJ (Hsp40) homolog, subfamily B, membe | 7.9 | 9.6  |
|    | 437073 | AI885608  | Hs.94122  | ESTs                                     | 7.9 | 11.3 |
|    | 408434 | AW195317  | Hs.107716 | hypothetical protein FLJ22344            | 7.9 | 16.4 |
| 5  | 440209 | H05049    | Hs.22269  | neurexin 3                               | 7.8 | 34.3 |
|    | 408119 | W26213    | Hs.101672 | ESTs, Weakly similar to T00331 hypotheti | 7.8 | 9.0  |
|    | 429611 | AI889077  | Hs.211388 | Homo sapiens BAC clone CTB-60N22 from 7q | 7.7 | 5.0  |
|    | 423440 | R25234    | Hs.143434 | contactin 1                              | 7.7 | 9.9  |
|    | 445148 | AI214510  | Hs.146304 | ESTs                                     | 7.6 | 9.1  |
| 10 | 416294 | D86980    | Hs.79170  | KIAA0227 protein                         | 7.6 | 7.6  |
|    | 424087 | N69333    | Hs.143434 | contactin 1                              | 7.6 | 10.3 |
|    | 437479 | R61866    | Hs.101277 | ESTs                                     | 7.5 | 9.3  |
|    | 430573 | AA744550  | Hs.136345 | ESTs                                     | 7.1 | 2.8  |
|    | 448958 | AB020651  | Hs.22653  | KIAA0844 protein                         | 7.1 | 10.4 |
| 15 | 419474 | AW968619  | Hs.155849 | ESTs                                     | 7.1 | 3.0  |
|    | 423605 | AF047826  | Hs.129887 | cadherin 19, type 2                      | 7.0 | 6.9  |
|    | 433098 | AW190593  | Hs.151143 | ESTs                                     | 7.0 | 9.2  |
|    | 449511 | AI436187  | Hs.296261 | guanine nucleotide binding protein (G pr | 6.9 | 3.1  |
|    | 428414 | AL049980  | Hs.184216 | DKFZP564C152 protein                     | 6.8 | 5.0  |
|    | 443155 | R54485    | Hs.23772  | ESTs                                     | 6.8 | 3.5  |
| 20 | 450561 | R49674    | Hs.25909  | ESTs                                     | 6.8 | 8.1  |
|    | 433068 | NM_006456 | Hs.288215 | sialyltransferase                        | 6.8 | 2.0  |
|    | 423589 | AA328082  | Hs.209569 | ESTs                                     | 6.6 | 10.5 |
|    | 415681 | AI379882  | Hs.72630  | ESTs                                     | 6.5 | 9.0  |
| 25 | 413510 | F13044    |           | gb:HSC3HH101 normalized infant brain cDN | 6.4 | 7.1  |
|    | 427992 | Y15014    | Hs.181353 | UDP-Gal:betaGlcNAc beta 1,3-galactosyltr | 6.4 | 9.5  |
|    | 450642 | R39773    | Hs.7130   | copine IV                                | 6.4 | 5.7  |
|    | 429322 | D86984    | Hs.199243 | KIAA0231 protein                         | 6.4 | 8.2  |
|    | 447482 | AB033059  | Hs.18705  | KIAA1233 protein                         | 6.4 | 2.3  |
| 30 | 446129 | AW244073  | Hs.145946 | ESTs                                     | 6.3 | 8.3  |
|    | 421913 | AI934365  | Hs.109439 | osteoglycin (osteoinductive factor, mime | 6.3 | 2.1  |
|    | 434273 | AA913143  | Hs.26303  | ESTs                                     | 6.2 | 10.3 |
|    | 408480 | AI350337  | Hs.164568 | fibroblast growth factor 7 (keratinocyte | 6.2 | 3.5  |
|    | 451301 | AI769514  | Hs.209890 | EST                                      | 6.2 | 12.4 |
| 35 | 438356 | AA805530  | Hs.48527  | ESTs                                     | 6.2 | 8.1  |
|    | 426388 | AW081394  | Hs.97103  | ESTs                                     | 6.2 | 8.6  |
|    | 452502 | AI904296  |           | gb:PM-BT046-220199-286_1 BT046 Homo sapi | 6.1 | 2.8  |
|    | 408165 | AL137573  | Hs.43143  | Homo sapiens mRNA; cDNA DKFZp564A2463 (f | 6.1 | 6.3  |
|    | 442979 | AW440782  | Hs.174743 | ESTs                                     | 6.1 | 6.3  |
| 40 | 408713 | NM_001248 | Hs.47042  | ectonucleoside triphosphate diphosphohyd | 6.0 | 3.8  |
|    | 430004 | U27768    | Hs.227571 | regulator of G-protein signalling 4      | 5.9 | 21.4 |
|    | 425087 | R62424    | Hs.126059 | ESTs                                     | 5.9 | 8.1  |
|    | 441695 | T12411    | Hs.183745 | hypothetical protein FLJ13456            | 5.9 | 3.1  |
|    | 417175 | R44558    | Hs.94002  | ESTs                                     | 5.8 | 12.5 |
| 45 | 437483 | AL390174  |           | gb:Homo sapiens mRNA; cDNA DKFZp547J184  | 5.8 | 2.2  |
|    | 436427 | AI344378  | Hs.143399 | ESTs                                     | 5.8 | 13.8 |
|    | 450382 | AA397658  | Hs.60257  | Homo sapiens cDNA FLJ13598 fis, clone PL | 5.7 | 4.4  |
|    | 408478 | NM_000806 | Hs.45740  | gamma-aminobutyric acid (GABA) A recepto | 5.7 | 12.5 |
|    | 442676 | AI733585  | Hs.130897 | ESTs                                     | 5.7 | 6.8  |
| 50 | 446443 | AV659082  | Hs.134228 | ESTs                                     | 5.7 | 6.4  |
|    | 459080 | AW192083  | Hs.290855 | ESTs                                     | 5.6 | 15.6 |
|    | 431984 | AL080239  | Hs.272284 | Human DNA sequence from clone GS1-256O22 | 5.6 | 8.2  |
|    | 428356 | AL046991  | Hs.10338  | ESTs                                     | 5.6 | 6.2  |
|    | 417877 | AI025829  | Hs.86320  | ESTs                                     | 5.4 | 4.9  |
| 55 | 429290 | AF203032  | Hs.198760 | neurofilament, heavy polypeptide (200kD) | 5.3 | 13.1 |
|    | 408556 | U49516    | Hs.46362  | 5-hydroxytryptamine (serotonin) receptor | 5.3 | 6.6  |
|    | 431930 | AB035301  | Hs.272211 | cadherin 7, type 2                       | 5.2 | 6.0  |
|    | 438285 | AA782845  | Hs.22790  | ESTs                                     | 5.2 | 7.3  |
|    | 439901 | N73885    | Hs.124169 | ESTs                                     | 5.2 | 2.7  |
| 60 | 449222 | AW293984  | Hs.197621 | ESTs                                     | 5.2 | 8.1  |
|    | 408016 | AW136827  | Hs.256096 | ESTs                                     | 5.1 | 2.5  |
|    | 436953 | AW959074  | Hs.23648  | Homo sapiens cDNA FLJ13097 fis, clone NT | 5.1 | 3.0  |
|    | 436773 | AW078629  | Hs.82110  | PC4 and SFRS1 interacting protein 1      | 5.1 | 7.3  |
|    | 409263 | AA069573  | Hs.50319  | ESTs                                     | 5.1 | 12.9 |
| 65 | 453830 | AA534296  | Hs.20953  | ESTs                                     | 5.1 | 3.4  |
|    | 441535 | AL135735  | Hs.7885   | phosphatidylinositol binding clathrin as | 5.0 | 4.8  |
|    | 416490 | AF090116  | Hs.79348  | regulator of G-protein signalling 7      | 5.0 | 20.1 |
|    | 417284 | N62889    | Hs.107242 | Homo sapiens cDNA FLJ12965 fis, clone NT | 5.0 | 3.9  |
|    | 448605 | AL109678  | Hs.21597  | Homo sapiens mRNA full length insert cDN | 5.0 | 6.1  |
| 70 | 442240 | AI791883  | Hs.292719 | ESTs                                     | 4.9 | 6.7  |
|    | 427972 | AA864870  | Hs.181304 | putative gene product                    | 4.9 | 5.2  |
|    | 416040 | AW819158  | Hs.289044 | Homo sapiens cDNA FLJ12048 fis, clone HE | 4.9 | 2.8  |
|    | 444922 | AI921750  | Hs.144871 | Homo sapiens cDNA FLJ13752 fis, clone PL | 4.8 | 3.7  |
|    | 408936 | AL138043  | Hs.293549 | ESTs                                     | 4.8 | 6.6  |
| 75 | 414943 | D80647    | Hs.124193 | ESTs                                     | 4.8 | 3.1  |
|    | 429254 | H10133    | Hs.91846  | hypothetical protein DKFZp761C121        | 4.8 | 2.3  |
|    | 407906 | AA369665  | Hs.41185  | Homo sapiens mRNA; cDNA DKFZp564O1262 (f | 4.8 | 9.1  |
|    | 416577 | BE063207  | Hs.79381  | granulysin                               | 4.7 | 2.2  |
|    | 420480 | AL137361  | Hs.98173  | hypothetical protein                     | 4.7 | 2.8  |
| 80 | 404793 |           |           |  | 4.6 | 2.2  |
|    | 430895 | U66581    | Hs.248121 | G protein-coupled receptor 22            | 4.6 | 7.4  |
|    | 438571 | AW020775  | Hs.56022  | ESTs                                     | 4.6 | 5.4  |
|    | 444585 | AW170015  | Hs.6594   | ESTs                                     | 4.6 | 6.0  |
|    | 414272 | AI651603  | Hs.46988  | ESTs                                     | 4.5 | 2.2  |



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|----|--------|-----------|-----------|--|-----|------|
|    | 414699 | AI815523  | Hs.76930  | synuclein, alpha (non A4 component of am | 4.5 | 30.9 |
|    | 423449 | AI497900  | Hs.33067  | ESTs                                     | 4.5 | 20.8 |
|    | 433521 | T66087    | Hs.112482 | Homo sapiens unknown mRNA sequence       | 4.4 | 2.0  |
| 5  | 429876 | AB028977  | Hs.225974 | KIAA1054 protein                         | 4.4 | 19.2 |
|    | 429726 | AW628326  | Hs.27151  | ESTs                                     | 4.4 | 10.2 |
|    | 449093 | AB035356  | Hs.22998  | neurexin 1                               | 4.4 | 9.4  |
|    | 415716 | N59294    | Hs.179662 | nucleosome assembly protein 1-like 1     | 4.4 | 15.1 |
|    | 419656 | AB002314  | Hs.92025  | KIAA0316 gene product                    | 4.4 | 8.2  |
| 10 | 425864 | U56420    | Hs.159903 | olfactory receptor, family 5, subfamily  | 4.4 | 2.4  |
|    | 435078 | AW518888  | Hs.40937  | ESTs                                     | 4.4 | 5.7  |
|    | 432712 | AB016247  | Hs.288031 | sterol-C5-desaturase (fungal ERG3, delta | 4.3 | 5.9  |
|    | 426867 | AA460967  | Hs.22668  | ESTs                                     | 4.3 | 6.0  |
|    | 412112 | BE180342  |           | gb:RC3-HT0622-130400-012-a07 HT0622 Homo | 4.3 | 3.2  |
|    | 410171 | H07892    | Hs.12431  | ESTs                                     | 4.3 | 5.3  |
| 15 | 442339 | BE299668  | Hs.227591 | ESTs, Weakly similar to 1901303A Leu zip | 4.2 | 5.0  |
|    | 421249 | AA285362  |           | gb:HTH277 HTCDL1 Homo sapiens cDNA 5/3'  | 4.2 | 3.5  |
|    | 422528 | AB011182  | Hs.118087 | KIAA0610 protein                         | 4.2 | 3.9  |
|    | 434460 | AA478486  | Hs.3852   | KIAA0368 protein                         | 4.1 | 8.3  |
| 20 | 410362 | H04811    | Hs.93164  | proprotein convertase subtilisin/kexin 1 | 4.1 | 7.0  |
|    | 449754 | H00820    | Hs.30977  | ESTs, Weakly similar to B34087 hypotheti | 4.1 | 3.9  |
|    | 408496 | AI683802  | Hs.136182 | ESTs                                     | 4.1 | 4.7  |
|    | 434101 | AA625205  | Hs.258599 | KIAA1622 protein                         | 4.1 | 6.3  |
|    | 430212 | AA469153  |           | gb:nc67f04.s1 NCL_CGAP_Pr1 Homo sapiens  | 4.0 | 2.5  |
| 25 | 453165 | S74727    | Hs.32042  | aspartoacylase (aminoacylase 2, Canavan  | 4.0 | 7.4  |
|    | 456407 | AW968614  |           | gb:EST380690 MAGE resequences, MAGJ Homo | 4.0 | 5.1  |
|    | 441869 | NM_003947 | Hs.8004   | huntingtin-associated protein interactin | 4.0 | 32.3 |
|    | 429628 | H09604    | Hs.13268  | ESTs                                     | 4.0 | 4.5  |
|    | 410087 | F12079    | Hs.332579 | ESTs                                     | 4.0 | 6.9  |
| 30 | 419910 | AA662913  | Hs.190173 | ESTs, Weakly similar to A46010 X-linked  | 4.0 | 2.6  |
|    | 441005 | Z41305    | Hs.303172 | Homo sapiens mRNA: cDNA DKFZp547G133 (fr | 3.9 | 21.7 |
|    | 412677 | AW029608  | Hs.17384  | ESTs                                     | 3.9 | 2.2  |
|    | 453341 | AI758912  | Hs.296341 | adenylyl cyclase-associated protein 2    | 3.9 | 7.2  |
|    | 416854 | H40164    | Hs.80296  | Purkinje cell protein 4                  | 3.9 | 2.2  |
| 35 | 414666 | NM_004466 | Hs.75828  | glypican 5                               | 3.8 | 6.2  |
|    | 418217 | AI910647  | Hs.13442  | ESTs                                     | 3.8 | 3.2  |
|    | 421855 | F06504    | Hs.27384  | ESTs, Moderately similar to ALU4_HUMAN A | 3.8 | 2.2  |
|    | 414764 | AW013887  | Hs.72047  | ESTs                                     | 3.8 | 10.7 |
|    | 433629 | R13140    | Hs.13359  | ESTs                                     | 3.7 | 2.7  |
| 40 | 424738 | AI963740  | Hs.46826  | ESTs                                     | 3.7 | 2.1  |
|    | 407706 | AA191085  | Hs.26612  | ESTs, Moderately similar to S23650 retro | 3.7 | 5.3  |
|    | 437268 | AI754847  | Hs.227571 | regulator of G-protein signalling 4      | 3.7 | 53.7 |
|    | 423135 | N67655    | Hs.26411  | ESTs                                     | 3.7 | 21.7 |
|    | 446818 | AI342668  | Hs.279765 | ESTs                                     | 3.7 | 2.6  |
| 45 | 427562 | R56424    | Hs.26534  | ESTs                                     | 3.6 | 3.6  |
|    | 439274 | AF086092  | Hs.48372  | ESTs                                     | 3.6 | 34.5 |
|    | 452381 | H23329    | Hs.290880 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 3.6 | 6.0  |
|    | 422897 | AA679784  | Hs.4290   | ESTs                                     | 3.6 | 5.1  |
|    | 429656 | X05608    | Hs.211584 | neurofilament, light polypeptide (68kD)  | 3.6 | 24.6 |
| 50 | 417154 | AI674701  | Hs.21388  | ESTs                                     | 3.6 | 5.8  |
|    | 447176 | Z42549    | Hs.160893 | ESTs                                     | 3.6 | 6.4  |
|    | 405977 |           |           |  | 3.6 | 3.9  |
|    | 423568 | NM_005256 | Hs.129818 | growth arrest-specific 2                 | 3.6 | 2.5  |
| 55 | 441235 | AI884586  | Hs.135570 | Homo sapiens cDNA: FLJ21268 fis, clone C | 3.6 | 5.4  |
|    | 426775 | AA384564  | Hs.108829 | ESTs                                     | 3.6 | 3.4  |
|    | 414831 | M31158    | Hs.77439  | protein kinase, cAMP-dependent, regulato | 3.6 | 2.8  |
|    | 425153 | AW023193  | Hs.27046  | ESTs                                     | 3.6 | 4.9  |
|    | 446495 | D60923    | Hs.153460 | ESTs                                     | 3.5 | 9.8  |
|    | 445898 | AF070623  | Hs.13423  | Homo sapiens clone 24468 mRNA sequence   | 3.5 | 16.6 |
| 60 | 418421 | AA134006  | Hs.79306  | eukaryotic translation initiation factor | 3.5 | 5.0  |
|    | 418207 | C14685    | Hs.34772  | ESTs                                     | 3.5 | 16.0 |
|    | 425383 | D83407    | Hs.156007 | Down syndrome critical region gene 1-lik | 3.5 | 6.2  |
|    | 417027 | AA192306  | Hs.23926  | triadin                                  | 3.5 | 2.5  |
|    | 408367 | AK001178  | Hs.44424  | homolog of rat orphan transporter v7-3   | 3.5 | 5.3  |
| 65 | 408776 | AA057365  | Hs.63356  | ESTs, Weakly similar to I38022 hypotheti | 3.5 | 5.5  |
|    | 453220 | AB033089  | Hs.32452  | Homo sapiens mRNA for KIAA1263 protein,  | 3.5 | 23.6 |
|    | 419347 | C15944    | Hs.90005  | superiorcervical ganglia, neural specifi | 3.5 | 42.3 |
|    | 433803 | AI823593  | Hs.27688  | ESTs                                     | 3.4 | 3.6  |
|    | 450715 | AI266484  | Hs.31570  | ESTs, Weakly similar to KIAA1324 protein | 3.4 | 4.1  |
| 70 | 415076 | NM_000857 | Hs.77890  | guanylate cyclase 1, soluble, beta 3     | 3.4 | 9.8  |
|    | 423826 | U20325    | Hs.17107  | cocaine- and amphetamine-regulated trans | 3.4 | 4.7  |
|    | 427173 | BE255017  | Hs.97540  | ESTs                                     | 3.4 | 2.4  |
|    | 446092 | N33522    | Hs.145894 | ESTs                                     | 3.4 | 3.5  |
|    | 416868 | AI656856  | Hs.292597 | ESTs                                     | 3.4 | 4.5  |
| 75 | 458234 | BE551408  | Hs.127196 | ESTs                                     | 3.4 | 4.5  |
|    | 434053 | AW445136  | Hs.134946 | ESTs                                     | 3.4 | 3.9  |
|    | 428536 | AI143139  | Hs.22288  | visinin-like 1                           | 3.3 | 42.3 |
|    | 410366 | AI267589  | Hs.302689 | hypothetical protein                     | 3.3 | 14.4 |
|    | 425785 | T27017    | Hs.159528 | Homo sapiens clone 24400 mRNA sequence   | 3.3 | 4.6  |
| 80 | 434998 | AW975157  | Hs.26037  | ESTs                                     | 3.3 | 4.7  |
|    | 456359 | AI967991  | Hs.93574  | homeo box D3                             | 3.3 | 4.4  |
|    | 426527 | NM_001037 | Hs.170238 | sodium channel, voltage-gated, type I, b | 3.3 | 5.2  |
|    | 400302 | N48056    | Hs.1915   | folate hydrolase (prostate-specific memb | 3.3 | 9.0  |
|    | 419875 | AA853410  | Hs.93557  | proenkephalin                            | 3.3 | 3.6  |

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|----|--------|-----------|-----------|--|-----|------|
|    | 444612 | AW138111  | Hs.22902  | ESTs                                       | 3.3 | 3.0  |
|    | 415242 | R45986    | Hs.295014 | ESTs                                       | 3.2 | 2.2  |
|    | 421640 | AW966652  |           | gb:EST378726 MAGE resequences, MAGI Homo   | 3.2 | 3.8  |
| 5  | 408806 | AW847814  | Hs.289005 | Homo sapiens cDNA: FLJ21532 fis, clone C   | 3.2 | 2.4  |
|    | 446015 | T30968    | Hs.13531  | hypothetical protein FLJ10971              | 3.2 | 3.2  |
|    | 425495 | AA358454  | Hs.78026  | ESTs, Weakly similar to similar to ankyr   | 3.2 | 2.2  |
|    | 403092 |           |           |  | 3.2 | 2.9  |
|    | 452971 | AI873878  | Hs.91789  | ESTs                                       | 3.2 | 4.5  |
|    | 454100 | AI693231  | Hs.126043 | chromosome 21 open reading frame 51        | 3.2 | 2.7  |
| 10 | 448440 | AA173467  | Hs.62402  | p21/Cdc42/Rac1-activated kinase 1 (yeast   | 3.2 | 2.8  |
|    | 421200 | AA284811  | Hs.264433 | ESTs                                       | 3.2 | 2.7  |
|    | 440827 | AI733110  | Hs.128128 | ESTs                                       | 3.2 | 2.1  |
|    | 429809 | AL162010  | Hs.223603 | Homo sapiens mRNA; cDNA DKFZp761D09121 (   | 3.2 | 4.3  |
|    | 420156 | AW449258  | Hs.6187   | ESTs                                       | 3.2 | 19.0 |
| 15 | 457535 | AA609685  | Hs.278672 | membrane component, chromosome 11, surfa   | 3.2 | 2.0  |
|    | 419956 | AL137939  | Hs.40096  | ESTs                                       | 3.1 | 8.7  |
|    | 423930 | AA332697  | Hs.42721  | ESTs                                       | 3.1 | 2.7  |
|    | 417868 | AI078534  | Hs.122592 | ESTs                                       | 3.1 | 12.6 |
|    | 423346 | AI267677  | Hs.127416 | synaptojanin 1                             | 3.1 | 12.0 |
| 20 | 441921 | AI733376  | Hs.154478 | hypothetical protein FLJ21939 similar to   | 3.1 | 4.3  |
|    | 429470 | AI878901  | Hs.203852 | guanine nucleotide binding protein (G pr   | 3.1 | 5.3  |
|    | 408217 | AI433201  | Hs.279860 | tumor protein, translationally-controlle   | 3.1 | 7.1  |
|    | 427322 | AK002017  | Hs.176227 | hypothetical protein FLJ11155              | 3.1 | 6.3  |
|    | 449078 | AK001255  | Hs.22975  | KIAA1576 protein                           | 3.1 | 30.1 |
| 25 | 429608 | U49250    | Hs.210862 | T-box, brain, 1                            | 3.1 | 2.2  |
|    | 442308 | AA989402  | Hs.1111   | fibroblast growth factor 9 (glia-activat   | 3.1 | 3.0  |
|    | 411666 | AF106564  | Hs.71346  | neurofilament 3 (150kD medium)             | 3.1 | 10.9 |
|    | 427865 | AA416931  | Hs.126065 | ESTs                                       | 3.1 | 7.5  |
|    | 430708 | U78308    | Hs.278485 | olfactory receptor, family 1, subfamily    | 3.1 | 3.4  |
| 30 | 451829 | AW964081  | Hs.247377 | ESTs                                       | 3.0 | 6.2  |
|    | 405911 |           |           |  | 3.0 | 2.4  |
|    | 418808 | AI821836  | Hs.10359  | ESTs                                       | 3.0 | 6.2  |
|    | 452893 | H18017    | Hs.22869  | ESTs, Moderately similar to KIAA1395 pro   | 3.0 | 5.1  |
|    | 423952 | AW877787  | Hs.136102 | KIAA0853 protein                           | 3.0 | 2.1  |
| 35 | 412000 | AW576555  | Hs.15780  | ATP-binding cassette, sub-family A (ABC1   | 3.0 | 2.1  |
|    | 405793 |           |           |  | 3.0 | 2.7  |
|    | 410711 | AB002316  | Hs.65746  | KIAA0318 protein                           | 3.0 | 14.3 |
|    | 427071 | AA397958  | Hs.192719 | ESTs                                       | 3.0 | 2.1  |
| 40 | 453534 | NM_014796 | Hs.33187  | KIAA0748 gene product                      | 3.0 | 14.5 |
|    | 413903 | AA496493  | Hs.23136  | ESTs                                       | 3.0 | 2.2  |
|    | 426866 | U02330    | Hs.172816 | neuregulin 1                               | 3.0 | 11.3 |
|    | 434945 | AB033065  | Hs.4280   | KIAA1239 protein                           | 3.0 | 3.5  |
|    | 412639 | AW961284  | Hs.296235 | ESTs                                       | 2.9 | 4.9  |
| 45 | 453590 | AF150278  | Hs.33578  | KIAA0820 protein                           | 2.9 | 33.1 |
|    | 414502 | AL133721  | Hs.224680 | ESTs                                       | 2.9 | 2.3  |
|    | 434367 | AB020700  | Hs.3830   | KIAA0893 protein                           | 2.9 | 23.1 |
|    | 425121 | AI797511  | Hs.154679 | synaptotagmin I                            | 2.9 | 8.1  |
|    | 412494 | AL133900  | Hs.792    | ADP-ribosylation factor domain protein 1   | 2.9 | 20.8 |
| 50 | 401213 |           |           |  | 2.9 | 3.2  |
|    | 401028 | AW673312  | Hs.50848  | hypothetical protein FLJ20331              | 2.9 | 3.4  |
|    | 415191 | AA190381  | Hs.120810 | ESTs                                       | 2.9 | 3.0  |
|    | 449275 | AW450848  | Hs.205457 | periaxin                                   | 2.9 | 5.6  |
|    | 419863 | AW952691  | Hs.93485  | Homo sapiens mRNA; cDNA DKFZp761D191 (fr   | 2.9 | 35.0 |
| 55 | 411421 | BE272110  | Hs.21177  | ESTs                                       | 2.9 | 2.0  |
|    | 430865 | AI073424  | Hs.5232   | HSPC125 protein                            | 2.9 | 11.4 |
|    | 437486 | AW952089  | Hs.5636   | RAB6A, member RAS oncogene family          | 2.9 | 2.2  |
|    | 442357 | AI458586  | Hs.135706 | ESTs                                       | 2.9 | 6.0  |
|    | 408274 | R17315    |           | gb:yg12g11.1.r1 Soares infant brain 1N1B H | 2.9 | 2.2  |
| 60 | 444185 | AW298350  | Hs.66020  | ESTs                                       | 2.8 | 5.0  |
|    | 420173 | AA256151  | Hs.22999  | ESTs                                       | 2.8 | 5.1  |
|    | 428358 | AA993222  | Hs.101915 | Stargardt disease 3 (autosomal dominant)   | 2.8 | 7.0  |
|    | 447252 | R90916    | Hs.12449  | Homo sapiens transmembrane protein HTMP1   | 2.8 | 4.4  |
|    | 440260 | AI972867  | Hs.7130   | copine IV                                  | 2.8 | 10.6 |
| 65 | 417084 | H08370    | Hs.33067  | ESTs                                       | 2.8 | 8.4  |
|    | 438257 | AW474419  | Hs.224794 | ESTs                                       | 2.8 | 2.8  |
|    | 441934 | T23939    | Hs.7344   | ESTs                                       | 2.8 | 6.2  |
|    | 447885 | F11528    | Hs.303172 | Homo sapiens mRNA; cDNA DKFZp547G133 (fr   | 2.8 | 3.5  |
| 70 | 423552 | AF107028  | Hs.129783 | sodium channel, voltage-gated, type II,    | 2.8 | 3.4  |
|    | 450940 | AI744943  | Hs.143209 | ESTs, Weakly similar to I38022 hypotheti   | 2.8 | 14.4 |
|    | 410011 | AB020641  | Hs.57856  | PFTAIRE protein kinase 1                   | 2.8 | 21.7 |
|    | 445887 | AI263105  | Hs.145597 | ESTs                                       | 2.8 | 5.1  |
|    | 425494 | N55540    | Hs.78026  | ESTs, Weakly similar to similar to ankyr   | 2.8 | 2.4  |
|    | 438202 | AW169287  | Hs.22588  | ESTs                                       | 2.8 | 11.9 |
| 75 | 436199 | R38946    | Hs.127951 | hypothetical protein FLJ14503              | 2.8 | 6.0  |
|    | 434826 | AF155661  | Hs.22265  | pyruvate dehydrogenase phosphatase         | 2.8 | 2.4  |
|    | 415462 | RS2692    | Hs.12698  | ESTs                                       | 2.8 | 3.4  |
|    | 418070 | NM_000844 | Hs.83407  | glutamate receptor, metabotropic 7         | 2.8 | 4.5  |
|    | 432149 | AW614326  | Hs.157022 | ESTs, Weakly similar to T34549 probable    | 2.8 | 9.5  |
| 80 | 430371 | D87466    | Hs.240112 | KIAA0276 protein                           | 2.8 | 7.0  |
|    | 437357 | AL359559  | Hs.331666 | Homo sapiens mRNA; cDNA DKFZp762O2215 (f   | 2.7 | 2.5  |
|    | 415838 | R44336    | Hs.7093   | ESTs                                       | 2.7 | 3.6  |
|    | 438675 | AA813725  | Hs.213568 | ESTs                                       | 2.7 | 2.5  |
|    | 419558 | AW953679  |           | gb:EST365749 MAGE resequences, MAGC Homo   | 2.7 | 3.1  |

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|    |        |           |           |  |     |      |
|----|--------|-----------|-----------|--|-----|------|
|    | 446318 | AI949389  | Hs.18067  | ESTs                                     | 2.7 | 4.1  |
|    | 445183 | AB007877  | Hs.12385  | KIAA0417 gene product                    | 2.7 | 5.3  |
|    | 457012 | R41480    | Hs.127630 | ESTs                                     | 2.7 | 19.0 |
| 5  | 431988 | AC002302  | Hs.77202  | protein kinase C, beta 1                 | 2.7 | 7.2  |
|    | 430223 | NM_002514 | Hs.235935 | nephroblastoma overexpressed gene        | 2.7 | 2.8  |
|    | 447932 | AA837474  | Hs.20021  | vesicle-associated membrane protein 1 (s | 2.7 | 3.8  |
|    | 450214 | BE439763  | Hs.227571 | regulator of G-protein signalling 4      | 2.7 | 6.9  |
|    | 434731 | AA648049  | Hs.121518 | ESTs                                     | 2.7 | 5.0  |
| 10 | 428839 | AI767756  | Hs.82302  | Homo sapiens cDNA FLJ14814 fis, clone NT | 2.7 | 5.2  |
|    | 407709 | AA456135  | Hs.23023  | ESTs                                     | 2.7 | 2.5  |
|    | 422420 | U03398    | Hs.1524   | tumor necrosis factor (ligand) superfam  | 2.7 | 3.3  |
|    | 443305 | AI050693  | Hs.133318 | ESTs                                     | 2.7 | 5.9  |
|    | 435648 | H24347    | Hs.27524  | ESTs                                     | 2.7 | 15.0 |
|    | 418407 | AL044818  | Hs.84928  | nuclear transcription factor Y, beta     | 2.7 | 2.7  |
| 15 | 436771 | AW975687  | Hs.292979 | ESTs                                     | 2.7 | 6.0  |
|    | 428689 | NM_014351 | Hs.189810 | sulfortranterase family 4A, member 1     | 2.7 | 4.8  |
|    | 440503 | NM_006539 | Hs.7235   | calcium channel, voltage-dependent, gamm | 2.7 | 4.4  |
|    | 441006 | AW605267  | Hs.7627   | CGI-60 protein                           | 2.7 | 3.1  |
| 20 | 410330 | AW023630  | Hs.46786  | ESTs                                     | 2.6 | 29.5 |
|    | 434398 | AA121098  | Hs.3838   | serum-inducible kinase                   | 2.6 | 2.6  |
|    | 438831 | BE263273  | Hs.6439   | synapsin II                              | 2.6 | 7.8  |
|    | 419066 | Z98492    | Hs.6975   | PRO1073 protein                          | 2.6 | 3.4  |
|    | 412643 | AW971239  | Hs.293982 | ESTs                                     | 2.6 | 2.2  |
| 25 | 430456 | AA314998  | Hs.241503 | hypothetical protein                     | 2.6 | 17.9 |
|    | 416498 | U33632    | Hs.79351  | potassium channel, subfamily K, member 1 | 2.6 | 2.9  |
|    | 401421 |           |           |  | 2.6 | 2.0  |
|    | 419530 | X98330    | Hs.90821  | ryanodine receptor 2 (cardiac)           | 2.6 | 4.2  |
|    | 441817 | AW969706  | Hs.293332 | ESTs                                     | 2.6 | 3.8  |
| 30 | 439203 | AA448930  | Hs.8453   | KIAA1587 protein                         | 2.6 | 4.2  |
|    | 426054 | U12431    | Hs.165109 | ELAV (embryonic lethal, abnormal vision, | 2.6 | 5.1  |
|    | 444583 | AW994403  | Hs.100861 | hypothetical protein FLJ14600            | 2.6 | 3.7  |
|    | 417919 | AI928203  | Hs.86379  | ESTs                                     | 2.6 | 3.0  |
|    | 434293 | NM_004445 | Hs.3796   | EphB6                                    | 2.6 | 3.2  |
| 35 | 431716 | D89053    | Hs.268012 | fatty-acid-Coenzyme A ligase, long-chain | 2.6 | 6.4  |
|    | 443037 | AW500305  | Hs.299166 | syntaxin 7                               | 2.6 | 2.2  |
|    | 440736 | D56919    | Hs.265848 | myomegalin                               | 2.6 | 7.1  |
|    | 404648 |           |           |  | 2.6 | 3.0  |
|    | 429995 | AA463571  |           | gb:zx72e09.r1 Soares_total_fetus_Nb2HF8_ | 2.6 | 3.5  |
| 40 | 436508 | AW604381  | Hs.121121 | ESTs, Weakly similar to S00755 pleckstri | 2.6 | 3.9  |
|    | 441190 | H09073    | Hs.25046  | ESTs                                     | 2.6 | 3.1  |
|    | 432278 | AL137506  | Hs.274256 | hypothetical protein FLJ23563            | 2.6 | 2.9  |
|    | 442731 | AI868167  | Hs.131044 | ESTs                                     | 2.6 | 4.1  |
|    | 416836 | D54745    | Hs.80247  | cholecystokinin                          | 2.6 | 14.9 |
| 45 | 449071 | NM_005872 | Hs.22960  | breast carcinoma amplified sequence 2    | 2.5 | 2.4  |
|    | 436321 | AA709133  | Hs.180144 | ESTs                                     | 2.5 | 2.8  |
|    | 439693 | AI741816  | Hs.125897 | ESTs                                     | 2.5 | 3.6  |
|    | 443212 | AW269515  | Hs.102500 | hypothetical protein FLJ20481            | 2.5 | 2.8  |
|    | 423981 | AL122104  | Hs.136664 | Homo sapiens mRNA; cDNA DKFZp434A1627 (f | 2.5 | 3.8  |
| 50 | 407868 | NM_000950 | Hs.40637  | proline-rich Gla (G-carboxyglutamic acid | 2.5 | 3.1  |
|    | 443992 | AW022228  | Hs.322922 | ESTs                                     | 2.5 | 27.9 |
|    | 444124 | R43097    | Hs.6818   | ESTs                                     | 2.5 | 5.3  |
|    | 411379 | AI816344  | Hs.12554  | ESTs, Weakly similar to NPL4_HUMAN NUCLE | 2.5 | 38.0 |
|    | 440474 | AI207936  | Hs.7195   | gamma-aminobutyric acid (GABA) A recepto | 2.5 | 3.8  |
| 55 | 446277 | AI284218  | Hs.159204 | ESTs                                     | 2.5 | 2.2  |
|    | 410111 | AI620206  | Hs.189647 | ESTs                                     | 2.5 | 3.5  |
|    | 445162 | AB011131  | Hs.12376  | piccolo (presynaptic cytomatrix protein) | 2.5 | 4.8  |
|    | 410718 | AI920783  | Hs.191435 | ESTs                                     | 2.5 | 4.5  |
|    | 417201 | T60432    | Hs.269084 | ESTs, Moderately similar to AF097994 1 L | 2.5 | 2.9  |
| 60 | 420274 | AW968000  | Hs.143389 | ESTs, Weakly similar to T14318 ubiquitin | 2.5 | 2.8  |
|    | 433496 | AF064254  | Hs.49765  | VLCS-H1 protein                          | 2.5 | 4.7  |
|    | 437331 | AL353933  | Hs.21710  | hypothetical protein DKFZp761G0313       | 2.5 | 3.3  |
|    | 437368 | AI471969  | Hs.182606 | ESTs                                     | 2.5 | 3.0  |
|    | 441985 | BE047625  | Hs.169815 | ESTs                                     | 2.5 | 3.6  |
| 65 | 410025 | BE220489  | Hs.113592 | ESTs, Moderately similar to I54374 gene  | 2.5 | 9.2  |
|    | 414680 | AA743331  | Hs.272572 | hemoglobin, alpha 2                      | 2.5 | 3.6  |
|    | 429956 | AI374651  | Hs.22542  | ESTs                                     | 2.5 | 23.9 |
|    | 429028 | AA443439  | Hs.48797  | ESTs                                     | 2.5 | 2.8  |
|    | 438109 | AI076621  | Hs.71367  | ESTs, Moderately similar to ALU7_HUMAN A | 2.5 | 3.1  |
| 70 | 439780 | AL109688  |           | gb:Homo sapiens mRNA full length insert  | 2.5 | 2.3  |
|    | 440888 | N45600    | Hs.326880 | ESTs                                     | 2.5 | 3.9  |
|    | 445246 | AI217713  | Hs.147586 | ESTs                                     | 2.5 | 2.6  |
|    | 440152 | AB002376  | Hs.7006   | KIAA0378 protein                         | 2.4 | 23.6 |
|    | 432740 | AF061034  | Hs.278898 | tumor necrosis factor alpha-inducible ce | 2.4 | 2.1  |
| 75 | 415122 | D60708    | Hs.22245  | ESTs                                     | 2.4 | 3.9  |
|    | 432298 | AL118812  | Hs.274293 | Homo sapiens mRNA; cDNA DKFZp761G1111 (f | 2.4 | 9.8  |
|    | 437948 | AA772920  | Hs.303527 | ESTs                                     | 2.4 | 9.8  |
|    | 421360 | AA297012  | Hs.103639 | erythrocyte membrane protein band 4.1-i  | 2.4 | 2.8  |
|    | 427115 | AW972853  | Hs.112237 | ESTs                                     | 2.4 | 2.2  |
| 80 | 452074 | BE299035  | Hs.27747  | G protein-coupled receptor 37 (endotheli | 2.4 | 10.0 |
|    | 436639 | D14838    | Hs.111    | fibroblast growth factor 9 (glia-activat | 2.4 | 3.5  |
|    | 434520 | AA205273  | Hs.177011 | hypothetical protein                     | 2.4 | 3.1  |
|    | 411529 | AA430348  | Hs.317596 | Homo sapiens cDNA FLJ12927 fis, clone NT | 2.4 | 3.0  |
|    | 442272 | AA988302  | Hs.129172 | ESTs                                     | 2.4 | 2.1  |

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|    |        |           |           |  |     |      |
|----|--------|-----------|-----------|--|-----|------|
|    | 422927 | AW247388  | Hs.301423 | calcium binding protein 1 (calbrain)     | 2.4 | 2.7  |
|    | 444647 | H14718    | Hs.11506  | Human clone 23589 mRNA sequence          | 2.4 | 2.8  |
|    | 415827 | H17462    | Hs.23079  | ESTs                                     | 2.4 | 15.0 |
| 5  | 451397 | AA017432  | Hs.84529  | ESTs, Weakly similar to Z202_HUMAN ZINC  | 2.4 | 3.9  |
|    | 445200 | AA084460  | Hs.12409  | somatostatin                             | 2.4 | 3.7  |
|    | 451062 | AL110125  | Hs.25910  | Homo sapiens mRNA; cDNA DKFZp564C1416 (f | 2.4 | 2.4  |
|    | 420328 | Y19062    | Hs.96870  | staufer (Drosophila, RNA-binding protein | 2.4 | 4.3  |
|    | 432122 | AA526514  |           | gb:n160f02.s1 NCL_CGAP_Ov2 Homo sapiens  | 2.4 | 4.3  |
| 10 | 444125 | AI124882  | Hs.118121 | ESTs                                     | 2.4 | 3.5  |
|    | 430538 | AB032435  | Hs.242821 | differentiation-associated Na-dependent  | 2.4 | 10.8 |
|    | 457519 | X69438    | Hs.3052   | early growth response 4                  | 2.4 | 2.4  |
|    | 409371 | R51736    | Hs.12381  | ESTs                                     | 2.4 | 2.1  |
|    | 456303 | AA224872  | Hs.115088 | ESTs                                     | 2.4 | 3.2  |
| 15 | 440105 | AA694010  | Hs.6932   | Homo sapiens clone 23809 mRNA sequence   | 2.4 | 23.4 |
|    | 400979 |           |           |  | 2.4 | 4.1  |
|    | 435296 | R49685    | Hs.24980  | ESTs                                     | 2.4 | 6.5  |
|    | 408950 | AA707814  | Hs.14945  | long fatty acyl-CoA synthetase 2 gene    | 2.4 | 18.5 |
|    | 452032 | BE244005  | Hs.27610  | retinoic acid- and interferon-inducible  | 2.4 | 2.2  |
| 20 | 432098 | AF252297  | Hs.91546  | cytochrome P450 retinoid metabolizing pr | 2.4 | 2.7  |
|    | 408974 | AW015458  | Hs.297017 | ESTs                                     | 2.4 | 2.5  |
|    | 412177 | Z23091    | Hs.73734  | glycoprotein V (platelet)                | 2.4 | 2.8  |
|    | 413153 | N94205    |           | gb:za27a08.r1 Soares fetal liver spleen  | 2.4 | 2.5  |
|    | 417583 | AA668782  | Hs.191284 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 2.4 | 2.6  |
| 25 | 452034 | F12234    | Hs.75893  | ankyrin 3, node of Ranvier (ankyrin G)   | 2.3 | 3.0  |
|    | 424940 | AA985308  | Hs.194327 | ESTs                                     | 2.3 | 6.3  |
|    | 431706 | AI816086  | Hs.296341 | adenyl cyclase-associated protein 2      | 2.3 | 4.1  |
|    | 419125 | AA642452  | Hs.130881 | B-cell CLL/lymphoma 11A (zinc finger pro | 2.3 | 2.9  |
|    | 423641 | AL137256  | Hs.130489 | ATPase, aminophospholipid transporter-li | 2.3 | 8.7  |
| 30 | 436407 | T88803    | Hs.271507 | ESTs, Weakly similar to TIM_HUMAN PROBAB | 2.3 | 3.2  |
|    | 448681 | AL109781  | Hs.21754  | Homo sapiens mRNA full length insert cDN | 2.3 | 5.2  |
|    | 415669 | NM_005025 | Hs.78589  | serine (or cysteine) proteinase inhibito | 2.3 | 54.7 |
|    | 410765 | AI694972  | Hs.66180  | nucleosome assembly protein 1-like 2     | 2.3 | 9.1  |
|    | 422386 | AF105374  | Hs.115830 | heparan sulfate (glucosamine) 3-O-sulfot | 2.3 | 5.0  |
| 35 | 414828 | AA156651  |           | gb:z105h05.r1 Soares_pregnant_uterus_NbH | 2.3 | 2.4  |
|    | 445556 | AI910241  | Hs.12887  | actin-related protein 3-beta             | 2.3 | 8.5  |
|    | 426968 | U07616    | Hs.173034 | amphiphysin (Stiff-Mann syndrome with br | 2.3 | 26.3 |
|    | 444562 | AA186715  | Hs.336429 | RIKEN cDNA 9130422N19 gene               | 2.3 | 2.5  |
|    | 423420 | AI571364  | Hs.128382 | Homo sapiens mRNA; cDNA DKFZp76111224 (f | 2.3 | 7.6  |
| 40 | 439450 | R51613    | Hs.125304 | ESTs                                     | 2.3 | 26.3 |
|    | 427127 | AW802282  | Hs.22265  | pyruvate dehydrogenase phosphatase       | 2.3 | 2.2  |
|    | 447179 | AW015633  | Hs.157299 | ESTs                                     | 2.3 | 3.8  |
|    | 414711 | AI310440  | Hs.288735 | Homo sapiens cDNA FLJ13522 fis, clone PL | 2.3 | 2.3  |
|    | 433449 | AW772282  |           | gb:hn71b05.x1 NCL_CGAP_Kid11 Homo sapien | 2.3 | 3.8  |
| 45 | 414320 | U13616    | Hs.75893  | ankyrin 3, node of Ranvier (ankyrin G)   | 2.3 | 2.5  |
|    | 416778 | M16505    | Hs.79876  | steroid sulfatase (microsomal), arylsulf | 2.3 | 7.8  |
|    | 425130 | AA448208  | Hs.99163  | ESTs                                     | 2.3 | 4.1  |
|    | 456664 | AW963354  | Hs.334409 | metallothionein 1G                       | 2.3 | 2.5  |
|    | 438283 | AI458931  | Hs.37282  | ESTs                                     | 2.3 | 4.2  |
| 50 | 417455 | AW007066  | Hs.18949  | ESTs, Weakly similar to CA2B_HUMAN COLLA | 2.3 | 3.0  |
|    | 412100 | AW892731  |           | gb:CM0-NN0005-100300-279-c02 NN0005 Homo | 2.3 | 3.7  |
|    | 448981 | AI968719  | Hs.195387 | ESTs                                     | 2.3 | 3.2  |
|    | 416101 | R24854    | Hs.268806 | ESTs                                     | 2.3 | 6.5  |
|    | 439731 | AI953135  | Hs.45140  | hypothetical protein FLJ14084            | 2.3 | 17.8 |
| 55 | 415734 | NM_014747 | Hs.78748  | KIAA0237 gene product                    | 2.3 | 40.1 |
|    | 424596 | AB020639  | Hs.151017 | estrogen-related receptor gamma          | 2.3 | 2.9  |
|    | 420230 | AL034344  | Hs.284186 | forkhead box C1                          | 2.3 | 2.4  |
|    | 451559 | AL119980  | Hs.20935  | hypothetical protein DKFZp761D221        | 2.3 | 5.7  |
|    | 404835 |           |           |  | 2.3 | 2.1  |
| 60 | 456765 | AI497900  | Hs.33067  | ESTs                                     | 2.3 | 4.1  |
|    | 455517 | AW984068  |           | gb:RC0-HN0006-160300-011-e06 HN0006 Homo | 2.3 | 2.4  |
|    | 408206 | AF041853  | Hs.43670  | kinesin family member 3A                 | 2.2 | 18.5 |
|    | 411770 | NM_014278 | Hs.71992  | heat shock protein (hsp110 family)       | 2.2 | 3.9  |
|    | 430105 | X70297    | Hs.2540   | cholinergic receptor, nicotinic, alpha p | 2.2 | 2.6  |
| 65 | 458694 | F12832    | Hs.13298  | ESTs                                     | 2.2 | 4.9  |
|    | 415091 | AL044872  | Hs.77910  | 3-hydroxy-3-methylglutaryl-Coenzyme A sy | 2.2 | 4.4  |
|    | 439642 | W81441    | Hs.153967 | ESTs                                     | 2.2 | 2.4  |
|    | 450138 | AW152104  | Hs.200879 | ESTs                                     | 2.2 | 4.9  |
|    | 454222 | BE144344  | Hs.7589   | ESTs, Weakly similar to A46010 X-linked  | 2.2 | 3.7  |
|    | 405326 |           |           |  | 2.2 | 2.7  |
| 70 | 431342 | AW971018  | Hs.21659  | ESTs                                     | 2.2 | 5.2  |
|    | 453101 | AW952776  | Hs.94943  | ESTs                                     | 2.2 | 3.3  |
|    | 408897 | N50204    | Hs.283709 | lipopolysaccharide specific response-7 p | 2.2 | 2.8  |
|    | 451398 | AI793124  | Hs.144479 | ESTs                                     | 2.2 | 4.6  |
| 75 | 438208 | AL041224  | Hs.65379  | ESTs                                     | 2.2 | 10.4 |
|    | 408449 | NM_004408 | Hs.166161 | dynamin 1                                | 2.2 | 6.1  |
|    | 414130 | AI670831  | Hs.71592  | Homo sapiens cDNA: FLJ21893 fis, clone H | 2.2 | 3.1  |
|    | 445016 | U79716    | Hs.12246  | reelin                                   | 2.2 | 3.9  |
|    | 424375 | AF070547  | Hs.146312 | Homo sapiens clone 24820 mRNA sequence   | 2.2 | 2.3  |
| 80 | 424645 | NM_014682 | Hs.151449 | KIAA0535 gene product                    | 2.2 | 11.7 |
|    | 409729 | D51315    | Hs.106289 | ESTs                                     | 2.2 | 4.9  |
|    | 432809 | AA565509  | Hs.131703 | ESTs                                     | 2.2 | 19.9 |
|    | 422890 | Z43784    | Hs.75893  | ankyrin 3, node of Ranvier (ankyrin G)   | 2.2 | 10.4 |
|    | 428532 | AF157326  | Hs.184786 | TBP-interacting protein                  | 2.2 | 6.5  |

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|    |        |           |           |  |     |      |
|----|--------|-----------|-----------|--|-----|------|
| 5  | 413074 | AI871368  | Hs.8417   | hypothetical protein DKFZp761M0423       | 2.2 | 3.4  |
|    | 414442 | AA156238  | Hs.32501  | ESTs                                     | 2.2 | 3.2  |
|    | 452768 | AW069459  | Hs.61539  | ESTs                                     | 2.2 | 2.0  |
|    | 450440 | AB024334  | Hs.25001  | tyrosine 3-monooxygenase/tryptophan 5-mo | 2.2 | 3.2  |
|    | 426281 | AK000987  | Hs.169111 | oxidation resistance 1                   | 2.2 | 2.3  |
| 10 | 428411 | AW291464  | Hs.10338  | ESTs                                     | 2.2 | 2.3  |
|    | 413787 | AI352558  | Hs.75544  | tyrosine 3-monooxygenase/tryptophan 5-mo | 2.2 | 3.1  |
|    | 451734 | NM_006176 | Hs.26944  | neurogranin (protein kinase C substrate, | 2.2 | 8.5  |
|    | 439108 | AW163034  | Hs.6467   | synaptogyrin 3                           | 2.2 | 7.9  |
|    | 405385 |           |           |  | 2.2 | 2.4  |
| 15 | 447285 | AI371849  | Hs.200696 | ATPase, Class VI, type 11C               | 2.2 | 2.2  |
|    | 452667 | T87219    | Hs.13219  | ESTs                                     | 2.2 | 3.1  |
|    | 422234 | AF119818  | Hs.113287 | discs, large (Drosophila) homolog-associ | 2.1 | 8.3  |
|    | 410339 | AI916499  | Hs.298258 | ESTs                                     | 2.1 | 3.2  |
|    | 413231 | D87461    | Hs.75244  | BCL2-like 2                              | 2.1 | 4.5  |
| 20 | 447104 | R19085    | Hs.210706 | Homo sapiens cDNA FLJ13182 fis, clone NT | 2.1 | 2.2  |
|    | 451952 | AL120173  | Hs.301663 | ESTs                                     | 2.1 | 36.5 |
|    | 415841 | Z45637    | Hs.7093   | ESTs                                     | 2.1 | 2.4  |
|    | 441086 | AI928489  | Hs.213490 | ESTs, Weakly similar to N33_HUMAN N33 PR | 2.1 | 2.2  |
|    | 450407 | NM_000810 | Hs.24969  | gamma-aminobutyric acid (GABA) A recepto | 2.1 | 6.6  |
| 25 | 427627 | R87582    | Hs.179915 | guanine nucleotide binding protein (G pr | 2.1 | 5.3  |
|    | 449712 | R56545    | Hs.6100   | ESTs                                     | 2.1 | 4.5  |
|    | 409660 | AW452065  | Hs.258905 | ESTs                                     | 2.1 | 2.1  |
|    | 430434 | AL049548  | Hs.241420 | Homo sapiens mRNA for KIAA1756 protein,  | 2.1 | 5.4  |
|    | 434138 | AA625804  |           | gb:zu86h01.s1 Soares_testis_NHT Homo sap | 2.1 | 3.0  |
| 30 | 448610 | NM_006157 | Hs.21602  | nel (chicken)-like 1                     | 2.1 | 4.8  |
|    | 418948 | AI217097  |           | gb:qd43h07.x1 Soares_fetal_heart_NbHH19W | 2.1 | 2.9  |
|    | 414876 | AW950925  | Hs.924    | crystallin, mu                           | 2.1 | 3.4  |
|    | 440426 | AI159800  | Hs.7181   | Homo sapiens cDNA FLJ13663 fis, clone PL | 2.1 | 3.7  |
|    | 451249 | AA016227  | Hs.27280  | ESTs                                     | 2.1 | 4.1  |
| 35 | 451475 | T19093    | Hs.26450  | KIAA0725 protein                         | 2.1 | 2.1  |
|    | 448743 | AB032962  | Hs.21896  | KIAA1136 protein                         | 2.1 | 29.7 |
|    | 430814 | U89336    | Hs.247993 | NG5 protein                              | 2.1 | 2.7  |
|    | 426990 | AL044315  | Hs.173094 | Homo sapiens mRNA for KIAA1750 protein,  | 2.1 | 2.3  |
|    | 426642 | AW058223  | Hs.171581 | ubiquitin C-terminal hydrolase UCH37     | 2.1 | 4.5  |
| 40 | 427335 | AA448542  | Hs.251677 | G antigen 7B                             | 2.1 | 2.2  |
|    | 459089 | F13035    | Hs.27373  | Homo sapiens mRNA; cDNA DKFZp564O1763 (f | 2.1 | 2.3  |
|    | 435832 | AA425688  | Hs.41641  | Bruno (Drosophila)-like 4, RNA binding   | 2.1 | 5.9  |
|    | 446383 | T05816    | Hs.92511  | ESTs                                     | 2.1 | 2.9  |
|    | 412768 | AW996044  | Hs.26239  | Human DNA sequence from clone RP11-43882 | 2.1 | 2.1  |
| 45 | 453976 | BE463830  | Hs.163714 | ESTs                                     | 2.1 | 4.2  |
|    | 415111 | R39039    | Hs.328455 | EST                                      | 2.1 | 3.3  |
|    | 452238 | F01811    | Hs.187931 | ESTs                                     | 2.1 | 4.9  |
|    | 445279 | R41900    | Hs.22245  | ESTs                                     | 2.1 | 9.8  |
|    | 448799 | AI937094  | Hs.179080 | ESTs                                     | 2.1 | 3.1  |
| 50 | 418338 | NM_002522 | Hs.84154  | neuronal pentraxin I                     | 2.1 | 8.3  |
|    | 445725 | AK000956  | Hs.13209  | hypothetical protein FLJ10094            | 2.1 | 5.4  |
|    | 443537 | D13305    | Hs.203    | cholecystokinin B receptor               | 2.1 | 4.1  |
|    | 454066 | X00356    | Hs.37058  | calcitonin/calcitonin-related polypeptid | 2.1 | 6.4  |
|    | 429954 | AI918130  | Hs.21374  | ESTs                                     | 2.1 | 7.2  |
| 55 | 415292 | H29016    | Hs.200576 | ESTs                                     | 2.1 | 3.9  |
|    | 423563 | R34734    | Hs.75209  | protein kinase (cAMP-dependent, catalyti | 2.1 | 3.1  |
|    | 424906 | AI56086   | Hs.153716 | Homo sapiens mRNA for Hmob33 protein, 3' | 2.1 | 4.7  |
|    | 459309 | AA040620  | Hs.5672   | hypothetical protein AF140225            | 2.1 | 2.2  |
|    | 439340 | AB032436  | Hs.6535   | brain-specific Na-dependent inorganic ph | 2.1 | 4.7  |
| 60 | 402598 | BE314624  | Hs.3128   | polymerase (RNA) II (DNA directed) polyp | 2.1 | 5.4  |
|    | 435406 | F26698    | Hs.4884   | calcium/calmodulin-dependent protein kin | 2.1 | 6.6  |
|    | 448792 | R42550    | Hs.12826  | ESTs                                     | 2.1 | 4.1  |
|    | 449500 | AW956345  | Hs.12926  | ESTs                                     | 2.1 | 2.4  |
|    | 441134 | W29092    | Hs.7678   | cellular retinoic acid-binding protein 1 | 2.1 | 5.8  |
| 65 | 433361 | AW469373  | Hs.300141 | ribosomal protein L39                    | 2.1 | 2.7  |
|    | 452946 | X95425    | Hs.31092  | EphA5                                    | 2.1 | 5.0  |
|    | 426167 | AF039023  | Hs.167496 | RAN binding protein 6                    | 2.0 | 2.2  |
|    | 453666 | AW015681  | Hs.135229 | ESTs, Weakly similar to A2BP_HUMAN ATAXI | 2.0 | 3.1  |
|    | 424632 | AB014523  | Hs.151406 | KIAA0623 gene product                    | 2.0 | 3.5  |
| 70 | 448589 | AF017090  | Hs.21554  | KIAA1107 protein                         | 2.0 | 4.1  |
|    | 430416 | AC005531  | Hs.57806  | Homo sapiens PAC clone RP4-701O16 from 7 | 2.0 | 2.3  |
|    | 445627 | AW818475  | Hs.7363   | ESTs                                     | 2.0 | 2.1  |
|    | 417092 | H97508    | Hs.181165 | eukaryotic translation elongation factor | 2.0 | 2.5  |
|    | 453653 | AW505554  | Hs.144559 | ESTs                                     | 2.0 | 4.7  |
| 75 | 435850 | AF250847  | Hs.283514 | mitochondrial ceramidase                 | 2.0 | 3.7  |
|    | 435086 | AW975243  | Hs.122596 | ESTs                                     | 2.0 | 2.1  |
|    | 423191 | D61506    | Hs.8417   | hypothetical protein DKFZp761M0423       | 2.0 | 2.1  |
|    | 411562 | AL050201  | Hs.70769  | hypothetical protein DKFZp586E1923       | 2.0 | 2.8  |
|    | 431645 | AF078849  | Hs.265483 | dynein light chain-A                     | 2.0 | 2.5  |
| 80 | 429834 | AI929645  | Hs.225936 | synapsin I                               | 2.0 | 3.6  |
|    | 439607 | BE540565  | Hs.159460 | ESTs                                     | 2.0 | 17.5 |
|    | 408033 | AW138045  | Hs.242256 | ESTs                                     | 2.0 | 4.0  |
|    | 430317 | AB020645  | Hs.239189 | glutaminase                              | 2.0 | 2.7  |
|    | 419631 | AW188117  | Hs.303154 | popeye protein 3                         | 2.0 | 2.6  |
|    | 432660 | AI288430  | Hs.64004  | ESTs                                     | 2.0 | 2.3  |
|    | 454048 | H05626    | Hs.6921   | ESTs                                     | 2.0 | 15.9 |
|    | 426917 | AA913814  | Hs.172854 | DKFZp586B0923 protein                    | 2.0 | 3.1  |

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|   |        |          |           |  |     |      |
|---|--------|----------|-----------|--|-----|------|
| 5 | 423246 | AL119114 | Hs.77196  | spectrin, alpha, non-erythrocytic 1 (alp | 2.0 | 2.9  |
|   | 415989 | AI267700 | Hs.317584 | ESTs                                     | 2.0 | 4.8  |
|   | 420276 | AA290938 | Hs.190561 | ESTs, Highly similar to SORL_HUMAN SORTI | 2.0 | 5.1  |
|   | 424983 | AI742434 | Hs.169911 | ESTs                                     | 2.0 | 15.9 |
|   | 446296 | AA985662 | Hs.63131  | Homo sapiens cDNA FLJ13155 fis, clone NT | 2.0 | 2.7  |
|   | 450006 | AI241555 | Hs.60171  | ESTs                                     | 2.0 | 3.5  |

TABLE 27B:

|    |             |                                       |
|----|-------------|---------------------------------------|
| 10 | Pkey:       | Unique Eos probeset identifier number |
|    | CAT number: | Gene cluster number                   |
|    | Accession:  | Genbank accession numbers             |

| Pkey | CAT Number | Accession  |
|------|------------|--|
| 15   | 408274     | 104999_1 R17315 Z43964 AA053547  |
|      | 412100     | 1277224_1 AW892731 H08502 Z45826   |
|      | 412112     | 1277883_1 BE180342 BE180347 AW901900 BE180222 BE180218 BE180226 BE180413 BE180416 AW901899 BE180228 AW901897 BE180224 AW901898 BE180223 BE180219 BE180346 BE180343 BE180418 BE180225 BE180221 BE180341 AW901894 BE180217 BE180227 AW901891 BE180345 AW893614 AW893615 H85799 H83501 BE180220 |
| 20   | 413153     | 1350849_1 N94205 BE067565 BE067556   |
|      | 413510     | 1374377_1 F13044 T77009 BE145525 BE145493  |
|      | 414828     | 149563_1 AA156651 AA156622 R14472  |
| 25   | 418948     | 180808_1 AI217097 AW886090 W38035 W38792 AA232835 AW936043   |
|      | 419558     | 185904_1 AW953679 AW953680 AA244436 H82527 AA361046 AA244483 H82526  |
|      | 421249     | 200649_1 AA285362 AW752386 AW847156 AA285373 AW879575 AW879558   |
| 30   | 421640     | 204833_1 AW966652 AW966653 AA294989 AA385977   |
|      | 429995     | 311738_1 AA463571 AI277645 AL118753  |
|      | 430212     | 314437_1 AA469153 AI718503 AA469225  |
| 35   | 432122     | 341756_1 AA526514 AW973343 AA554293  |
|      | 433449     | 366532_1 AW772282 AA592974   |
|      | 434138     | 380572_1 AA625804 AW418787 AW074833 AI675642 AI393368  |
| 40   | 437483     | 43756_1 AL390174 AW698817  |
|      | 439780     | 47673_1 AL109688 R23665 R26578   |
|      | 452502     | 919733_1 AI904296 BE007223 R30687  |
| 45   | 455517     | 1321782_1 AW984068 AW984072 AW984077   |
|      | 456407     | 184986_1 AW968614 AA243209 AA281411  |

TABLE 27C:

|    |              |   |
|----|--------------|---|
| 40 | Pkey:        | Unique number corresponding to an Eos probeset  |
|    | Ref:         | Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495. |
|    | Strand:      | Indicates DNA strand from which exons were predicted.   |
|    | NT_position: | Indicates nucleotide positions of predicted exons.  |

| Pkey | Ref    | Strand        | NT_position   |
|------|--------|---------------|---|
| 45   | 400979 | 8072554 Plus  | 160842-161028   |
|      | 401213 | 9858408 Plus  | 98243-98380,98489-98619   |
|      | 401421 | 7452889 Minus | 142291-142461   |
| 50   | 403092 | 8954241 Plus  | 174720-175016,175104-175406,175508-175813                               |
|      | 404648 | 9796894 Minus | 115334-116020   |
|      | 404793 | 7232206 Minus | 61087-61590   |
| 55   | 404835 | 6970743 Plus  | 85462-85684,88139-88287,90338-91018,94827-94990                         |
|      | 405326 | 4375975 Plus  | 10633-10709,30805-30893,38078-38253,55112-55327,57718-57818,66696-66841 |
|      | 405385 | 6552772 Plus  | 48332-48454   |
| 60   | 405793 | 1405887 Minus | 89197-89453   |
|      | 405911 | 6758795 Plus  | 101008-101643   |
|      | 405977 | 8247789 Minus | 135548-136177   |

TABLE 28A: About 139 genes up-regulated in glioma compared to normal adult tissues

Table 28A lists about 139 genes up-regulated in glioma compared to normal adult tissues. In order to identify new genes that are associated with glioma, a non-redundant set of 6614 genes that have been previously identified were removed from the starting collection of 59680 probesets on the Affymetrix/Eos-Hu03 GeneChip® array. Genes associated with glioma were selected from the remaining 53005 probesets such that the ratio of "average" glioma to "average" normal adult tissues was greater than or equal to 2.5, and the "average" glioma value was greater than or equal to 50 units (this selects for the most abundant of the up-regulated genes). The "average" glioma level was set to the 94th percentile value amongst various glioblastoma, astrocytoma, and oligodendroglioma specimens; the "average" normal adult tissue level was set to the 85th percentile value amongst various non-malignant organs and tissues and other non-malignant brain tissues. In order to remove gene-specific background levels of non-specific hybridization, the 15th percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated. Predicted protein domains are noted.

| Pkey | ExAccn | UniGene ID | Unigene Title                       | Protein Domains                     | R1  |
|------|--------|------------|-------------------------------------|-------------------------------------|-----|
| 75   | 443902 | W28470     | Hs.12600                            | N-ethylmaleimide-sensitive factor a | 4.0 |
|      | 441476 | R44566     | Hs.173134                           | ESTs                                | 4.0 |
|      | 446048 | AI272364   | Hs.182081                           | KIAA1811 protein                    | 3.8 |
| 80   | 407061 | X97748     | gb:H.sapiens PTX3 gene promoter reg |                                     | 3.7 |
|      | 414323 | NM_014759  | Hs.334688                           | KIAA0273 gene product               | 3.6 |
|      | 439769 | AA448828   | Hs.30596                            | Homo sapiens mRNA full length inser | 3.6 |
| 80   | 429319 | AL023754   | Hs.199068                           | similar to calcium/calmodulin depen | 3.6 |
|      | 443412 | W84893     | Hs.9305                             | angiotensin receptor-like 1         | 3.5 |
|      | 425533 | T47802     | Hs.9305                             | angiotensin receptor-like 1         | 3.5 |

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|    |        |           |           |                                     |                           |     |
|----|--------|-----------|-----------|-------------------------------------|---------------------------|-----|
| 5  | 408610 | AW026692  | Hs.285050 | ESTs                                | ion_trans,K_tetra,Kv2chan | 3.4 |
|    | 450678 | AL109703  | Hs.25314  | Homo sapiens mRNA full length inser |                           | 3.4 |
|    | 419171 | NM_002846 | Hs.89655  | protein tyrosine phosphatase, recep | Y_phosphatase,ART;TM;SS   | 3.4 |
|    | 445875 | AF070524  | Hs.13410  | Homo sapiens clone 24453 mRNA seque |                           | 3.4 |
|    | 412581 | AA224244  | Hs.182704 | ESTs. Moderately similar to alterna |                           | 3.3 |
|    | 424911 | AA984364  | Hs.7913   | ESTs                                |                           | 3.3 |
|    | 452753 | AA028049  | Hs.277728 | SEC14 (S. cerevisiae)-like 2        | CRAL_TRIO                 | 3.3 |
|    | 436648 | R18656    | Hs.352385 | ESTs                                | pkinase,pkinase_C,PMP22_C | 3.2 |
| 10 | 452130 | AW248349  | Hs.28088  | SGC32445 protein                    | TB2_DP1_HVA22;TM;SS       | 3.2 |
|    | 448948 | AF131851  | Hs.22241  | hypothetical protein                |                           | 3.2 |
|    | 426470 | AA528794  | Hs.128644 | ESTs                                |                           | 3.2 |
|    | 419344 | U94905    | Hs.277445 | diacylglycerol kinase, zeta (104kD) | ank,DAGKa,DAGKc,DAG_PE-bi | 3.2 |
|    | 439783 | AI125760  | Hs.24835  | hypothetical protein FLJ14594       | ig,LRR,LRRNT,LRRCT;TM;S   | 3.2 |
|    | 411358 | R47479    | Hs.94761  | KIAA1691 protein                    | TM;SS                     | 3.2 |
| 15 | 409433 | AA074382  | Hs.135255 | ADAMTS14                            |                           | 3.2 |
|    | 456940 | H46986    | Hs.31861  | ESTs                                |                           | 3.1 |
|    | 423744 | D26158    | Hs.1701   | ELAV (embryonic lethal, abnormal vi | rm,Gene66;                | 3.1 |
|    | 432227 | U28389    | Hs.274122 | erythrocyte membrane protein band 4 | VHP;TM;                   | 3.1 |
|    | 449181 | X96783    | Hs.23179  | synaptotagmin V                     | C2;TM;SS                  | 3.1 |
| 20 | 422274 | NM_015564 | Hs.114169 | KIAA0416 protein                    | LRR,LRRNT,LRRCT;TM;SS     | 3.1 |
|    | 424607 | NM_016848 | Hs.151123 | neuronal Shc                        | PID,SH2;                  | 3.1 |
|    | 416898 | BE219510  | Hs.234074 | Homo sapiens mRNA; cDNA DKFZp761G02 | EGF,Rhabd_glycop;TM;SS=   | 3.1 |
|    | 438162 | NM_014618 | Hs.6090   | deleted in bladder cancer chromosom | TM;SS                     | 3.1 |
|    | 439892 | AL043463  | Hs.6755   | RaP2 interacting protein 8          | RUN;SS                    | 3.1 |
| 25 | 445330 | R52656    | Hs.21691  | ESTs                                | 7tm_1                     | 3.0 |
|    | 451766 | NM_001406 | Hs.26988  | ephrin-B3                           | Ephrin;TM;SS              | 3.0 |
|    | 444457 | A1204146  | Hs.92556  | ESTs                                | Fork_head                 | 3.0 |
|    | 458247 | R14439    | Hs.209194 | ESTs                                |                           | 3.0 |
|    | 424616 | U72671    | Hs.151250 | intercellular adhesion molecule 5,  | ig,JCAM_N;TM;SS           | 3.0 |
| 30 | 408971 | R38990    | Hs.13485  | ESTs                                |                           | 3.0 |
|    | 423940 | NM_012429 | Hs.277728 | SEC14 (S. cerevisiae)-like 2        | CRAL_TRIO;TM;             | 3.0 |
|    | 458124 | AW005548  | Hs.124590 | ESTs                                |                           | 3.0 |
|    | 410491 | AA465131  | Hs.64001  | Homo sapiens clone 25218 mRNA seque |                           | 3.0 |
| 35 | 444808 | H20019    | Hs.286084 | ESTs                                | ank,ras,PH,ArfGap,HCO3_co | 3.0 |
|    | 437696 | Z83844    | Hs.5790   | hypothetical protein dJ37E16.5      | Hydrolase;TM;             | 2.9 |
|    | 424016 | AW163729  | Hs.6140   | hypothetical protein MGC15730       | ig;SS                     | 2.9 |
|    | 421680 | AL031186  | Hs.289106 | Human DNA sequence from clone CTA-9 | Collagen;TM;SS            | 2.9 |
|    | 418055 | R18516    | Hs.351299 | ESTs. Weakly similar to I38022 hypo | ZZ,ZZ                     | 2.9 |
| 40 | 444819 | AI697836  | Hs.148433 | ESTs                                |                           | 2.9 |
|    | 420524 | AB010575  | Hs.98547  | amiloride-sensitive cation channel  | ASC;TM;                   | 2.9 |
|    | 416237 | H30684    | Hs.159863 | ESTs                                |                           | 2.9 |
|    | 432270 | AK001008  | Hs.274233 | Homo sapiens cDNA FLJ10146 fis, clo |                           | 2.9 |
|    | 405569 |           |           | NM_031481*:Homo sapiens solute carr | mito_carr;TM;SS           | 2.9 |
| 45 | 428950 | BE311879  | Hs.194673 | phosphoprotein enriched in astrocyt | DED;TM;                   | 2.9 |
|    | 426128 | NM_001471 | Hs.167017 | gamma-aminobutyric acid (GABA) B re | 7tm_3,sushi,ANF_receptor; | 2.9 |
|    | 447758 | H17302    | Hs.93967  | ESTs. Weakly similar to NBHU8 deco  | LRR,LRRNT,LRRCT;TM;SS     | 2.9 |
|    | 445331 | H04489    | Hs.12520  | Homo sapiens clone 23568, 23621, 23 | PC_rep                    | 2.9 |
|    | 431010 | BE251246  | Hs.248214 | complexin 1                         | TM;                       | 2.9 |
| 50 | 433065 | N62902    | Hs.343660 | Homo sapiens PAC clone RP4-651K2 tr | :SS                       | 2.9 |
|    | 426845 | AB025186  | Hs.172740 | microtubule-associated protein, RP/ | EB1,CH;TM;                | 2.9 |
|    | 454360 | L78207    | Hs.54470  | ATP-binding cassette, sub-family C  | ABC_tran,ABC_membrane,PRK | 2.9 |
|    | 438859 | AI559626  | Hs.93522  | Homo sapiens mRNA for KIAA1547 prot | bZIP,K-box,7tm_2,EGF,cadh | 2.9 |
|    | 410515 | F12086    | Hs.4257   | ESTs                                | PID,SH2,PID,SH2           | 2.8 |
| 55 | 434022 | R18374    | Hs.117956 | ESTs                                | hormone_rec,zf-C4         | 2.8 |
|    | 428960 | AF052224  | Hs.194684 | bassoon (presynaptic cytomatrix pro | Carla_C4,RPH3A_effector;T | 2.8 |
|    | 426290 | AB007918  | Hs.169182 | KIAA0449 protein                    | WD40;TM;                  | 2.8 |
|    | 417287 | AI831678  | Hs.285714 | KIAA1599 protein                    | C2;TM;                    | 2.8 |
|    | 422575 | AK000546  | Hs.118552 | hypothetical protein FLJ20539       | PTR2;TM;SS                | 2.8 |
| 60 | 417941 | AI056049  | Hs.96297  | ESTs                                | Band_41,ERM               | 2.8 |
|    | 452707 | AI093823  | Hs.45070  | ESTs                                |                           | 2.8 |
|    | 424873 | AB018294  | Hs.153610 | KIAA0751 gene product               | C2,POZ;TM;                | 2.8 |
|    | 408209 | NM_004454 | Hs.43697  | ets variant gene 5 (ets-related mol | Ets;TM;                   | 2.8 |
|    | 415935 | H09663    | Hs.106490 | ESTs                                | PID                       | 2.8 |
| 65 | 437999 | AW905038  | Hs.90242  | ESTs                                | ion_trans                 | 2.8 |
|    | 428248 | AI126772  | Hs.40479  | ESTs                                |                           | 2.8 |
|    | 414001 | AI610347  | Hs.103812 | ESTs. Moderately similar to ALU1_HU | Gelsolin,VHP,p450         | 2.8 |
|    | 406634 | AA386235  | Hs.74576  | GDP dissociation inhibitor 1        | GDI;TM;                   | 2.8 |
|    | 453439 | AI572438  | Hs.32976  | guanine nucleotide binding protein  | G-gamma;TM;               | 2.8 |
| 70 | 433320 | D60647    | Hs.250879 | ESTs. Highly similar to CTXN RAT CO |                           | 2.8 |
|    | 420888 | AB006713  | Hs.100058 | dihydropyrimidinase-like 4          | Dihydroorotase;TM;        | 2.7 |
|    | 440001 | AI740721  | Hs.128292 | ESTs                                |                           | 2.7 |
|    | 417622 | AW298163  | Hs.82318  | WAS protein family, member 3        | WH2;TM;                   | 2.7 |
|    | 438626 | AI198059  | Hs.26370  | ESTs                                |                           | 2.7 |
| 75 | 404439 |           |           | ENSP00000067222*:Mitochondrial 28S  | OLF;SS                    | 2.7 |
|    | 448375 | NM_004644 | Hs.21022  | adaptor-related protein complex 3,  | Adaptin_N;TM;             | 2.7 |
|    | 420989 | AB002372  | Hs.323833 | syntaphilin                         | TM;                       | 2.7 |
|    | 419651 | NM_007023 | Hs.91971  | cAMP-regulated guanine nucleotide e | cNMP_binding,DEP,RasGEF,R | 2.7 |
|    | 414562 | AW955734  | Hs.112195 | ESTs. Weakly similar to 2108402A ca |                           | 2.7 |
|    | 410865 | T16342    | Hs.66727  | ESTs. Weakly similar to T31613 hypo | IRK                       | 2.7 |
| 80 | 421146 | AI082215  | Hs.97993  | ESTs. Moderately similar to SERP1 ( |                           | 2.7 |
|    | 419087 | AI671245  | Hs.24835  | hypothetical protein FLJ14594       | ig,LRR,LRRNT,LRRCT;TM;S   | 2.7 |
|    | 421499 | AI271438  | Hs.236131 | homeodomain-interacting protein kin | pkinase,Peptidase_M1;TM   | 2.7 |
|    | 425014 | AI251449  | Hs.171939 | ESTs                                | PID,POZ                   | 2.7 |

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|    |        |           |           |                                     |                           |     |
|----|--------|-----------|-----------|-------------------------------------|---------------------------|-----|
| 5  | 448655 | AL035289  | Hs.21708  | hypothetical protein from clone 248 | TM,SS                     | 2.7 |
|    | 424410 | W79027    | Hs.271762 | ESTs                                |                           | 2.7 |
|    | 447117 | AI362798  | Hs.40183  | ESTs                                |                           | 2.7 |
|    | 447478 | BE618843  | Hs.28144  | fibronectin type 3 and SPRY domain- | fn3,SPRY,TM;              | 2.7 |
|    | 437645 | R20728    | Hs.21164  | ESTs                                |                           | 2.7 |
|    | 433698 | H24201    | Hs.247423 | adducin 2 (beta)                    | Aldolase_II;TM;           | 2.7 |
|    | 419701 | AA248999  | Hs.7913   | ESTs                                |                           | 2.7 |
|    | 410510 | AW294625  | Hs.64064  | potassium voltage-gated channel, su | cNMP_binding,ion_trans,PA | 2.7 |
| 10 | 452869 | AB014534  | Hs.30898  | KIAA0634 protein                    | fn3,SS                    | 2.7 |
|    | 428045 | T15465    | Hs.182231 | thyrotropin-releasing hormone       | ,SS                       | 2.7 |
|    | 425218 | NM_014909 | Hs.155182 | KIAA1036 protein                    | TM;                       | 2.7 |
|    | 425558 | AF040723  | Hs.158300 | huntingtin-associated protein 1 (ne | TM;                       | 2.6 |
|    | 440789 | AB007857  | Hs.7416   | KIAA0397 gene product               | TBC,RUN;TM;               | 2.6 |
|    | 418423 | NM_014732 | Hs.301658 | KIAA0513 gene product               | TM;                       | 2.6 |
| 15 | 450400 | AI694722  | Hs.279744 | ESTs                                | lectin_c                  | 2.6 |
|    | 413566 | AW604451  | Hs.285814 | sprouty (Drosophila) homolog 4      | SH2,SH3,TM;SS             | 2.6 |
|    | 443759 | BE390832  | Hs.134729 | FXRD domain-containing ion transpor | ATP1G1_PLM_MAT8,TM;SS     | 2.6 |
|    | 425069 | AA687465  | Hs.298184 | potassium voltage-gated channel, sh | aldo_kel_red              | 2.6 |
| 20 | 429291 | AI933057  | Hs.349189 | mannosyl (alpha-1,3)-glycoprotein   |                           | 2.6 |
|    | 424798 | AW016523  | Hs.182850 | ESTs                                |                           | 2.6 |
|    | 447455 | H38335    | Hs.6750   | Homo sapiens mRNA for FLJ00058 prot | TM;SS                     | 2.6 |
|    | 417212 | AW952823  | Hs.351547 | NS1-binding protein                 | E2_N,E2_C,DNA_mis_repair, | 2.6 |
|    | 432265 | BE382679  | Hs.285753 | SCG10-like-protein                  | Stathmin;TM;SS            | 2.6 |
| 25 | 417005 | C21115    | Hs.26612  | ESTs, Moderately similar to S23650  |                           | 2.6 |
|    | 421091 | W22821    | Hs.351612 | ribosomal protein L26               | TM;                       | 2.6 |
|    | 445472 | AB006631  | Hs.12784  | Homo sapiens mRNA for KIAA0293 gene | homeobox,CUT;TM;          | 2.6 |
|    | 431967 | AJ243653  | Hs.373498 | organic cation transporter          | sugar_tr;TM;SS            | 2.6 |
|    | 439151 | AW135066  | Hs.283110 | carbonic anhydrase X                | carb_anhydrase;TM;SS      | 2.6 |
| 30 | 424134 | AF070637  | Hs.140950 | hypothetical protein                | DUF176;SS                 | 2.6 |
|    | 430213 | AW993446  | Hs.235445 | hypothetical protein FLJ21313       | GRAM;TM;                  | 2.6 |
|    | 445954 | AA148926  | Hs.27836  | hypothetical protein FLJ22362       | fn3;TM;                   | 2.6 |
|    | 445084 | H38914    | Hs.250848 | hypothetical protein FLJ14761       | TM;SS                     | 2.6 |
|    | 446236 | NM_006293 | Hs.301    | TYRO3 protein tyrosine kinase       | fn3,ig,kinase;TM;         | 2.6 |
| 35 | 433706 | AW947250  | Hs.283645 | ESTs                                | PH,RhoGAP                 | 2.6 |
|    | 423606 | AB011094  | Hs.129892 | KIAA0522 protein                    | PH,bZIP,IQ,Sec7;TM;       | 2.5 |
|    | 438915 | AA280174  | Hs.285681 | Williams-Beuren syndrome chromosome |                           | 2.5 |
|    | 448923 | AL034562  | Hs.22584  | prodynorphin                        | Opiods_neuropep;SS        | 2.5 |
|    | 408115 | AB033107  | Hs.42796  | KIAA1281 protein                    |                           | 2.5 |
| 40 | 446772 | AW294404  | Hs.144515 | Homo sapiens cDNA FLJ11672 fis, clo | TM;SS                     | 2.5 |
|    | 427989 | H85525    | Hs.40479  | gb:yy88h06.r1 Soares melanocyte 2Nb | rrm;TM;                   | 2.5 |
|    | 435833 | BE259178  | Hs.41641  | Bruno (Drosophila)-like 4, RNA bin  | heme_1,FA_desaturase;TM   | 2.5 |
|    | 423797 | BE259364  | Hs.132898 | fatty acid desaturase 1             | mito_carr;TM;SS           | 2.5 |
|    | 448277 | BE622827  | Hs.99486  | hypothetical protein FLJ13044       |                           | 2.5 |
| 45 | 417298 | AW665639  | Hs.37958  | ESTs                                |                           | 2.5 |
|    | 415577 | AF257770  | Hs.20930  | poly(rC)-binding protein 4          | Ki-I-domain;TM;           | 2.5 |
|    | 420742 | U79251    | Hs.99902  | opioid-binding protein/cell adhesio | ig;TM;SS                  | 2.5 |
|    | 419109 | BE169157  | Hs.172717 | ESTs                                | kinase,LRRCT,ig,LRR,LRRN  | 2.5 |

TABLE 28C:

Pkey: Unique number corresponding to an Eos probeset  
 Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495  
 Strand: Indicates DNA strand from which exons were predicted.  
 NI\_position: Indicates nucleotide positions of predicted exons.

| Pkey   | Ref     | Strand | NI_position |
|--------|---------|--------|-------------|
| 405569 | 6006906 | Plus   | 99719-99873 |
| 404439 | 7139680 | Plus   | 55316-55585 |

TABLE 29A: ABOUT 362 GENES UP-REGULATED IN GLIOMA COMPARED TO NON-MALIGNANT ADULT BRAIN TISSUE

Table 29A lists about 362 genes up-regulated in glioma compared to non-malignant adult brain tissue. These were selected as for Table 28A, except that the ratio of "average" glioma to "average" normal brain was greater than or equal to 3.0, the "average" glioma level was set to the 99th percentile value amongst various glioma specimens, the "average" normal adult tissue level was set to the 90th percentile value amongst various non-malignant adult brain specimens, the "average" glioma value was greater than or equal to 50 units. Predicted protein domains are noted.

Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenetID: Unigene number  
 Unigene Title: Unigene gene title  
 Protein Domains: Predicted Protein Domains  
 R1: glioma vs non-malignant adult brain tissue

| Pkey   | ExAccn    | Unigene ID | Unigene Title                       | Protein Domains   | R1   |
|--------|-----------|------------|-------------------------------------|-------------------|------|
| 414477 | U41635    | Hs.76228   | amplified in osteosarcoma           | kinase,LRR,TM;SS  | 11.2 |
| 407241 | M34516    |            | gb:Human omega light chain protein  | TM;               | 10.9 |
| 408972 | AL050100  | Hs.49378   | DKFZP586D0919 protein               | TM;               | 7.0  |
| 417512 | X76534    | Hs.82226   | glycoprotein (transmembrane) nmb    | PKD;TM;SS         | 6.9  |
| 414001 | AI610347  | Hs.103812  | ESTs, Moderately similar to ALU1_HU | Gelsolin,VHP,p450 | 6.3  |
| 428847 | AI954833  | Hs.98831   | ESTs                                |                   | 6.2  |
| 407061 | X97748    |            | gb:H.sapiens PTX3 gene promotor reg |                   | 5.4  |
| 440020 | AI480204  | Hs.177131  | ESTs                                |                   | 5.4  |
| 408832 | AW085690  | Hs.63428   | ESTs, Weakly similar to Z195_HUMAN  |                   | 5.3  |
| 406837 | R70292    | Hs.156110  | immunoglobulin kappa constant       |                   | 5.2  |
| 407607 | NM_001887 | Hs.37135   | crystallin, beta B1                 | crystall;TM;      | 5.1  |



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|    |        |           |           |                                      |                            |     |
|----|--------|-----------|-----------|--------------------------------------|----------------------------|-----|
|    | 435013 | H91923    | Hs.110024 | NM_020142.Homo sapiens NADH:ubiquin  |                            | 5.1 |
|    | 424916 | AW867440  | Hs.23096  | ESTs                                 | rm                         | 5.1 |
|    | 409659 | AW970843  | Hs.55682  | eukaryotic translation initiation f  | ;SS                        | 5.1 |
|    | 432576 | AW157424  | Hs.165954 | ESTs, Weakly similar to I38022 hypo  | rm                         | 5.1 |
| 5  | 406621 | X57809    | Hs.181125 | immunoglobulin lambda locus          | ig.HSP70,Ppx-GppA;TM;SS    | 5.1 |
|    | 430418 | R98852    | Hs.36029  | heart and neural crest derivatives   | HLH                        | 5.1 |
|    | 441633 | AW958544  | Hs.112242 | normal mucosa of esophagus specific  | TM;SS                      | 5.0 |
|    | 429707 | W76631    | Hs.211819 | matrix metalloproteinase 23B         | ig.Peptidase_M10;TM;SS=    | 5.0 |
| 10 | 438915 | AA280174  | Hs.285581 | Williams-Beuren syndrome chromosome  |                            | 5.0 |
|    | 441321 | H17182    | Hs.7771   | B-cell associated protein            | Band_7;TM;                 | 5.0 |
|    | 406848 | AI264844  | Hs.275865 | ribosomal protein S18                | Ribosomal_S13;             | 4.9 |
|    | 423505 | AF064090  | Hs.129708 | tumor necrosis factor (ligand) supe  | TNF;TM;SS                  | 4.8 |
|    | 433848 | AF095719  | Hs.93764  | carboxypeptidase A4                  | Zn_carbOpept,Propep_M14;T  | 4.8 |
|    | 431882 | NM_001426 | Hs.271977 | engrafted homolog 1                  | homeobox;TM;               | 4.8 |
| 15 | 446295 | AI355029  | Hs.101660 | ESTs, Weakly similar to T14171 atax  | LIM                        | 4.8 |
|    | 409170 | W91994    | Hs.16145  | ESTs                                 | rm                         | 4.8 |
|    | 421155 | H87879    | Hs.102267 | lysyl oxidase                        | Lysyl_oxidase,Aldose_epim  | 4.7 |
|    | 409202 | AA236881  | Hs.51043  | hexosaminidase B (beta polypeptide)  | Glyco_hydro_20,Glyco_hydr  | 4.7 |
|    | 412115 | AK001763  | Hs.73239  | hypothetical protein FLJ10901        | ;SS                        | 4.7 |
| 20 | 450463 | AW952018  | Hs.201398 | G protein coupled receptor interact  | C1q,Collagen;TM;SS         | 4.7 |
|    | 445960 | AI268399  | Hs.140489 | ESTs, Weakly similar to LIN1_HUMAN   | zf-C2H2,bZIP               | 4.7 |
|    | 406307 | AA057605  | Hs.180920 | ribosomal protein S9                 | Ribosomal_S4,S4,tRNA_inL   | 4.6 |
|    | 409190 | AU076536  | Hs.50584  | sarcoma amplified sequence           | transmembrane4;TM;SS       | 4.6 |
|    | 401699 |           |           | Target Exon                          | TM;                        | 4.6 |
| 25 | 408901 | AK001330  | Hs.48855  | hypothetical protein FLJ10468        | TM;                        | 4.6 |
|    | 441669 | R78195    | Hs.29692  | Homo sapiens cDNA FLJ11436 fis, clo  |                            | 4.6 |
|    | 406868 | AA505445  | Hs.300697 | immunoglobulin heavy constant gamma  | ig;TM;                     | 4.6 |
|    | 406699 | L06505    | Hs.182979 | ribosomal protein L12                | Ribosomal_L11;TM;          | 4.6 |
|    | 406663 | U24683    |           | immunoglobulin heavy constant mu     | ;SS                        | 4.6 |
| 30 | 427714 | AF119850  | Hs.2186   | eukaryotic translation elongation f  | COX8,SHMT,MIF,GST_C,EF1G_  | 4.6 |
|    | 407260 | L09095    |           | gb:Homo sapiens mRNA fragment        |                            | 4.5 |
|    | 406803 | H42321    | Hs.163593 | ribosomal protein L18a               | Ribosomal_L18ae;TM;        | 4.5 |
|    | 430397 | AI924533  | Hs.105607 | bicarbonate transporter related pro  | HCO3_cotransp;TM;          | 4.5 |
|    | 414044 | BE614194  | Hs.75721  | profilin 1                           | profilin;TM;               | 4.5 |
| 35 | 424238 | AA337401  | Hs.137635 | ESTs                                 | TM;SS                      | 4.5 |
|    | 421532 | AW138207  | Hs.146170 | hypothetical protein FLJ22969        | Armadillo_seg,HEAT;TM;S    | 4.4 |
|    | 421241 | X91817    | Hs.102866 | transketolase-like 1                 | transketolase,transket_py  | 4.4 |
|    | 436398 | H87136    | Hs.5174   | ribosomal protein S17                | Ribosomal_S17e,PolyA_pol;  | 4.4 |
|    | 428479 | Y00272    | Hs.334562 | cell division cycle 2, G1 to S and   | pkinese,ICE_p10,ICE_p20,T  | 4.4 |
| 40 | 446921 | AB012113  | Hs.16530  | small inducible cytokine subfamily   | IL8;SS                     | 4.3 |
|    | 433271 | BE621697  | Hs.14317  | nucleolar protein family A, member   | ;                          | 4.3 |
|    | 406964 | M21305    |           | FGENES predicted novel secreted pro  |                            | 4.3 |
|    | 432191 | AA043193  | Hs.273186 | hypothetical protein, clone Teletho  | ABC1;TM;                   | 4.3 |
| 45 | 420890 | AA434058  | Hs.100071 | 6-phosphogluconolactonase            | Glucosamine_iso;TM;        | 4.3 |
|    | 413053 | AW963263  | Hs.65377  | ESTs, Moderately similar to KIAA139  | TM;                        | 4.3 |
|    | 406687 | M31126    | Hs.352054 | matrix metalloproteinase 11 (stroma  | hemopexin,Peptidase_M10;T  | 4.2 |
|    | 425157 | NM_006227 | Hs.283007 | phospholipid transfer protein        | LBP_BPI_CETP,LBP_BPI_CETP  | 4.2 |
|    | 426386 | AA748850  | Hs.125830 | bladder cancer overexpressed protei  |                            | 4.2 |
| 50 | 446490 | AK000706  | Hs.15125  | hypothetical protein FLJ20699        | TM;                        | 4.2 |
|    | 431750 | AA514986  | Hs.283705 | ESTs                                 | cpn60_TCP1                 | 4.2 |
|    | 428327 | AW206236  | Hs.28773  | ESTs                                 | cystatin,Coprogen_oxidase, | 4.2 |
|    | 417342 | W40277    | Hs.81994  | glycophorin C (Gerbich blood group)  |                            | 4.1 |
|    | 433688 | AA628467  | Hs.112572 | Homo sapiens cDNA FLJ14130 fis, clo  |                            | 4.1 |
| 55 | 433170 | AB037816  | Hs.8982   | KIAA1395                             | TM;                        | 4.1 |
|    | 423084 | AU076474  | Hs.123178 | translocase of inner mitochondrial   | rm                         | 4.1 |
|    | 407926 | AW956382  | Hs.59771  | ESTs                                 | TYA;SS                     | 4.1 |
|    | 445636 | AW105401  | Hs.350068 | ribosomal protein L29                |                            | 4.1 |
|    | 418589 | AI360883  | Hs.375584 | hypothetical protein FLJ11029        | filament,GTP_EFTU,EF3_C,G  | 4.1 |
| 60 | 450690 | AA296696  | Hs.333418 | FXD domain-containing ion transpor   | ATP1G1_PLM_MAT8;TM;SS      | 4.1 |
|    | 419092 | J05581    | Hs.89603  | mucin 1, transmembrane               | SEA;TM;SS                  | 4.0 |
|    | 447813 | AI394345  | Hs.238513 | hypothetical protein MGC5442         | ubiquitin;TM;SS            | 4.0 |
|    | 436419 | AI948626  | Hs.171356 | ESTs                                 | AT_hook,ATHILA             | 4.0 |
|    | 458147 | AW752597  |           | gb:IL3-CT0214-161299-045-B06 CT0214  | PMM                        | 4.0 |
| 65 | 443402 | U77846    | Hs.356316 | elastin (supravalvular aortic steno  | PDZ,LIM,pkinase            | 4.0 |
|    | 433435 | BE545277  | Hs.340959 | Ts translation elongation factor, m  | EF_TS,UBA;                 | 4.0 |
|    | 413595 | AW235215  | Hs.16145  | ESTs                                 | rm                         | 4.0 |
|    | 412607 | Z33642    | Hs.74115  | immunoglobulin superfamily, member   | ig;TM;SS                   | 4.0 |
|    | 419913 | AW270040  | Hs.34455  | ESTs                                 | EPH_lbd,fn3,pkinase,       | 4.0 |
|    | 415209 | F00183    | Hs.172004 | titin                                |                            | 4.0 |
| 70 | 439310 | AF086120  | Hs.102793 | ESTs                                 | casein_kappa,pkinase,ig,n  | 3.9 |
|    | 421777 | BE562088  | Hs.108196 | HSPC037 protein                      | TM;                        | 3.9 |
|    | 409485 | S80990    | Hs.252136 | ficollin (collagen/fibrinogen domain | Collagen,fibrinogen_C;TM=  | 3.9 |
|    | 402241 |           |           | Target Exon                          | p450;TM;SS                 | 3.9 |
|    | 432716 | AI762964  | Hs.205180 | ESTs                                 | LRR,UPAR_LY6;TM;           | 3.9 |
| 75 | 418140 | BE613836  | Hs.83551  | microfibrillar-associated protein 2  | TM;SS                      | 3.9 |
|    | 434214 | AF119871  | Hs.155860 | hypothetical protein PRO2268         | ;SS                        | 3.9 |
|    | 406855 | AA902829  |           | gb:ok72e06.s1 NCI_CGAP_GC4 Homo sap  |                            | 3.9 |
|    | 421567 | AJ272137  | Hs.198265 | matrix metalloproteinase 25          | hemopexin,Peptidase_M10;T  | 3.9 |
| 80 | 403364 |           |           | Target Exon                          | SH2_Y_phosphatase          | 3.9 |
|    | 412339 | BE151267  | Hs.314466 | ESTs                                 | tubulin                    | 3.8 |
|    | 423007 | AA320134  | Hs.196029 | Homo sapiens mRNA for KIAA1657 prot  | TIMP                       | 3.8 |
|    | 427600 | AW630918  | Hs.179774 | proteasome (prosome, macropain) act  | PA28_alpha,PA28_beta;      | 3.8 |
|    | 405201 |           |           | Target Exon                          | mito_carr,SH2,SH3,Alpha_a  | 3.8 |

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|    |        |           |           |                                     |                           |     |
|----|--------|-----------|-----------|-------------------------------------|---------------------------|-----|
| 5  | 436906 | H95990    | Hs.181244 | major histocompatibility complex, c | ig.MHC_I;TM;SS            | 3.8 |
|    | 407319 | A1743332  | Hs.257729 | ESTs, Moderately similar to ALU7_HU | rrm,Lipoprotein_2         | 3.8 |
|    | 400290 | H18836    | Hs.31608  | hypothetical protein FLJ20041       | Cys_knot                  | 3.8 |
|    | 430240 | BE303038  | Hs.236547 | Homo sapiens, clone IMAGE:2905978,  | HEAT_PBS;TM;              | 3.8 |
|    | 442487 | AF191019  | Hs.8361   | hypothetical protein, estradiol-ind | LRR,LRRNT;TM;SS           | 3.8 |
| 10 | 408135 | AA317248  | Hs.42957  | methyltransferase-like 1            | Methyltransf_4;TM;        | 3.8 |
|    | 419942 | U25138    | Hs.93841  | potassium large conductance calcium | CaKB;TM;SS                | 3.8 |
|    | 410584 | AB011112  | Hs.64742  | KIAA0540 protein                    |                           | 3.8 |
|    | 440676 | NM_004987 | Hs.112378 | LIM and senescent cell antigen-like | LIM;SS                    | 3.8 |
|    | 406874 | AW161706  | Hs.180842 | ribosomal protein L13               | Ribosomal_L13e;SS         | 3.7 |
| 15 | 429249 | X81479    | Hs.2375   | egf-like module containing, mucin-I | 7tm_2,EGF,GPS,S_locus_gly | 3.7 |
|    | 430799 | C19035    | Hs.164259 | ESTs                                | FKBP,TPR                  | 3.7 |
|    | 453099 | H62087    | Hs.31659  | thyroid hormone receptor-associated | WD40;TM;                  | 3.7 |
|    | 421794 | X86096    | Hs.108371 | E2F transcription factor 4, p107/p1 | E2F_TDP,KOW,Ribosomal_L14 | 3.7 |
|    | 444795 | AI193356  | Hs.160316 | ESTs                                | Tropomyosin,ACOX          | 3.7 |
| 20 | 443834 | AI741510  | Hs.173548 | ESTs                                | CUB,MAM,F5_F8_type_C      | 3.7 |
|    | 429731 | AK001592  | Hs.212172 | beta-carotene 15,15'-dioxygenase    | RPE65;SS                  | 3.7 |
|    | 426433 | L38969    | Hs.169875 | thrombospondin 3                    | TSPN,tsp_3,EGF,toxin;TM   | 3.7 |
|    | 426395 | BE151985  | Hs.355669 | hypothetical protein FLJ23316       | kinase                    | 3.7 |
|    | 406704 | M21665    | Hs.929    | myosin, heavy polypeptide 7, cardia | myosin_head,IQ,Myosin_tai | 3.7 |
| 25 | 447850 | AF193807  | Hs.131835 | Rhesus blood group, B glycoprotein  | Ammonium_transp,FecCD;TM= | 3.7 |
|    | 430281 | A1878842  | Hs.237924 | CGI-69 protein                      | mito_carr,homeobox;TM;S   | 3.7 |
|    | 448360 | AL117560  | Hs.306352 | Homo sapiens mRNA; cDNA DKFZp566P23 |                           | 3.7 |
|    | 446057 | AI420227  | Hs.366053 | Trp-p8 transient receptor potential |                           | 3.7 |
|    | 432078 | BE314877  | Hs.24553  | hypothetical protein FLJ12541 simil | TM;SS                     | 3.7 |
| 30 | 406854 | AA613705  | Hs.252259 | ribosomal protein S3                | KH-domain,Ribosomal_S3_C; | 3.7 |
|    | 422532 | AL008726  | Hs.118126 | protective protein for beta-galacto | serine_carbpept,GalP_UDP_ | 3.7 |
|    | 428171 | AA489323  | Hs.182825 | ribosomal protein L35               | Ribosomal_L29;            | 3.6 |
|    | 442285 | W28729    | Hs.356072 | uncharacterized hypothalamus protei |                           | 3.6 |
|    | 411281 | BE392792  | Hs.4786   | Homo sapiens cDNA: FLJ22849 fis, cl | cadherin                  | 3.6 |
| 35 | 457657 | AW411509  | Hs.352567 | hypothetical protein PRO2121        | UQ_con;TM;                | 3.6 |
|    | 414624 | BE389320  | Hs.23628  | 3 beta-hydroxy-delta 5-C27-steroid  |                           | 3.6 |
|    | 451564 | AU076698  | Hs.132760 | hypothetical protein MGC15729       | sugar_tr,Condensation;TM= | 3.6 |
|    | 445411 | AL137255  | Hs.12646  | hypothetical protein FLJ22693       | hormone_rec,zf-CCCH;TM;   | 3.6 |
|    | 400785 |           |           | C11000861:gi 9938016 ref NP_064687. | TM;SS                     | 3.6 |
| 40 | 413343 | BE392026  | Hs.334346 | hypothetical protein MGC13045       | TM;                       | 3.6 |
|    | 427380 | NM_005534 | Hs.177559 | interferon gamma receptor 2 (interf | fn3;TM;SS                 | 3.6 |
|    | 427818 | AW511222  | Hs.193765 | ESTs                                |                           | 3.6 |
|    | 449957 | D31365    | Hs.24220  | hypothetical protein                | TM;                       | 3.6 |
|    | 451529 | AI917901  | Hs.208641 | ESTs                                | actin                     | 3.6 |
| 45 | 446528 | AU076640  | Hs.15243  | nucleolar protein 1 (120KD)         | Nol1_Nop2_Sun;TM;         | 3.6 |
|    | 431659 | AA031875  | Hs.266940 | t-complex-associated-testis-express | Tctex-1;TM;               | 3.6 |
|    | 433350 | BE563152  | Hs.10362  | Homo sapiens cDNA: FLJ20944 fis, cl | zf-C3HC4,SPRY             | 3.6 |
|    | 412896 | AW804157  | Hs.375570 | major histocompatibility complex, c | ig.MHC_II_beta;TM;SS      | 3.6 |
|    | 441748 | R14439    | Hs.209194 | ESTs                                |                           | 3.6 |
| 50 | 406853 | AA614553  | Hs.252259 | hypothetical protein FLJ23059       | KH-domain,Ribosomal_S3_C; | 3.5 |
|    | 457464 | AW972234  | Hs.126580 | ESTs                                |                           | 3.5 |
|    | 429619 | AL120751  | Hs.211568 | eukaryotic translation initiation f |                           | 3.5 |
|    | 423309 | BE006775  | Hs.126782 | sushi-repeat protein                | sushi,HYR;SS              | 3.5 |
|    | 438682 | AA354489  | Hs.375594 | EBP50-PDZ interactor of 64 kD       |                           | 3.5 |
| 55 | 453022 | AA031499  | Hs.118489 | ESTs                                | Amino_oxidase             | 3.5 |
|    | 434042 | AI589941  | Hs.8254   | Homo sapiens, Similar to tumor diff |                           | 3.5 |
|    | 424867 | AI024860  | Hs.153591 | Not56 (D. melanogaster)-like protei | TM;SS                     | 3.5 |
|    | 417298 | AW665639  | Hs.37958  | ESTs                                |                           | 3.5 |
|    | 403943 |           |           | C5000355:gi 4503225 ref NP_000765.1 |                           | 3.5 |
| 60 | 429497 | AB028953  | Hs.204121 | KIAA1030 protein                    | fn3;TM;                   | 3.5 |
|    | 426613 | U96132    | Hs.171280 | hydroxyacyl-Coenzyme A dehydrogenas | adh_short;TM;SS           | 3.5 |
|    | 428343 | AL043021  | Hs.12705  | ESTs                                | WD40;SS                   | 3.5 |
|    | 456376 | AA663904  | Hs.89862  | TNFRSF1A-associated via death domai | death;TM;                 | 3.5 |
|    | 400348 | AJ251708  | Hs.352588 | Target                              |                           | 3.5 |
| 65 | 404854 |           |           | Target Exon                         | ;SS                       | 3.5 |
|    | 427930 | AA417696  | Hs.372121 | ESTs                                |                           | 3.5 |
|    | 453143 | AA382234  | Hs.356289 | protein tyrosine phosphatase, recep | serpin;SS                 | 3.5 |
|    | 406806 | AW088535  | Hs.350108 | ribosomal protein, large, P0        | TM;                       | 3.5 |
|    | 406793 | AW264291  | Hs.5662   | guanine nucleotide binding protein  | WD40;TM;                  | 3.5 |
| 70 | 414525 | C14904    | Hs.45184  | Homo sapiens cDNA FLJ12284 fis, clo |                           | 3.5 |
|    | 419950 | AK001645  | Hs.93871  | hypothetical protein FLJ10783       | Glyco_hydro_47;TM;SS      | 3.5 |
|    | 404243 |           |           | NM_006778:Homo sapiens ring finger  | zf-C3HC4,zf-B_box;TM;SS   | 3.4 |
|    | 424611 | NM_001421 | Hs.151139 | E74-like factor 4 (ets domain trans | Ets;SS                    | 3.4 |
|    | 432831 | AI821702  | Hs.115959 | ESTs, Weakly similar to I38022 hypo |                           | 3.4 |
| 75 | 413943 | AW294416  | Hs.144687 | Homo sapiens cDNA FLJ12981 fis, clo | TM;                       | 3.4 |
|    | 418558 | AW082266  | Hs.86131  | Fas (TNFRSF6)-associated via death  | death,DED;SS              | 3.4 |
|    | 408930 | AA146721  | Hs.334686 | hypothetical protein FLJ21588       | CUE;TM;                   | 3.4 |
|    | 403246 |           |           | Target Exon                         | HMG_box;SS                | 3.4 |
|    | 416330 | AU077101  | Hs.79222  | galactosidase, beta 1               | Glyco_hydro_35;TM;SS      | 3.4 |
| 80 | 404864 |           |           | NM_025204:Homo sapiens hypothetica  | ;                         | 3.4 |
|    | 441384 | AA447849  | Hs.288660 | Homo sapiens cDNA: FLJ22182 fis, cl | 7tm_3                     | 3.4 |
|    | 430284 | AI693534  | Hs.293196 | ESTs                                |                           | 3.4 |
|    | 433669 | AL047879  | Hs.194251 | ESTs, Weakly similar to ALU2_HUMAN  | RNA_pol_L,RNA_pol_L,RasGA | 3.4 |
|    | 456050 | R79445    | Hs.76230  | ribosomal protein S10               | S10_plectin;TM;           | 3.4 |
|    | 422311 | AF073515  | Hs.114948 | cytokine receptor-like factor 1     | fn3;TM;                   | 3.4 |
|    | 408909 | AW502034  | Hs.287379 | ESTs, Weakly similar to T26022 hypo |                           | 3.4 |
|    | 428028 | U52112    | Hs.182018 | interleukin-1 receptor-associated k | death,kinase;TM;          | 3.4 |

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|    |        |           |           |  |                             |     |
|----|--------|-----------|-----------|--|-----------------------------|-----|
|    | 424213 | BE390125  | Hs.143187 | hypothetical protein                     | DEAD,helicase_C, TM;        | 3.4 |
|    | 416432 | BE391767  | Hs.79322  | glutamyl-tRNA synthetase                 |                             | 3.4 |
|    | 400233 |           |           | Eos Control                              | Ribosomal_S9;               | 3.4 |
|    | 403252 |           |           | Target Exon                              | TM;SS                       | 3.4 |
| 5  | 409433 | AA074382  | Hs.135255 | ADAMTS14                                 |                             | 3.4 |
|    | 426053 | U68105    | Hs.172182 | poly(A)-binding protein, cytoplasmic     | rmn,PABP;TM;                | 3.4 |
|    | 448222 | AI648587  | Hs.20725  | Mov10 (Moloney leukemia virus 10, m      | TM;                         | 3.4 |
|    | 432982 | AA531058  | Hs.182248 | truncated calcium binding protein        | OPR_ZZ, TM;                 | 3.4 |
| 10 | 453914 | NM_000507 | Hs.574    | fructose-1,6-bisphosphatase 1            | FBPase;TM;                  | 3.4 |
|    | 444626 | AA320893  | Hs.117062 | hypothetical protein FLJ14497            | pyr_redox;TM;SS             | 3.4 |
|    | 427751 | AF000152  | Hs.355816 | conserved gene amplified in osteosarcoma | NIF;TM;                     | 3.4 |
|    | 416971 | R34657    | Hs.80658  | uncoupling protein 2 (mitochondrial      | mito_carr;TM;               | 3.4 |
|    | 428046 | AW812795  | Hs.337534 | ESTs, Moderately similar to I38022       | ank                         | 3.4 |
| 15 | 456575 | AW063659  | Hs.191649 | ESTs                                     | Myosin_tail                 | 3.4 |
|    | 407366 | AF026942  | Hs.17518  | gb:Homo sapiens cig33 mRNA, partial      | IBR                         | 3.4 |
|    | 414738 | L24038    | Hs.77183  | v-raf murine sarcoma 3611 viral onc      | pk kinase,DAG_PE-bind,RBD;T | 3.4 |
|    | 456356 | M74715    | Hs.89560  | iduronidase, alpha-L                     | Glyco_hydro_39;SS           | 3.3 |
|    | 429668 | AA626142  | Hs.179991 | ESTs, Weakly similar to S28942 prot      |                             | 3.3 |
| 20 | 404913 |           |           | NM_024408":Homo sapiens Notch (Dros      | EGF,ank,notch,metalthio,E   | 3.3 |
|    | 426059 | BE292842  | Hs.166120 | interferon regulatory factor 7           | IRF;SS                      | 3.3 |
|    | 451619 | AA018854  | Hs.353196 | glutathione peroxidase 3 (plasma)        | PH;SS                       | 3.3 |
|    | 410225 | AW608964  | Hs.12030  | ESTs                                     |                             | 3.3 |
|    | 402534 |           |           | Target Exon                              | :                           | 3.3 |
| 25 | 433750 | H15448    | Hs.31330  | Homo sapiens clone HQ0319                | GLFV_dehydro, GLFV_dehydr   | 3.3 |
|    | 421712 | AK000140  | Hs.107139 | hypothetical protein                     | TM;SS                       | 3.3 |
|    | 433333 | AI016521  | Hs.71816  | v-akt murine thymoma viral oncogene      | pk kinase,PH, pk kinase_C   | 3.3 |
|    | 424915 | R42755    | Hs.23096  | ESTs                                     | rmn                         | 3.3 |
|    | 408494 | AA554714  | Hs.187578 | Homo sapiens cDNA FLJ11639 fis, clo      |                             | 3.3 |
| 30 | 445084 | H38914    | Hs.250848 | hypothetical protein FLJ14761            | TM;SS                       | 3.3 |
|    | 446478 | AI950021  | Hs.370306 | ESTs                                     | TM;                         | 3.3 |
|    | 425274 | BE281191  | Hs.155462 | minichromosome maintenance deficien      | MCM;TM;                     | 3.3 |
|    | 456655 | AI376736  | Hs.111779 | secreted protein, acidic, cysteine-      | kazal;SS                    | 3.3 |
|    | 438912 | AF085843  |           | gb:Homo sapiens full length insert       |                             | 3.3 |
| 35 | 428396 | U70539    | Hs.184161 | exostoses (multiple) 1                   | Exostosin;TM;SS             | 3.3 |
|    | 437546 | AW074836  | Hs.173984 | T-box 1                                  | T-box,WD40;TM;              | 3.3 |
|    | 410693 | BE044206  |           | gb:ho40c08.x1 Soares_NFL_T_GBC_S1 H      | C1q,Collagen,cystati        | 3.3 |
|    | 414961 | U27266    | Hs.927    | myosin-binding protein H                 | fn3,ig;TM;                  | 3.3 |
|    | 422766 | AA334108  | Hs.159572 | heparan sulfate (glucosamine) 3-O-s      |                             | 3.3 |
| 40 | 426120 | AA325243  | Hs.166887 | copine 1                                 | C2,rmn;TM;                  | 3.3 |
|    | 452383 | T70900    | Hs.27189  | ESTs                                     | zf-C2H2,PRK                 | 3.3 |
|    | 456799 | AC004923  | Hs.135187 | unc93 (C.elegans) homolog B              | TM;                         | 3.3 |
|    | 409227 | AA806165  | Hs.130323 | Homo sapiens, clone IMAGE:3960432,       | NA;NA                       | 3.3 |
|    | 432659 | AA281633  | Hs.278586 | KIAA1108 protein                         | TBC;TM;                     | 3.3 |
| 45 | 448997 | AA130390  | Hs.25549  | hypothetical protein FLJ20898            | TM;SS                       | 3.3 |
|    | 446990 | AI354717  | Hs.223908 | ESTs                                     | transmembrane4              | 3.3 |
|    | 437259 | AI377755  | Hs.120695 | ESTs                                     | MHC_II_alpha,ig             | 3.3 |
|    | 423461 | AB020527  | Hs.128827 | solute carrier family 17 (sodium ph      | sugar_fr;TM;                | 3.3 |
|    | 421563 | NM_006433 | Hs.105806 | granulysin                               | :SS                         | 3.3 |
| 50 | 453804 | AA300204  | Hs.35276  | KIAA0852 protein                         | TM;                         | 3.3 |
|    | 428810 | AF068236  | Hs.193788 | nitric oxide synthase 2A (inducible      | NAD_binding,flavodoxin,FA   | 3.3 |
|    | 453933 | AI462933  | Hs.65377  | ESTs                                     | EF_TS,UBA,transmembr        | 3.3 |
|    | 449267 | AI638640  | Hs.220624 | ESTs                                     |                             | 3.3 |
|    | 418165 | R45959    | Hs.6637   | ESTs                                     | mito_carr                   | 3.3 |
| 55 | 446673 | NM_016361 | Hs.15871  | LPAP for lysophosphatidic acid phos      | acid_phosphat;TM;SS         | 3.3 |
|    | 402475 |           |           | ubiquitin specific protease 18           | :                           | 3.2 |
|    | 404233 |           |           | Target Exon                              | HIT                         | 3.2 |
|    | 406655 | M21533    | Hs.277477 | major histocompatibility complex, c      | ig,MHC_I;TM;SS              | 3.2 |
| 60 | 414556 | AW975063  | Hs.343443 | ribosomal protein L35                    | Ribosomal_L36e;             | 3.2 |
|    | 450191 | AW137243  | Hs.248074 | ESTs                                     | homeobox;TM;                | 3.2 |
|    | 435906 | AI686379  | Hs.110796 | SAR1 protein                             | arl,ras;TM;                 | 3.2 |
|    | 412540 | C18341    | Hs.73999  | thyroid hormone receptor interactor      | SH3,FCH;SS                  | 3.2 |
|    | 422562 | AI962060  | Hs.118397 | AE-binding protein 1                     | Zn_carbOpept,F5_F8_type_C   | 3.2 |
|    | 431051 | AA491143  | Hs.283374 | ESTs, Weakly similar to CA15_HUMAN       | TM;                         | 3.2 |
| 65 | 407984 | AW134708  | Hs.243569 | ESTs                                     |                             | 3.2 |
|    | 441494 | AW452344  | Hs.129977 | ESTs                                     |                             | 3.2 |
|    | 423114 | AI076497  | Hs.1614   | cholinergic receptor, nicotinic, al      | Neur_chan_LBD,Neur_chan_m   | 3.2 |
|    | 419833 | AA251131  | Hs.220697 | ESTs                                     | WHEP-TRS,tRNA-synt_1b,non   | 3.2 |
|    | 419036 | T80967    | Hs.372603 | gb:yd23f12.s1 Soares fetal liver sp      |                             | 3.2 |
| 70 | 431222 | X56777    | Hs.273790 | zona pellucida glycoprotein 3A (spe      | zona_pellucida;TM;SS        | 3.2 |
|    | 453094 | AA740928  | Hs.27356  | ESTs                                     |                             | 3.2 |
|    | 426989 | AI815206  | Hs.367644 | ESTs                                     | BAG,ubiquitin               | 3.2 |
|    | 445033 | AV652402  | Hs.72901  | cyclin-dependent kinase inhibitor 2      | ank;                        | 3.2 |
|    | 446272 | BE268912  | Hs.14601  | hematopoietic cell-specific Lyn sub      | SH3,HS1_rep;TM;             | 3.2 |
| 75 | 438930 | AW843633  | Hs.343261 | hypothetical protein AL110115            | HLH                         | 3.2 |
|    | 438183 | BE263252  | Hs.6101   | hypothetical protein MGC3178             | thioreid;TM;                | 3.2 |
|    | 421310 | AW630067  | Hs.103315 | trinucleotide repeat containing 1        | PHD                         | 3.2 |
|    | 409293 | R02673    | Hs.110156 | ESTs                                     |                             | 3.2 |
|    | 407115 | AA084921  | Hs.76230  | ribosomal protein S10                    | S10_plectin;TM;             | 3.2 |
| 80 | 401174 |           |           | Target Exon                              | transmembrane4,EF_TS,UBA    | 3.2 |
|    | 400217 |           |           | Eos Control                              | ras;SS                      | 3.2 |
|    | 408676 | AI815189  | Hs.57475  | sex comb on midleg homolog 1             |                             | 3.2 |
|    | 418245 | AA088767  | Hs.83883  | transmembrane, prostate androgen in      | TM,SS                       | 3.2 |
|    | 403694 |           |           | Target Exon                              | UDPGT                       | 3.2 |

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|    |        |           |           |                                     |                           |     |
|----|--------|-----------|-----------|-------------------------------------|---------------------------|-----|
| 5  | 414265 | BE410411  | Hs.75864  | endoplasmic reticulum glycoprotein  |                           | 3.2 |
|    | 451118 | AI862096  | Hs.60640  | ESTs                                | EGF,vwc,TIL,SS            | 3.2 |
|    | 422624 | BE16678   | Hs.76152  | KDEL (Lys-Asp-Glu-Leu) endoplasmic  | ER_lumen_recept           | 3.2 |
|    | 437388 | AL359586  | Hs.14478  | Homo sapiens mRNA: cDNA DKFZp762H18 |                           | 3.2 |
|    | 429150 | AF120103  | Hs.197366 | smoothened (Drosophila) homolog     | COX8,SHMT,MIF,GST_C,EF1G_ | 3.2 |
|    | 430379 | AF134149  | Hs.240395 | potassium channel, subfamily K, mem | ion_trans;TM;SS           | 3.2 |
|    | 434956 | BE266566  | Hs.4288   | hypothetical protein DKFZp434K046   | Cullin;TM;                | 3.2 |
|    | 422166 | W72424    | Hs.112405 | S100 calcium-binding protein A9 (ca | efhand,S_100;TM;          | 3.2 |
| 10 | 452493 | AI904031  | Hs.106826 | KIAA1696 protein                    | PHD,Myc-LZ,DC1,AT_hook;TM | 3.2 |
|    | 413100 | BE065208  |           | gb.RC1-BT0314-310300-015-b09 BT0314 |                           | 3.2 |
|    | 420764 | BE250676  | Hs.19928  | hypothetical protein SP329          | F-box;TM;                 | 3.2 |
|    | 421680 | AL031186  | Hs.289106 | Human DNA sequence from clone CTA-9 | Collagen;TM;SS            | 3.2 |
|    | 406738 | AA587983  |           | gb.nj30b09.s1 NCI_CGAP_AA1 Homo sap | TIM,Ribosomal_SS;TM;SS=   | 3.1 |
| 15 | 434288 | AW189075  | Hs.116265 | fibronin3                           | EGF,granulin,TB,EB,TIL;TM | 3.1 |
|    | 438264 | T86773    | Hs.6133   | calpain 5                           | Calpain_III,Peptidase_C2, | 3.1 |
|    | 436819 | AA731746  | Hs.120232 | ESTs                                | rm                        | 3.1 |
|    | 459298 | R86701    |           | gb.ym86d09.r1 Soares adult brain N2 | TM;                       | 3.1 |
|    | 452127 | BE562126  | Hs.28081  | eukaryotic translation initiation f | rm,7tm_1,SNF;TM;          | 3.1 |
| 20 | 422305 | AI928242  | Hs.293438 | ESTs, Highly similar to AF198488 1  |                           | 3.1 |
|    | 414393 | AA146855  |           | gb.zo41h10.r1 Stratagene endothelia |                           | 3.1 |
|    | 423369 | BE219099  | Hs.279513 | ESTs                                |                           | 3.1 |
|    | 429457 | BE243065  | Hs.202955 | hypothetical protein FLJ20507       | Cys-protease-3C;TM;       | 3.1 |
|    | 409124 | AW292809  | Hs.50727  | N-acetylglucosaminidase, alpha- (Sa | TM;SS                     | 3.1 |
| 25 | 429615 | AF258627  | Hs.211562 | ATP-binding cassette, sub-family A  | ABC_tran;TM;SS            | 3.1 |
|    | 445519 | AI635202  | Hs.170132 | hypothetical protein FLJ22494       | TM;                       | 3.1 |
|    | 410007 | AW950887  | Hs.57813  | zinc ribbon domain containing, 1    | TFIIS;TM;                 | 3.1 |
|    | 407228 | M25079    | Hs.155376 | hemoglobin, beta                    | globin;TM;                | 3.1 |
|    | 411573 | AB029000  | Hs.70823  | KIAA1077 protein                    | Sulfatase;TM;             | 3.1 |
| 30 | 406654 | M90686    | Hs.73885  | HLA-G histocompatibility antigen, c | ig,MHC_I;TM;SS            | 3.1 |
|    | 435072 | AW592176  | Hs.116932 | ESTs                                | zf-RanBP,MDM2             | 3.1 |
|    | 456642 | AW451623  | Hs.109752 | putative c-Myc-responsive           | ;SS                       | 3.1 |
|    | 445457 | AF168793  | Hs.12743  | camitine O-octanoyltransferase      | Carn_acyltransf;TM;       | 3.1 |
|    | 448389 | AW188950  | Hs.345838 | ESTs                                | 2OG-Fel1_Oxy,rm,SH3,ras   | 3.1 |
| 35 | 458248 | BE407379  | Hs.108082 | ESTs, Weakly similar to T31636 hypo | C1q,Collagen;TM;SS        | 3.1 |
|    | 451310 | AW250651  | Hs.26213  | Human DNA sequence from clone RP3-4 | TM;                       | 3.1 |
|    | 414688 | AI750246  | Hs.76901  | for protein disulfide isomerase-rel | thioered;SS               | 3.1 |
|    | 428797 | AA496205  | Hs.193700 | Homo sapiens mRNA: cDNA DKFZp586I03 | LIM,Ran_BP1,GRIP,TPR_pro_ | 3.1 |
|    | 425067 | BE223071  | Hs.169142 | ESTs                                |                           | 3.1 |
| 40 | 410639 | BE269047  | Hs.65234  | hypothetical protein FLJ20596       | DEAD,helicase_C,PRK,AIP3; | 3.1 |
|    | 413011 | AW068115  | Hs.821    | biglycan                            | LRRLRRNT;SS               | 3.1 |
|    | 421502 | AF111856  | Hs.105039 | solute carrier family 34 (sodium ph | Ribosomal_L20_Na_Pi_cotra | 3.1 |
|    | 447164 | AF026941  | Hs.17518  | vipirin; similar to inflammatory r  | MoaA_NifB_PqqE;TM;        | 3.1 |
|    | 414907 | X90725    | Hs.77597  | polo (Drosophila)-like kinase       | Ribosomal_L37ae,pkinase,P | 3.1 |
| 45 | 418613 | AA744529  | Hs.86575  | mitogen-activated protein kinase ki | kinase,CNH;TM;            | 3.1 |
|    | 406734 | AI565616  |           | gb.to16h12.x1 NCI_CGAP_U12 Homo sap |                           | 3.1 |
|    | 410188 | AL096739  | Hs.107260 | hypothetical protein DKFZp586H0523  | Ricin_B_lectin,Glycos_tra | 3.1 |
|    | 437959 | AI472068  | Hs.375604 | KIAA1856 protein                    | elF5_elF2B,W2;TM;         | 3.1 |
|    | 406764 | AA429825  | Hs.343443 | ribosomal protein L36               | Ribosomal_L35e;           | 3.1 |
| 50 | 406637 | U14966    | Hs.180946 | ribosomal protein L5                | Ribosomal_L18p;           | 3.1 |
|    | 451080 | H41082    | Hs.271783 | ESTs                                |                           | 3.1 |
|    | 414875 | H42679    | Hs.77522  | major histocompatibility complex, c | ig,MHC_II_alpha;TM;SS     | 3.1 |
|    | 416365 | U15131    | Hs.79265  | suppression of tumorigenicity 5     | DENN,dDENN,uDENN;TM;SS=   | 3.1 |
|    | 400261 |           |           | Eos Control                         | ig,MHC_II_beta;TM;SS      | 3.1 |
| 55 | 412270 | AC005262  | Hs.73797  | guanine nucleotide binding protein  | G-alpha_arf;TM;           | 3.1 |
|    | 456843 | BE301883  | Hs.152707 | glioblastoma amplified sequence     | ;                         | 3.1 |
|    | 443071 | AL080021  | Hs.8986   | complement component 1, q subcompon | C1q,Collagen;SS           | 3.1 |
|    | 426196 | BE272095  | Hs.167791 | reticulocalbin 1, EF-hand calcium b | efhand;SS                 | 3.1 |
|    | 424010 | AL080188  | Hs.137556 | Homo sapiens mRNA: cDNA DKFZp434A13 | cadherin;TM;SS            | 3.1 |
| 60 | 439975 | AW328081  | Hs.6817   | inosine triphosphatase (nucleoside  | Ham1p_like;TM;            | 3.1 |
|    | 450761 | R75930    | Hs.174838 | Homo sapiens cDNA FLJ14192 fis, clo |                           | 3.1 |
|    | 418322 | AA284166  | Hs.84113  | cyclin-dependent kinase inhibitor 3 | Y_phosphatase,DSPc;TM;S   | 3.1 |
|    | 432396 | AW295956  | Hs.11900  | hypothetical protein FLJ14972       | Xlink,zf-CCCH,G-patch,non | 3.1 |
|    | 407904 | W44735    | Hs.107260 | Homo sapiens cDNA: FLJ21278 fis, cl |                           | 3.1 |
| 65 | 452500 | AW373011  | Hs.54558  | hypothetical protein FLJ22222       |                           | 3.1 |
|    | 432171 | AI202503  | Hs.343651 | ESTs, Weakly similar to ALUB_HUMAN  | WD40                      | 3.1 |
|    | 416768 | AA363733  | Hs.1032   | regenerating islet-derived 1 alpha  | lectin_c;TM;SS            | 3.1 |
|    | 442492 | AA528489  | Hs.234518 | ribosomal protein L23               | Ribosomal_L14;            | 3.0 |
|    | 421210 | U80016    | Hs.102598 | mucosal vascular addressin cell adh | TM;SS                     | 3.0 |
| 70 | 439429 | AF150286  |           | gb:AF150286 Human mRNA from cd34 st | RA,Band_7,MBOAT           | 3.0 |
|    | 447463 | AW378685  | Hs.18625  | Mitochondrial Acyl-CoA Thioesterase | Acyl-CoA_hydro;TM;        | 3.0 |
|    | 448352 | AA337951  | Hs.20991  | SET domain, bifurcated 1            | AhpC-TSA,SET,MBD;TM;SS=   | 3.0 |
|    | 428291 | AA534009  | Hs.183487 | interferon stimulated gene (20kD)   |                           | 3.0 |
|    | 445669 | AI570830  | Hs.174870 | ESTs                                |                           | 3.0 |
|    | 452862 | AW378065  | Hs.8687   | ADAMTS2 (a disintegrin-like and me  | Pep_M12B_propep,tsq_1,Rep | 3.0 |
| 75 | 430069 | AI219293  | Hs.293660 | Homo sapiens, clone IMAGE:3535476,  | SPRY,zf-B_box,zf-C3HC4;TM | 3.0 |
|    | 451028 | AA021258  | Hs.123073 | ESTs                                |                           | 3.0 |
|    | 446021 | BE389213  | Hs.286    | ribosomal protein L4                | Ribosomal_L4;TM;          | 3.0 |
|    | 434652 | AF148713  | Hs.125830 | bladder cancer overexpressed protei | WD40,DUF6;                | 3.0 |
| 80 | 425829 | AL133079  | Hs.134126 | crystallin, gamma S                 | crystal;TM;               | 3.0 |
|    | 424909 | S78187    | Hs.153752 | cell division cycle 25B             | Rhodanese;SS              | 3.0 |
|    | 423579 | NM_004121 | Hs.1675   | gamma-glutamyltransferase-like acti | Acyl_glu_transpept;TM;SS  | 3.0 |
|    | 444652 | BE513613  | Hs.11538  | actin related protein 2/3 complex,  | WD40;TM;                  | 3.0 |
|    | 441283 | AA927670  | Hs.131704 | ESTs                                | CUB,MAM,F5_F8_type_C      | 3.0 |

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|------------|-------------|---------------------------------------|---|---|-------------------------------------|--------|-----|
| 5          | 437415      | AL137400                              | Hs.306456   | pre-mRNA processing factor 18   | Band_41.hormone2.Prp18;TM           | 3.0    |     |
|            | 444542      | AI161293                              | Hs.280380   | aminopeptidase  | NAD_binding.flavodoxin,FA           | 3.0    |     |
|            | 442426      | AI373062                              | Hs.332938   | hypothetical protein MGC5370  | zf-RanBP,MDM2                       | 3.0    |     |
|            | 447910      | AL137679                              | Hs.20000  | Homo sapiens mRNA; cDNA DKFZp434D24   | Exonuclease:SS                      | 3.0    |     |
|            | 426858      | NM_004182                             | Hs.172791   | ubiquitously-expressed transcript   | DUF232;SS                           | 3.0    |     |
|            | 445417      | AK001058                              | Hs.12680  | a disintegrin-like and metalloprote   | tsp_1,Repolyisin,Pep_M12B           | 3.0    |     |
|            | 430482      | AF131810                              | Hs.241545   | hypothetical protein  | TM;SS                               | 3.0    |     |
|            | 427661      | AA410292                              | Hs.104761   | ESTs  | wnt                                 | 3.0    |     |
|            | 451876      | T63141                                |   | gb:yb99a12.s1 Stratagene lung (9372   | SH3                                 | 3.0    |     |
|            | 10          | 453862                                | AL137493  | Hs.35945  | Homo sapiens mRNA; cDNA DKFZp434B12 | ig;TM; | 3.0 |
| 452965     |             | AI904779                              | Hs.247525   | Human DNA sequence from clone RP11-   | C2,PHD,RPH3A_effector,zf-           | 3.0    |     |
| 441455     |             | AJ271671                              | Hs.7854   | zinc/ferron regulated transporter-lik   | Zip;TM;SS                           | 3.0    |     |
| 452600     |             | AI910842                              | Hs.103381   | ESTs  | Exo_endo_phos                       | 3.0    |     |
| 450775     |             | AA902384                              | Hs.73853  | bone morphogenetic protein 2  | TGFb_propeptide,TGF-beta,           | 3.0    |     |
| 417634     |             | W27202                                | Hs.82327  | glutathione synthetase  | GSH_synthase;TM;                    | 3.0    |     |
| 415152     |             | W22644                                | Hs.278712   | Homo sapiens cDNA FLJ11074 fis, clo   |                                     | 3.0    |     |
| 410093     |             | AW589558                              | Hs.299883   | ESTs, Weakly similar to KIAA0970 pr   |                                     | 3.0    |     |
| 412404     |             | AW075995                              | Hs.86228  | TRIAD3 protein  |                                     | 3.0    |     |
| 443466     |             | BE243123                              | Hs.321045   | IKK-related kinase epsilon; inducib   | kinase,RIO1;TM;                     | 3.0    |     |
| TABLE 29B: |             |                                       |   |   |                                     |        |     |
|            | Pkey:       | Unique Eos probeset identifier number |   |   |                                     |        |     |
|            | CAT number: | Gene cluster number                   |   |   |                                     |        |     |
|            | Accession:  | Genbank accession numbers             |   |   |                                     |        |     |
| 25         | Pkey        | CAT Number                            | Accession   |   |                                     |        |     |
|            | 458147      | 1030220_1                             | AW848781 AW848490 AW849062 AW752597 AW752699  |   |                                     |        |     |
|            | 406855      | 0_0                                   | AA902829  |   |                                     |        |     |
|            | 400233      | 11259_1                               | BC004324 NM_001020 BC007977 M06854 BM050628 BG829809 BE385504 BG744451 BI826914 BE440007 BI260656 BE395117 BE389334                                   |   |                                     |        |     |
|            |             |                                       | BE255792 BI194169 BI668218 BI194376 BG716213 BG714408 BE392513 AV722219 AW328077 BM424171 BI828267 AW958606 BG831252                                  |   |                                     |        |     |
|            |             |                                       | BE392943 BE394033 BI858915 BI668334 BE521019 BG706995 BE791985 BF967484 BI193635 BG761859 BM466537 BG747165 BG827488 AI133550                         |   |                                     |        |     |
|            |             |                                       | BM011511 BI227282 BG489212 BG478388 BE727789 BI160880 BG831707 BG324692 BM470427 BI083889 BG831605 BG754114 BG420536                                  |   |                                     |        |     |
|            |             |                                       | BF308210 BE384213 BG832271 BG828032 BG481641 BF205675 BE899041 BE271558 BI193807 BI159866 BG473786 BG397178 BI194428 BI117210                         |   |                                     |        |     |
|            |             |                                       | BG768326 BG759507 BF975645 BF343657 BM020598 BG831082 BG829943 BG829501 BF306557 BE562511 BM050145 BM017978 BI193934                                  |   |                                     |        |     |
|            |             |                                       | BI160764 BI160371 BG754991 BF973348 BF663234 BF032537 BE388168 BM009051 BI192794 BG831002 BG830459 BG764737 BG761808                                  |   |                                     |        |     |
| 35         |             |                                       | BG481705 BG104314 BM464565 BI261500 BG831857 BG831684 BG829852 BG765030 BG760419 BG760268 BG749762 BG480900 BG419627                                  |   |                                     |        |     |
|            |             |                                       | BG248771 BF975542 BM042233 BI161149 BG831302 BG830033 BG829626 BM050064 BI193014 BI161360 BG822729 BG110091 BG106500                                  |   |                                     |        |     |
|            |             |                                       | BI258369 BG831982 BM458301 BM019513 BI161350 BI114178 BG481969 BG474870 BF974048 BF971122 BE741405 BE395269 BG832027                                  |   |                                     |        |     |
|            |             |                                       | BG831469 BG490895 BM413638 BG943529 BG831012 BG829471 BG686284 BG337575 BG336551 BF206677 BI258301 BI160946 BG105893                                  |   |                                     |        |     |
|            |             |                                       | BF183072 BM459542 BI193881 BG832043 BG831323 BI194545 BI160968 BG755930 BG706018 BE743865 BM465145 BG831227 BG774290                                  |   |                                     |        |     |
|            |             |                                       | BF683451 BE907161 BM045391 BI194396 BI161269 BG747091 BG546643 BF984863 BI160206 BI226402 BI226336 AW328236 BG339458 BF972634                         |   |                                     |        |     |
|            |             |                                       | BE909808 BI160988 BI160251 BG828764 BG826860 BG758360 BF568228 BI818282 BI457127 BG831491 BG759864 AI830010 BF568381 BE907238                         |   |                                     |        |     |
|            |             |                                       | BI161172 BI116773 BG827153 BG825088 BG335419 BG109404 AI929068 BE906354 BE408564 BM045000 BG339617 BG282794 BG335767                                  |   |                                     |        |     |
|            |             |                                       | BE907263 BF568921 BG829961 BG479305 BG260397 AI922228 BE301975 AW516055 BG480919 BG480626 AW196817 BG336261 BE906157                                  |   |                                     |        |     |
|            |             |                                       | BE395717 BE391427 BI192954 BG829757 BG476379 BE301536 BE394727 BE257695 BE905344 AI433577 BE894416 BE886992 BE409223                                  |   |                                     |        |     |
| 40         |             |                                       | BF034756 BE904077 BG830886 BE909153 BE907998 BE395767 AI871751 BE744523 BI192663 BG831669 AI000225 BE743836 BE272515 AA628078                         |   |                                     |        |     |
|            |             |                                       | BM453802 BE393375 BE393033 AW170187 BE730961 BE395410 BE744572 BE392297 BE391448 BE390780 BE388821 BE258477 BE905970                                  |   |                                     |        |     |
|            |             |                                       | BE901567 BE898833 BE880326 BF726889 BE910504 BE390753 BE390131 AA650542 BE744156 BE394125 BE742207 BE395265 BE392942                                  |   |                                     |        |     |
|            |             |                                       | BE894336 BE378222 BE906926 BE904650 BE393704 BE620999 BE515162 BE378753 BE272370 BE907458 BE612801 BE392484 BE907636                                  |   |                                     |        |     |
|            |             |                                       | BE907353 BE910491 BE909796 BE905331 AW248173 AI683576 BE908826 BE620180 BF037570 BE908312 BE615015 BE256977 BE746875                                  |   |                                     |        |     |
|            |             |                                       | BE394133 BE391478 BE910068 BE907185 BE742109 AA995746 BE561195 BE908825 BE906472 BE906509 BE906017 BE910442 BE514657                                  |   |                                     |        |     |
|            |             |                                       | BI261969 BE741707 BE392216 BM042793 BF570283 BI262119 BE395707 BE378298 AW327827 BE394422 BF569178 BE263240 AI700512                                  |   |                                     |        |     |
|            |             |                                       | BG830290 BF569308 BF569156 BI194587 BE390831 BG745096 AI681675 BE395674 AA136372 BE279892 AA442822 BE384898 AA313519 AI878866                         |   |                                     |        |     |
|            |             |                                       | AA305904 F33366 BE394852 F29153 F33618 AI133637 AA300009 F34063 F29455 AU099691 AI905085 AI906656 AA343249 BE388691 AW404280                          |   |                                     |        |     |
|            |             |                                       | AA379888 F29022 BF089981 F31013 F24305  |   |                                     |        |     |
| 45         |             | 438912                                | 4071_1  | AF085843 R70523 R70523  |                                     |        |     |
|            |             | 410693                                | 1054267_1   | BE044206 AW797320 BE161676 AW797356 AW797352  |                                     |        |     |
|            |             | 413100                                | 1490226_1   | BE065224 BE065168 BE065313 BE065208   |                                     |        |     |
|            |             | 406738                                | 0_0   | AA587983  |                                     |        |     |
|            |             | 459298                                | 90831_2   | AL157655 BF802216 R86701 BF802224 R84600 BF356151 BG982935  |                                     |        |     |
|            |             | 414393                                | 15833_3   | AL532972 BI092731 AI765546 AA393801 AI129669 AI393538 AW519008 AI432598 AW295856 AI650941 AI470541 AL550388 AA146856 AI074762 |                                     |        |     |
|            |             |                                       |   | BE895187 AA393867 BI052082  |                                     |        |     |
|            |             | 406734                                | 0_0   | AI565616 AI190141   |                                     |        |     |
|            |             | 400261                                | 23110_1   | BC006097 X03066 NM_002120 M26040 AW469119 AW469127 AI299772 AW518149 AI144456 AW628070 AI629032 AI358810 AI880433 AI440472    |                                     |        |     |
|            |             |                                       |   | AI357070 AI865365 AW014799 AI767973 AW518041 AA809398 AW758606  |                                     |        |     |
| 65         |             | 439429                                | 452694_1  | AF150286 AV739062 AA835857  |                                     |        |     |
|            |             | 451876                                | 2328579_1   | T63141 AI821021 BF370092 BF370127 BF370060 T62998   |                                     |        |     |
|            | TABLE 29C:  |                                       |   |   |                                     |        |     |
|            |             | Pkey:                                 | Unique number corresponding to an Eos probeset  |   |                                     |        |     |
|            |             | Ref:                                  | Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA |   |                                     |        |     |
|            |             |                                       | sequence of human chromosome 22" Dunham, et al. (1999) <u>Nature</u> 402:489-495.   |   |                                     |        |     |
|            |             | Strand:                               | Indicates DNA strand from which exons were predicted.   |   |                                     |        |     |
|            |             | Nt_position:                          | Indicates nucleotide positions of predicted exons.  |   |                                     |        |     |
|            | 75          | Pkey                                  | Ref   | Strand  | Nt_position                         |        |     |
|            |             | 401699                                | 3176654   | Minus   | 33285-34084                         |        |     |
| 402241     |             | 7690131                               | Minus   | 125073-125206,130996-131125   |                                     |        |     |
| 403364     |             | 8571785                               | Plus  | 120351-120465   |                                     |        |     |
| 405201     |             | 7230116                               | Plus  | 36934-37314   |                                     |        |     |
| 400785     |             | 8131682                               | Plus  | 43113-43967   |                                     |        |     |
| 403943     |             | 7711864                               | Plus  | 100742-100904,101322-101503   |                                     |        |     |
| 404854     |             | 7143420                               | Plus  | 14260-14537   |                                     |        |     |
| 80         |             |                                       |   |   |                                     |        |     |
|            |             |                                       |   |   |                                     |        |     |
|            |             |                                       |   |   |                                     |        |     |
|            |             |                                       |   |   |                                     |        |     |
|            |             |                                       |   |   |                                     |        |     |
|            |             |                                       |   |   |                                     |        |     |
|            |             |                                       |   |   |                                     |        |     |
|            |             |                                       |   |   |                                     |        |     |
|            |             |                                       |   |   |                                     |        |     |
|            |             |                                       |   |   |                                     |        |     |

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|    |        |         |       |  |
|----|--------|---------|-------|--|
| 5  | 404243 | 5672609 | Plus  | 74695-75123                              |
|    | 403246 | 7637831 | Minus | 143547-143654,143741-143900              |
|    | 404864 | 5263010 | Plus  | 94495-94661,95055-95195,97396-97506,9760 |
|    | 403252 | 7677983 | Plus  | 102214-102692                            |
|    | 404913 | 7341740 | Plus  | 97717-97976                              |
| 10 | 402534 | 9801061 | Plus  | 58989-59457                              |
|    | 402475 | 7547191 | Plus  | 65363-65725                              |
|    | 404233 | 8218045 | Minus | 84791-85123                              |
|    | 401174 | 9438414 | Minus | 132847-133917                            |
|    | 403694 | 7107765 | Plus  | 142925-143080,165505-166186,167486-16763 |

TABLE 30A: ABOUT 282 GENES UP-REGULATED IN GLIOMA COMPARED TO NON-MALIGNANT ADULT BRAIN TISSUES THAT ARE LIKELY TO ENCODE EXTRACELLULAR OR CELL-SURFACE PROTEINS

Table 30A lists about 282 genes up-regulated in glioma compared to non-malignant adult brain tissues that are likely to encode extracellular or cell-surface proteins. These were selected as for Table 28A, except that the ratio of "average" glioma to "average" normal adult tissues was greater than or equal to 4.0, the "average" glioma level was set to the 99th percentile value amongst various glioma specimens, the "average" normal adult brain tissue level was set to the 75th percentile value amongst various non-malignant brain tissues, the "average" glioma value was greater than or equal to 50 units (this selects for the most abundant of the up-regulated genes), and the predicted protein contained a structural domain that is indicative of extracellular localization (e.g. ig, fn3, efg, 7tm domains, signal sequences, transmembrane domains). Predicted protein domains are noted.

Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigeneID: Unigene number  
 Unigene Title: Unigene gene title  
 Protein Domains: Predicted Protein Domains  
 R1: glioma vs. non-malignant adult brain tissues likely to encode extracellular or cell-surface proteins

|    | Pkey   | Accession | UniGene ID | Unigene Title                       | Protein Domains            | R1   |
|----|--------|-----------|------------|-------------------------------------|----------------------------|------|
| 30 | 406868 | AA505445  | Hs.300697  | immunoglobulin heavy constant gamma | ig;TM;                     | 37.6 |
|    | 407241 | M34516    |            | gb:Human omega light chain protein  | TM;                        | 22.7 |
|    | 414477 | U41635    | Hs.75228   | amplified in osteosarcoma           | kinase,LRR;TM;SS           | 22.7 |
|    | 417512 | X75534    | Hs.82226   | glycoprotein (transmembrane) nmb    | PKD;TM;SS                  | 15.4 |
|    | 405803 | H42321    | Hs.163593  | ribosomal protein L18a              | Ribosomal_L18ae;TM;        | 14.2 |
| 35 | 429707 | W76631    | Hs.211819  | matrix metalloproteinase 23B        | ig,Peptidase_M10;TM;SS=    | 12.8 |
|    | 419092 | J05581    | Hs.89603   | mucin 1, transmembrane              | SEA;TM;SS                  | 12.8 |
|    | 414738 | L24038    | Hs.77183   | v-raf murine sarcoma 3611 viral onc | kinase,DAG_PE-bind,RBD;T   | 12.4 |
|    | 441384 | AA447849  | Hs.288660  | Homo sapiens cDNA: FLJ22182 fis, cl | 7tm_3,none                 | 11.6 |
|    | 406521 | X57809    | Hs.181125  | immunoglobulin lambda locus         | ig,HSP70,Ppx-GppA;TM;SS    | 11.0 |
| 40 | 410584 | AB011112  | Hs.64742   | KIAA0540 protein                    | none                       | 11.0 |
|    | 426395 | BE151985  | Hs.355659  | hypothetical protein FLJ23316       | kinase,none                | 10.7 |
|    | 425184 | BE278288  | Hs.155048  | Lutheran blood group (Auberger b an | ig;TM;SS                   | 10.7 |
|    | 430379 | AF134149  | Hs.240395  | potassium channel, subfamily K, mem | ion_trans;TM;SS            | 10.3 |
|    | 408972 | AL050100  | Hs.49378   | DKFZP586D0919 protein               | TM;                        | 9.9  |
| 45 | 446921 | AB012113  | Hs.16530   | small inducible cytokine subfamily  | IL8;SS                     | 9.9  |
|    | 452862 | AW378065  | Hs.8687    | ADAMTS2 (a disintegrin-like and me  | Pep_M12B_propep,tspl_1,Rep | 9.7  |
|    | 418101 | AL047476  | Hs.296310  | gap junction protein, alpha 4, 37kD | connexin;TM;SS             | 8.5  |
|    | 400290 | H18836    | Hs.31608   | hypothetical protein FLJ20041       | Cys_knot                   | 8.4  |
|    | 401699 |           |            | Target Exon                         | TM;                        | 8.1  |
| 50 | 423309 | BE006775  | Hs.126782  | sushi-repeat protein                | sushi,HYR;SS               | 8.1  |
|    | 427600 | AW630918  | Hs.179774  | proteasome (prosome, macropain) act | PA28_alpha,PA28_beta;      | 7.9  |
|    | 436906 | H95990    | Hs.181244  | major histocompatibility complex, c | ig,MHC_I;TM;SS             | 7.8  |
|    | 425335 | BE394327  | Hs.296267  | folliculin-like 1                   | efhand,kazal,arf,ras,7tm_  | 7.7  |
|    | 413011 | AW068115  | Hs.821     | biglycan                            | LRR,LRRNT;SS               | 7.7  |
| 55 | 446295 | AI355029  | Hs.101660  | ESTs, Weakly similar to T14171 atax | LIJ                        | 7.7  |
|    | 436398 | H87136    | Hs.5174    | ribosomal protein S17               | Ribosomal_S17e,PolyA_pol;  | 7.6  |
|    | 435013 | H91923    | Hs.110024  | NM_020142:Homo sapiens NADH:ubiquin | none                       | 7.4  |
|    | 431809 | A1623488  | Hs.333488  | Homo sapiens, clone IMAGE:3603998,  | TM;SS                      | 7.4  |
|    | 424608 | X80695    | Hs.151134  | oxidase (cytochrome c) assembly 1-I | 60KD;IMP;TM;               | 7.3  |
| 60 | 438560 | AA481690  | Hs.300697  | immunoglobulin heavy constant gamma | ig                         | 7.3  |
|    | 429297 | X82494    | Hs.198862  | fibulin 2                           | EGF,ANATO,TIL,spidertoxin  | 7.2  |
|    | 450463 | AW952018  | Hs.201398  | G protein coupled receptor interact | C1q,Collagen;TM;SS         | 7.2  |
|    | 417342 | W40277    | Hs.81994   | glycophorin C (Gerbich blood group) | TM;                        | 7.2  |
|    | 414688 | AI750246  | Hs.75901   | for protein disulfide isomerase-rel | thioed;SS                  | 7.2  |
| 65 | 414044 | BE614194  | Hs.75721   | profilin 1                          | profilin;TM;               | 7.1  |
|    | 404864 |           |            | NM_025204*:Homo sapiens hypothetica | ;                          | 7.1  |
|    | 452127 | BE562126  | Hs.28081   | eukaryotic translation initiation f | mm,7tm_1,SNF;TM;           | 7.0  |
|    | 412115 | AK001763  | Hs.73239   | hypothetical protein FLJ10901       | ;SS                        | 7.0  |
|    | 409826 | AW501112  | Hs.353013  | hypothetical protein FLJ23412       | none                       | 6.9  |
| 70 | 434343 | AW956705  | Hs.3804    | DKFZP564C1940 protein               | ldl_recept_a;TM;           | 6.9  |
|    | 427714 | AF119850  | Hs.2186    | eukaryotic translation elongation f | COX8,SHMT,MIF,GST_C,EF1G_  | 6.9  |
|    | 437259 | AI377755  | Hs.120695  | ESTs                                | MHC_II_alpha,ig,none       | 6.9  |
|    | 429212 | NM_001504 | Hs.198252  | G protein-coupled receptor 9        | 7tm_1;TM;                  | 6.8  |
|    | 448988 | Y09763    | Hs.22785   | gamma-aminobutyric acid (GABA) A re | Neur_chan_LBD,Neur_chan_m  | 6.8  |
| 75 | 423505 | AF064090  | Hs.129708  | tumor necrosis factor (ligand) supe | TNF;TM;SS                  | 6.8  |
|    | 413053 | AW963263  | Hs.65377   | ESTs, Moderately similar to KIAA139 | TM;                        | 6.7  |
|    | 430542 | AI557486  | Hs.119122  | ribosomal protein L13a              | Ribosomal_L13,LACT,arf,ra  | 6.7  |
|    | 435906 | AI686379  | Hs.110796  | SAR1 protein                        | arf,ras;TM;                | 6.6  |
|    | 429307 | AU076592  | Hs.198951  | jun B proto-oncogene                | bZIP;TM;                   | 6.4  |
| 80 | 437388 | AL359586  | Hs.14478   | Homo sapiens mRNA: cDNA DKFZp762H18 | none                       | 6.4  |
|    | 415714 | NM_002290 | Hs.78672   | laminin, alpha 4                    | laminin_EGF,laminin_G,Tro  | 6.3  |
|    | 406733 | AA976565  | Hs.297753  | vimentin                            | filament,bZIP,Apolipoprot  | 6.3  |
|    | 411296 | BE207307  | Hs.10114   | growth suppressor 1                 | 2OG-Fell_Oxy;TM;SS         | 6.3  |
|    | 441321 | H17182    | Hs.7771    | B-cell associated protein           | Band_7;TM;                 | 6.3  |
|    | 444637 | T19101    | Hs.11494   | fibulin 5                           | EGF,TIL;SS                 | 6.3  |

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|    |        |           |           |                                     |                            |     |
|----|--------|-----------|-----------|-------------------------------------|----------------------------|-----|
| 5  | 413731 | BE243845  | Hs.75511  | connective tissue growth factor     | Cys_knot,isp_1,vwc,IGFBP;  | 6.2 |
|    | 422901 | R81936    | Hs.374568 | ribosomal protein L44               | sushi:none                 | 6.2 |
|    | 430397 | A1924533  | Hs.105607 | bicarbonate transporter related pro | HCO3_cotransp;TM;          | 6.1 |
|    | 429630 | M85289    | Hs.211573 | heparan sulfate proteoglycan 2 (per | EGF,ig,laminin_B,laminin_  | 6.1 |
|    | 434867 | AF159442  | Hs.103382 | phospholipid scramblase 3           | SAPA,Scramblase;TM;SS      | 6.1 |
| 10 | 431449 | M55994    | Hs.256278 | tumor necrosis factor receptor supe | TNFR_c6;TM;SS              | 6.1 |
|    | 440676 | NM_004987 | Hs.112378 | LIM and senescent cell antigen-like | LIM;SS                     | 6.0 |
|    | 424658 | NM_002406 | Hs.151513 | mannosyl (alpha-1,3-)-glycoprotein  | GNT-I,Glycos_transf_2;TM=  | 5.9 |
|    | 439310 | AF086120  | Hs.102793 | ESTs                                | casein_kappa,kinase,ig,n   | 5.9 |
|    | 410169 | A1373741  | Hs.59384  | hypothetical protein MGC3047        | ig;TM;                     | 5.8 |
| 15 | 423007 | AA320134  | Hs.196029 | Homo sapiens mRNA for KIAA1657 prot | TIMP:none                  | 5.8 |
|    | 414265 | BE410411  | Hs.75864  | endoplasmic reticulum glycoprotein  | none                       | 5.8 |
|    | 427715 | BE245274  | Hs.180428 | KIAA1181 protein                    | TM;                        | 5.8 |
|    | 409220 | BE243323  | Hs.51233  | tumor necrosis factor receptor supe | TNFR_c6,death,Lipoprotein  | 5.8 |
|    | 450690 | AA296696  | Hs.333418 | FXYD domain-containing ion transpor | ATP1G1_PLM_MAT8;TM;SS      | 5.8 |
| 20 | 433848 | AF095719  | Hs.93764  | carboxypeptidase A4                 | Zn_carbOpept,Propept_M14;T | 5.7 |
|    | 446404 | AA019961  | Hs.26216  | LOC50627                            | none                       | 5.7 |
|    | 441641 | A1650417  | Hs.247068 | ESTs, Moderately similar to ALUB_HU | Plerin_4a,fibrinogen_C,Co  | 5.7 |
|    | 418875 | W19971    | Hs.233459 | ESTs                                | Xlink:none                 | 5.7 |
|    | 424748 | AA346257  | Hs.134933 | ESTs                                | none                       | 5.7 |
| 25 | 439737 | A1751438  | Hs.41271  | Homo sapiens collagen, type VIII, a | C1q,Collagen,none          | 5.7 |
|    | 448950 | AF288687  | Hs.9275   | CGI-152 protein                     | E1-E2_ATPase,Hydrolase;TM  | 5.6 |
|    | 406654 | M90686    | Hs.73885  | HLA-G histocompatibility antigen, c | ig,MHC_I;TM;SS             | 5.6 |
|    | 423084 | AU076474  | Hs.123178 | translocase of inner mitochondrial  | nm                         | 5.6 |
|    | 402241 |           |           | Target Exon                         | p450;TM;SS                 | 5.6 |
| 30 | 425157 | NM_006227 | Hs.283007 | phospholipid transfer protein       | LBP_BPI_CETP,LBP_BPI_CETP  | 5.6 |
|    | 428343 | AL043021  | Hs.12705  | ESTs                                | WD40;SS                    | 5.6 |
|    | 447990 | BE048821  | Hs.20144  | small inducible cytokine subfamily  | IL8;SS                     | 5.6 |
|    | 412607 | Z33642    | Hs.74115  | immunoglobulin superfamily, member  | ig;TM;SS                   | 5.5 |
|    | 447625 | AW505364  | Hs.19074  | LATS (large tumor suppressor, Dros  | kinase,kinase_C,UBA,Pol    | 5.5 |
| 35 | 408056 | AA312329  | Hs.42331  | ephrin-A4                           | Ephrin;TM;SS               | 5.5 |
|    | 445960 | A1268399  | Hs.140489 | ESTs, Weakly similar to LIN1_HUMAN  | zf-C2H2,bZIP,none          | 5.5 |
|    | 406874 | AW161706  | Hs.180842 | ribosomal protein L13               | Ribosomal_L13e;SS          | 5.4 |
|    | 418558 | AW082266  | Hs.86131  | Fas (TNFRSF6)-associated via death  | death,DED;SS               | 5.4 |
|    | 414638 | W03516    | Hs.76698  | stress-associated endoplasmic retic | TM;SS                      | 5.4 |
| 40 | 409190 | AU076536  | Hs.50984  | sarcoma amplified sequence          | transmembrane4;TM;SS       | 5.4 |
|    | 429150 | AF120103  | Hs.197366 | smoothened (Drosophila) homolog     | COX8,SHMT,MIF,GST_C,EF1G_  | 5.3 |
|    | 453099 | H62087    | Hs.31659  | thyroid hormone receptor-associated | WD40;TM;                   | 5.3 |
|    | 414443 | AU077268  | Hs.76144  | platelet-derived growth factor rece | ig,kinase;TM;              | 5.3 |
|    | 441283 | AA927670  | Hs.131704 | ESTs                                | CUB,MAM,F5_F8_type_C,none  | 5.3 |
| 45 | 414249 | A1797994  | Hs.279929 | gp25L2 protein                      | Sulfotransfer,EMP24_GP25L  | 5.3 |
|    | 451154 | AA015879  | Hs.33536  | ESTs                                | TIMP:none                  | 5.2 |
|    | 406655 | M21533    | Hs.277477 | major histocompatibility complex, c | ig,MHC_I;TM;SS             | 5.2 |
|    | 406656 | M16714    | Hs.89643  | major histocompatibility complex, c | transketolase,transket_py  | 5.2 |
|    | 449224 | AW995911  | Hs.299883 | hypothetical protein FLJ23399       | fn3;TM;                    | 5.2 |
| 50 | 422562 | A1962060  | Hs.118397 | AE-binding protein 1                | Zn_carbOpept,F5_F8_type_C  | 5.2 |
|    | 436127 | W94824    | Hs.11565  | RIKEN cDNA 2010100012 gene          | TM;SS                      | 5.2 |
|    | 428327 | AW206236  | Hs.28773  | ESTs                                | cystatin,Coprogen_oxidase, | 5.2 |
|    | 427080 | AW068287  | Hs.301175 | ras-related C3 botulinum toxin subs | ras;TM;                    | 5.2 |
|    | 414624 | BE389320  | Hs.23628  | 3 beta-hydroxy-delta 5-C27-steroid  | none                       | 5.2 |
| 55 | 430281 | A1878842  | Hs.237924 | CGI-69 protein                      | mito_carr,homeobox;TM;S    | 5.2 |
|    | 426433 | L38969    | Hs.169875 | thrombospondin 3                    | TSPN,isp_3,EGF,toxin;TM    | 5.1 |
|    | 432716 | A1762964  | Hs.205180 | ESTs                                | LRR,UPAR_LY6;TM;           | 5.1 |
|    | 451564 | AU076698  | Hs.132760 | hypothetical protein MGC15729       | sugar_tr,Condensation;TM=  | 5.1 |
|    | 409340 | BE174629  | Hs.321130 | hypothetical protein MGC2771        | aa_permeases,pyridoxal_de  | 5.1 |
| 60 | 432680 | T47364    | Hs.278613 | interferon, alpha-inducible protein | TM;SS                      | 5.1 |
|    | 404913 |           |           | NM_024408*:Homo sapiens Notch (Dros | EGF,ank,notch,metalthio,E  | 5.1 |
|    | 409485 | S80990    | Hs.252136 | ficolin (collagen/fibrinogen domain | Collagen,fibrinogen_C;TM=  | 5.1 |
|    | 432078 | BE314877  | Hs.24553  | hypothetical protein FLJ12541 simil | TM;SS                      | 5.1 |
|    | 406687 | M31126    | Hs.352054 | matrix metalloproteinase 11 (stroma | hemopexin,Peptidase_M10;T  | 5.1 |
| 65 | 423712 | W46802    | Hs.81988  | disabled (Drosophila) homolog 2 (mi | PID,MACPF,Idl_recept_a,ts  | 5.0 |
|    | 441595 | AW206035  | Hs.356457 | ESTs                                | sugar_tr,none              | 5.0 |
|    | 450435 | A1695975  | Hs.201805 | ESTs                                | EGF,laminin_B,laminin_EGF  | 5.0 |
|    | 443177 | BE268461  | Hs.202    | benzodiazepine receptor (peripheral | TspO_MBR;TM,SS             | 5.0 |
|    | 433435 | BE545277  | Hs.340959 | Ts translation elongation factor, m | EF_TS,UBA;                 | 5.0 |
| 70 | 426386 | AA748850  | Hs.125830 | bladder cancer overexpressed protei | none                       | 5.0 |
|    | 419913 | AW270040  | Hs.34455  | ESTs                                | EPH_lbd,fn3,kinase,        | 5.0 |
|    | 446696 | AF279265  | Hs.298476 | solute carrier family 26, member 6  | Sulfate_transp,STAS,xan_u  | 5.0 |
|    | 448997 | AA130390  | Hs.25549  | hypothetical protein FLJ20898       | TM;SS                      | 5.0 |
|    | 413891 | BE271020  | Hs.355753 | tumor suppressor deleted in oral ca | none                       | 5.0 |
| 75 | 453143 | AA382234  | Hs.356289 | protein tyrosine phosphatase, recep | serpin;SS                  | 5.0 |
|    | 448249 | AW855331  | Hs.337124 | ESTs                                | carb_anhydrase,UCH-1,UCH-  | 5.0 |
|    | 412819 | T25829    | Hs.24048  | FK506 binding protein precursor     | FKBP;TM;SS                 | 5.0 |
|    | 426059 | BE292842  | Hs.166120 | interferon regulatory factor 7      | IRF;SS                     | 5.0 |
|    | 432295 | BE091049  | Hs.343665 | ribosomal protein S15a              | Ribosomal_S8,RNase_PH,KH-  | 5.0 |
| 80 | 412540 | C18341    | Hs.73999  | thyroid hormone receptor interactor | SH3,FCH;SS                 | 5.0 |
|    | 414465 | AW270645  | Hs.76194  | ribosomal protein S5                | Ribosomal_S7;              | 5.0 |
|    | 456655 | A1376736  | Hs.111779 | secreted protein, acidic, cysteine- | kazal;SS                   | 5.0 |
|    | 421794 | X86096    | Hs.108371 | E2F transcription factor 4, p107/p1 | E2F_TDP,KOW,Ribosomal_L14  | 4.9 |
|    | 444824 | AA843575  | Hs.12056  | asialoglycoprotein receptor 1       | lectin_c,Tropomyosin;TM    | 4.9 |
|    | 438278 | BE409248  | Hs.57988  | hypothetical protein FLJ22357 simil | TFIIIS,RNA_POL_M_15KD,UPF0 | 4.9 |
|    | 418140 | BE613836  | Hs.83551  | microfibrillar-associated protein 2 | TM;SS                      | 4.9 |
|    | 429457 | BE243065  | Hs.202955 | hypothetical protein FLJ20507       | Cys-protease-3C;TM;        | 4.9 |

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|    |        |           |            |                                      |                           |     |
|----|--------|-----------|------------|--------------------------------------|---------------------------|-----|
|    | 449475 | AI348027  | Hs. 108557 | hypothetical protein PP1057          | transmembrane4;TM;SS      | 4.9 |
|    | 425274 | BE281191  | Hs. 155462 | minichromosome maintenance deficient | MCM;TM;                   | 4.9 |
|    | 442110 | AF113008  | Hs. 8102   | ribosomal protein S20                | Ribosomal_S10;TM;         | 4.9 |
| 5  | 415209 | F00183    | Hs. 172004 | titin                                | none                      | 4.9 |
|    | 451849 | AI199261  | Hs. 27191  | hypothetical protein from clone 247  | TM;                       | 4.9 |
|    | 421567 | AJ272137  | Hs. 198265 | matrix metalloproteinase 25          | hemopexin,Peptidase_M10;T | 4.9 |
|    | 427380 | NM_005534 | Hs. 177559 | interferon gamma receptor 2 (interf  | fn3;TM;SS                 | 4.9 |
|    | 431303 | AW241605  | Hs. 253928 | ESTs                                 | none                      | 4.9 |
| 10 | 432396 | AW295956  | Hs. 11900  | hypothetical protein FLJ14972        | Xlink,zf-CCCH,G-patch,non | 4.9 |
|    | 415021 | R54409    | Hs. 301693 | Homo sapiens, clone IMAGE:3638994,   | none                      | 4.8 |
|    | 430498 | X02910    | Hs. 241570 | tumor necrosis factor (TNF superfam  | TNF;TM;SS                 | 4.8 |
|    | 449957 | D31365    | Hs. 24220  | hypothetical protein                 | TM;                       | 4.8 |
|    | 419603 | BE262579  | Hs. 91566  | PL6 protein                          | OMPdecase;TM;SS           | 4.8 |
| 15 | 427588 | L25081    | Hs. 179735 | ras homolog gene family, member C    | ras,none                  | 4.8 |
|    | 421502 | AF111856  | Hs. 105039 | solute carrier family 34 (sodium ph  | Ribosomal_L20,Na_Pi_cotra | 4.8 |
|    | 404854 |           |            | Target Exon                          | :SS                       | 4.7 |
|    | 411281 | BE392792  | Hs. 4786   | Homo sapiens cDNA: FLJ22849 fis, cl  | cadherin                  | 4.7 |
|    | 414045 | NM_002951 | Hs. 75722  | ribophorin II                        | gpdh,gpdh_C,pili_assembly | 4.7 |
| 20 | 431830 | Y16645    | Hs. 271387 | small inducible cytokine subfamily   | IL8;SS                    | 4.7 |
|    | 412896 | AW804157  | Hs. 375570 | major histocompatibility complex, c  | ig,MHC_II_beta;TM;SS      | 4.7 |
|    | 429305 | AF095727  | Hs. 287832 | myelin protein zero-like 1           | ig,transmembrane4;TM;SS   | 4.7 |
|    | 451698 | Y16187    | Hs. 26880  | endothelin converting enzyme-like 1  | Peptidase_M13;TM;         | 4.7 |
|    | 422687 | AW068823  | Hs. 119206 | insulin-like growth factor binding   | zf-C2H2,ig,none           | 4.7 |
| 25 | 444542 | AI161293  | Hs. 280380 | aminopeptidase                       | NAD_binding,flavodoxin,FA | 4.7 |
|    | 429833 | NM_012079 | Hs. 288627 | diacylglycerol O-acyltransferase (m  | ACAT;TM;                  | 4.7 |
|    | 456376 | AA663904  | Hs. 89862  | TNFRSF1A-associated via death domai  | death;TM;                 | 4.7 |
|    | 438558 | R98865    | Hs. 11135  | major histocompatibility complex, c  | MHC_II_alpha,ig,none      | 4.7 |
|    | 456356 | M74715    | Hs. 89560  | iduronidase, alpha-L-                | Glyco_hydro_39;SS         | 4.7 |
| 30 | 420486 | AF036365  | Hs. 98303  | caveolin 3                           | Caveolin;TM;              | 4.6 |
|    | 425123 | AW205274  | Hs. 154695 | phosphomannomutase 2                 | PMM;SS                    | 4.6 |
|    | 439512 | AA418287  | Hs. 58093  | Homo sapiens, clone IMAGE:3163559,   | laminin_EGF;TM;           | 4.6 |
|    | 418424 | Y13622    | Hs. 85087  | latent transforming growth factor b  | EGF,TB,spidertoxin,granul | 4.6 |
|    | 433350 | BE563152  | Hs. 10362  | Homo sapiens cDNA: FLJ20944 fis, cl  | zf-C3HC4,SPRY,none        | 4.6 |
| 35 | 432659 | AA281633  | Hs. 278586 | KIAA1108 protein                     | TBC;TM;                   | 4.6 |
|    | 445417 | AK001058  | Hs. 12680  | a disintegrin-like and metalloprote  | tsp_1,Reprolysin,Pep_M12B | 4.6 |
|    | 437408 | AL359598  | Hs. 36606  | Homo sapiens mRNA; cDNA DKFZp547B08  | none                      | 4.6 |
|    | 427349 | AA360154  | Hs. 177415 | Finkel-Biskis-Reilly murine sarcoma  | ubiquitin;TM;             | 4.6 |
|    | 418918 | X07871    | Hs. 89476  | CD2 antigen (p50), sheep red blood   | ig;TM;SS                  | 4.6 |
| 40 | 421310 | AW630087  | Hs. 103315 | trinucleotide repeat containing 1    | PHD                       | 4.6 |
|    | 427969 | NM_001963 | Hs. 2230   | epidermal growth factor (beta-uroga  | EGF,Igf1_recept_LB,EB;TM; | 4.6 |
|    | 447860 | AF193807  | Hs. 131835 | Rhesus blood group, B glycoprotein   | Ammonium_transp,FecCD;TM= | 4.6 |
|    | 418916 | BE392781  | Hs. 89474  | ADP-ribosylation factor 6            | arf,ras;TM;               | 4.6 |
|    | 425720 | AA362394  | Hs. 293984 | hypothetical protein MGC13102        | TM;SS                     | 4.6 |
| 45 | 419942 | U25138    | Hs. 93841  | potassium large conductance calcium  | CaKB;TM;SS                | 4.6 |
|    | 403105 |           |            | Target Exon                          | ISK_Channel;TM;SS         | 4.6 |
|    | 418067 | AI127958  | Hs. 83393  | cystatin E/M                         | cystatin;SS               | 4.6 |
|    | 427863 | AF189712  | Hs. 181002 | MLL septin-like fusion               | GTP_CDC;TM;               | 4.5 |
| 50 | 458147 | AW752597  |            | gb:IL3-CT0214-161299-045-B06 CT0214  | PMM,none                  | 4.5 |
|    | 456799 | AC004923  | Hs. 135187 | unc93 (C.elegans) homolog B          | TM;                       | 4.5 |
|    | 427136 | AL117415  | Hs. 173716 | a disintegrin and metalloproteinase  | ig                        | 4.5 |
|    | 458766 | AW183618  | Hs. 55610  | solute carrier family 30 (zinc tran  | Cation_efflux;TM;SS       | 4.5 |
|    | 445033 | AV652402  | Hs. 72901  | cyclin-dependent kinase inhibitor 2  | ank;                      | 4.5 |
|    | 441281 | BE501247  | Hs. 144084 | ESTs                                 | Collagen,C4,none          | 4.5 |
| 55 | 439720 | AI935202  | Hs. 31181  | Homo sapiens cDNA: FLJ23230 fis, cl  | SDF,sugar_tr              | 4.5 |
|    | 410184 | AW503667  | Hs. 59545  | ring finger protein 15               | SPRY,zf-B_box,zf-C3HC4;TM | 4.5 |
|    | 431760 | NM_005317 | Hs. 268531 | granzyme M (lymphocyte met-ase 1)    | trypsin;TM;SS             | 4.5 |
|    | 446990 | AI354717  | Hs. 223908 | ESTs                                 | transmembrane4            | 4.5 |
|    | 407366 | AF026942  | Hs. 17518  | gb:Homo sapiens cig33 mRNA, partial  | IBR                       | 4.5 |
| 60 | 426156 | BE244537  | Hs. 167382 | natriuretic peptide receptor A/guan  | ANF_receptor,guanylate_cy | 4.5 |
|    | 442941 | AU076728  | Hs. 8867   | cysteine-rich, angiogenic inducer,   | Cys_knot,tsp_1,vwc,IGFBP; | 4.5 |
|    | 451118 | AI862096  | Hs. 60640  | ESTs                                 | EGF,vwc,TIL;SS            | 4.5 |
|    | 457657 | AW411509  | Hs. 352567 | hypothetical protein PRO2121         | UQ_con;TM;                | 4.4 |
|    | 437016 | AU076916  | Hs. 5398   | guanine monophosphate synthetase     | PHD,SET,zf-CXXC,EGF,ank,n | 4.4 |
| 65 | 429497 | AB028953  | Hs. 204121 | KIAA1030 protein                     | fn3;TM;                   | 4.4 |
|    | 444090 | S69115    | Hs. 10306  | natural killer cell group 7 sequenc  | PMP22_Claudin;TM;SS       | 4.4 |
|    | 454005 | AF039237  | Hs. 288600 | hypothetical protein MGC3123         | TM;SS                     | 4.4 |
|    | 412270 | AC005262  | Hs. 73797  | guanine nucleotide binding protein   | G-alpha,arf;TM;           | 4.4 |
|    | 406729 | AA069711  |            | gb:zm52b11.s1 Stratagene fibroblast  | filament,bZIP,Apolipoprot | 4.4 |
| 70 | 404610 |           |            | Homo sapiens cDNA FLJ11027 fis, cl   | EGF,laminin_B,laminin_EGF | 4.4 |
|    | 422311 | AF073515  | Hs. 114948 | cytokine receptor-like factor 1      | fn3;TM;                   | 4.4 |
|    | 406973 | M34996    | Hs. 198253 | major histocompatibility complex, c  | ig,MHC_II_alpha;TM;SS     | 4.4 |
|    | 407196 | D11747    | Hs. 177415 | Finkel-Biskis-Reilly murine sarcoma  | ERG4_ERG24,none           | 4.4 |
|    | 404243 |           |            | NM_006778:Homo sapiens ring finger   | zf-C3HC4,zf-B_box;TM;SS   | 4.4 |
| 75 | 443834 | AI741510  | Hs. 173548 | ESTs                                 | CUB,MAM,F5_F8_type_C,none | 4.4 |
|    | 446057 | AI420227  | Hs. 366053 | Trp-p8 transient receptor potential  | none                      | 4.4 |
|    | 413661 | AA071146  | Hs. 343354 | ribosomal protein L18                | Ribosomal_L18e,L15;TM;S   | 4.4 |
|    | 414875 | H42679    | Hs. 77522  | major histocompatibility complex, c  | ig,MHC_II_alpha;TM;SS     | 4.4 |
|    | 439730 | AF035292  | Hs. 6664   | KIAA0657 protein                     | fn3;ig;                   | 4.3 |
| 80 | 406257 |           |            | Target Exon                          | 7tm_1,none                | 4.3 |
|    | 434025 | AF114264  | Hs. 216381 | Homo sapiens clone HH409 unknown mR  | ig;TM;                    | 4.3 |
|    | 414961 | U27266    | Hs. 927    | myosin-binding protein H             | fn3;ig;TM;                | 4.3 |
|    | 430265 | L36033    | Hs. 237356 | stromal cell-derived factor 1        | IL8;SS                    | 4.3 |
|    | 429249 | X81479    | Hs. 2375   | egf-like module containing, mucin-I  | 7tm_2,EGF,GPS,S_locus_gly | 4.3 |



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|    |        |           |           |                                     |                           |     |
|----|--------|-----------|-----------|-------------------------------------|---------------------------|-----|
|    | 433541 | AW081538  | Hs.220324 | hypothetical protein FLJ13052       | NAD_kinase;TM;            | 4.3 |
|    | 400575 |           |           | NM_022146:Homo sapiens neuropeptide | 7tm_1;TM;SS               | 4.3 |
|    | 427661 | AA410292  | Hs.104761 | ESTs                                | wnt:none                  | 4.3 |
| 5  | 452056 | AW955065  | Hs.101150 | Homo sapiens, clone IMAGE:4054156,  | TM;                       | 4.3 |
|    | 433669 | AL047879  | Hs.194251 | ESTs, Weakly similar to ALU2_HUMAN  | RNA_pol_L,RNA_pol_L,RasGA | 4.3 |
|    | 422624 | BE615678  | Hs.76152  | KDEL (Lys-Asp-Glu-Leu) endoplasmic  | ER_lumen_recept:none      | 4.3 |
|    | 421680 | AL031186  | Hs.289106 | Human DNA sequence from clone CTA-9 | Collagen;TM;SS            | 4.3 |
|    | 422766 | AA334108  | Hs.159572 | heparan sulfate (glucosamine) 3-O-s | none                      | 4.3 |
| 10 | 437596 | AA761490  | Hs.351250 | ESTs, Moderately similar to S65657  | pkinese,WD40              | 4.3 |
|    | 419285 | D31887    | Hs.89868  | KIAA0062 protein                    | Zip;TM;SS                 | 4.3 |
|    | 453082 | H18835    | Hs.31608  | hypothetical protein FLJ20041       | ion_trans;TM;SS           | 4.2 |
|    | 410693 | BE044206  |           | gb:hc40c08.x1 Soares_NFL_T_GBC_S1 H | C1q,Collagen,cystati      | 4.2 |
|    | 413100 | BE065208  |           | gb:RC1-BT0314-310300-015-b09 BT0314 | none                      | 4.2 |
| 15 | 432497 | AA551104  |           | ESTs, Moderately similar to ALUC_HU | none                      | 4.2 |
|    | 423041 | BE170842  | Hs.123059 | chloride channel Kb                 | CBS,voltage_CLC;TM;SS     | 4.2 |
|    | 449799 | AI143466  | Hs.125050 | ESTs                                | none                      | 4.2 |
|    | 438472 | AW974907  | Hs.86228  | TRIAD3 protein                      | none                      | 4.2 |
|    | 432179 | X75208    | Hs.2913   | EphB3                               | EPH_lbd,tn3,kinase,SAM;T  | 4.2 |
| 20 | 424488 | AK000413  | Hs.149227 | hypothetical protein FLJ20406       | Xlink,zf-CCCH,G_patch;TM= | 4.2 |
|    | 406809 | AF000574  | Hs.22405  | leukocyte immunoglobulin-like recep | ig,Gemini_mov;TM;SS       | 4.2 |
|    | 407586 | Z37544    | Hs.37121  | phospholipase C, beta 3 (phosphatid | C2,PI-PLC-Y,PI-PLC-X;TM   | 4.2 |
|    | 407228 | M25079    | Hs.155376 | hemoglobin, beta                    | globin;TM;                | 4.2 |
|    | 450900 | H61005    | Hs.37902  | ESTs                                | none                      | 4.2 |
| 25 | 410188 | AL096739  | Hs.107260 | hypothetical protein DKFZp586H0623  | Ricin_B_lectin,Glycos_tra | 4.2 |
|    | 458248 | BE407379  | Hs.108082 | ESTs, Weakly similar to T31636 hypo | C1q,Collagen;TM;SS        | 4.2 |
|    | 403138 |           |           | NM_006056:Homo sapiens G protein-co | 7tm_1,HECT;TM;SS          | 4.2 |
|    | 432074 | AA525248  | Hs.149723 | ESTs                                | Y_phosphatase,none        | 4.2 |
|    | 438682 | AA354489  | Hs.375594 | EBP50-PDZ interactor of 54 kD       | none                      | 4.2 |
| 30 | 401908 |           |           | C17000154.gij12003980 gb AAG43830.1 | TM;SS                     | 4.2 |
|    | 451287 | AK002158  | Hs.26194  | likely homolog of mouse immunity-as | TM;                       | 4.2 |
|    | 407904 | W44735    | Hs.107260 | Homo sapiens cDNA: FLJ21278 fis, cl | none                      | 4.1 |
|    | 403694 |           |           | Target Exon                         | UDPGT-                    | 4.1 |
|    | 423461 | AB020527  | Hs.128827 | solute carrier family 17 (sodium ph | sugar_lr;TM;              | 4.1 |
| 35 | 425603 | U52219    | Hs.158329 | G protein-coupled receptor 50       | 7tm_1;TM;SS               | 4.1 |
|    | 421485 | AA243499  | Hs.104800 | hypothetical protein FLJ10134       | TM;SS                     | 4.1 |
|    | 414509 | AW161311  | Hs.76294  | CD63 antigen (melanoma 1 antigen)   | transmembrane4;TM;SS      | 4.1 |
|    | 423313 | NM_014269 | Hs.126838 | a disintegrin and metalloproteinase | disintegrin,Reprolysin,Pe | 4.1 |
|    | 432171 | AI020503  | Hs.343661 | ESTs, Weakly similar to ALUB_HUMAN  | WD40                      | 4.1 |
| 40 | 434652 | AF148713  | Hs.125830 | bladder cancer overexpressed protei | WD40,DUF6;                | 4.1 |
|    | 429592 | AB029041  | Hs.209646 | KIAA1118 protein                    | Troponin,Exo_endo_phos,IO | 4.1 |
|    | 432982 | AA531058  | Hs.182248 | truncated calcium binding protein   | OPR,ZZ;TM;                | 4.1 |
|    | 424867 | AI024860  | Hs.153591 | Not56 (D. melanogaster)-like protei | TM;SS                     | 4.1 |
|    | 441455 | AJ271671  | Hs.7854   | zinc/iron regulated transporter-lik | Zip;TM;SS                 | 4.1 |
| 45 | 400785 |           |           | C11000861.gij9938016 ref NP_064687. | TM;SS                     | 4.1 |
|    | 447232 | AW499834  | Hs.327    | interleukin 10 receptor, alpha      | TM;SS                     | 4.1 |
|    | 450785 | AA852713  | Hs.108885 | Homo sapiens, alpha-1 (VI) collagen | vwa,Collagen;TM;SS        | 4.1 |
|    | 424027 | AW337575  | Hs.201591 | ESTs                                | 7tm_2,HRM,none            | 4.1 |
|    | 435857 | AF253468  | Hs.3736   | delta-like 4 homolog (Drosophila)   | EGF,DSL,EB;TM;SS          | 4.1 |
| 50 | 437118 | AB037857  | Hs.300591 | CD9 partner 1                       | none                      | 4.1 |
|    | 411410 | R20693    | Hs.69954  | laminin, gamma 3                    | laminin_B,laminin_EGF,lam | 4.1 |
|    | 413902 | AU076743  | Hs.75613  | CD36 antigen (collagen type I recep | E2F_TDP,CD36;SS           | 4.1 |
|    | 428938 | AC002425  | Hs.194660 | ceroid-lipofuscinosis, neuronal 3,  | CLN3;TM;SS                | 4.1 |
|    | 453094 | AA740928  | Hs.27356  | ESTs                                | none                      | 4.1 |
| 55 | 440811 | BE384713  | Hs.74655  | ESTs, Weakly similar to T34482 hypo | hormone_rec,zf-C4,none    | 4.0 |
|    | 407287 | AI678812  | Hs.345139 | gb:tu59d08.x1 NCI_CGAP_Gas4 Homo sa | ras,cadherin              | 4.0 |
|    | 428028 | U52112    | Hs.182018 | interleukin-1 receptor-associated k | death,kinase;TM;          | 4.0 |
|    | 428469 | BE549205  | Hs.184488 | flotillin 2                         | none                      | 4.0 |
|    | 423114 | AU076497  | Hs.1614   | cholinergic receptor, nicotinic, al | Neur_chan_LBD,Neur_chan_m | 4.0 |
| 60 | 426858 | NM_004182 | Hs.172791 | ubiquitously-expressed transcript   | DUF232;SS                 | 4.0 |
|    | 444626 | AA320893  | Hs.117062 | hypothetical protein FLJ14497       | pyr_redox;TM;SS           | 4.0 |

TABLE 30B:

Pkey: Unique Eos probeset identifier number  
CAT number: Gene cluster number  
Accession: Genbank accession numbers

|    |        |            |   |
|----|--------|------------|---|
|    | Pkey   | CAT Number | Accession   |
| 65 | 458147 | 1030220_1  | AW848781 AW848490 AW849062 AW752597 AW752699        |
|    | 406729 | 0_0        | AA069711  |
| 70 | 410693 | 1054267_1  | BE044206 AW797320 BE161676 AW797356 AW797352        |
|    | 413100 | 1490226_1  | BE065224 BE065168 BE065313 BE065208                 |
|    | 432497 | 852_71     | AW874688 R94134 AA551104 AA777322 A1033094 BE247143 |

TABLE 30C:

Pkey: Unique number corresponding to an Eos probeset  
Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. \*Dunham, et al.\* refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) Nature 402:489-495.  
Strand: Indicates DNA strand from which exons were predicted.  
NL\_position: Indicates nucleotide positions of predicted exons.

|    |        |         |        |  |
|----|--------|---------|--------|--|
|    | Pkey   | Ref     | Strand | NL_position                              |
| 80 | 401699 | 3176654 | Minus  | 33285-34084                              |
|    | 404864 | 5263010 | Plus   | 94495-94661,95055-95195,97396-97506,9760 |

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|    |        |         |       |  |
|----|--------|---------|-------|--|
| 5  | 402241 | 7690131 | Minus | 125073-125206,130996-131125              |
|    | 404913 | 7341740 | Plus  | 97717-97976                              |
|    | 404854 | 7143420 | Plus  | 14260-14537                              |
|    | 403105 | 8980016 | Minus | 145287-145744                            |
|    | 404610 | 9588566 | Minus | 89583-89725,90402-90555,91428-91673      |
| 10 | 404243 | 5672609 | Plus  | 74695-75123                              |
|    | 406257 | 7417784 | Plus  | 55821-56037                              |
|    | 400575 | 9886575 | Plus  | 131603-132095                            |
|    | 403138 | 9211494 | Minus | 164684-165066,167757-168651              |
|    | 401908 | 8698760 | Minus | 126888-127024                            |
|    | 403694 | 7107765 | Plus  | 142925-143080,165505-166186,167486-16763 |
|    | 400785 | 8131682 | Plus  | 43113-43967                              |

## 15 TABLE 31A: ABOUT 189 GENES DOWN-REGULATED IN GLIOMA COMPARED TO NON-MALIGNANT ADULT BRAIN TISSUE

Table 31A lists about 189 genes down-regulated in glioma compared to non-malignant adult brain tissue. These were selected as for Table 30A, except that the numerator was set to the 90th percentile amongst various non-malignant brain specimens, the denominator was set to the 90th percentile value amongst various gliomas, the numerator was greater than or equal to 50 units, and the ratio was greater than or equal to 2.5 (i.e. 2½-fold downregulation in brain tumor vs. normal brain).

20 Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenetID: Unigene number  
 Unigene Title: Unigene gene title  
 Protein Domains: Predicted Protein Domains  
 R1: non-malignant adult brain tissue vs. glioma

|    | Pkey   | ExAccn    | UniGene ID | Unigene Title                       | Protein Domains           | R1   |
|----|--------|-----------|------------|-------------------------------------|---------------------------|------|
| 30 | 412524 | AA417813  | Hs.44208   | hypothetical protein FLJ23153       | F420_oxidored;TM;SS       | 14.5 |
|    | 432874 | W94322    | Hs.279651  | melanoma inhibitory activity        | SH3;TM;SS                 | 8.3  |
|    | 452669 | AA216363  | Hs.262958  | hypothetical protein DKFZp434B044   | SCP,LCCL;TM;SS            | 8.2  |
|    | 426300 | U15979    | Hs.169228  | delta-like homolog (Drosophila)     | EGF,laminin_EGF;TM;SS     | 8.2  |
|    | 447990 | BE048821  | Hs.20144   | small inducible cytokine subfamily  | IL8;SS                    | 7.3  |
| 35 | 439477 | W69813    | Hs.58042   | ESTs, Moderately similar to GFR3_HU | GDNF,TPR                  | 7.1  |
|    | 411602 | L01406    | Hs.767     | growth hormone releasing hormone re | 7tm_2,HRM;TM;SS           | 6.1  |
|    | 417067 | AJ001417  | Hs.81086   | solute carrier family 22 (extraneur | sugar_tr;TM;SS            | 6.0  |
|    | 426488 | X03350    | Hs.4       | alcohol dehydrogenase 1B (class I), | adh_zinc;TM;              | 5.9  |
|    | 447656 | NM_003726 | Hs.19126   | src kinase-associated phosphoprotei | SH3,PH;TM;                | 5.3  |
| 40 | 436950 | L05779    | Hs.113     | epoxide hydrolase 2, cytoplasmic    | abhydrolase,Hydrolase;TM= | 5.2  |
|    | 406837 | R70292    | Hs.156110  | immunoglobulin kappa constant       |                           | 4.9  |
|    | 410387 | A1277367  | Hs.47094   | ESTs                                |                           | 4.8  |
|    | 432855 | AF017988  | Hs.279565  | secreted frizzled-related protein 5 | Fz,NTR;TM;SS              | 4.7  |
|    | 441499 | AW298235  | Hs.101689  | ESTs                                |                           | 4.6  |
| 45 | 421481 | AW391972  | Hs.104696  | KIAA1324 protein                    | TM;SS                     | 4.5  |
|    | 420255 | NM_007289 | Hs.1298    | membrane metallo-endopeptidase (neu | Peptidase_M13;TM;SS       | 4.5  |
|    | 407230 | AA157857  | Hs.182265  | keratin 19                          | filament,bZIP;SS          | 4.4  |
|    | 412445 | X51362    | Hs.73893   | dopamine receptor D2                | 7tm_1;TM;SS               | 4.3  |
|    | 413966 | AA133935  | Hs.173704  | ESTs, Moderately similar to A53959  |                           | 4.2  |
| 50 | 415165 | AW887604  | Hs.78065   | complement component 7              | ldl_recept_a,sushi,isp_1, | 4.2  |
|    | 420103 | AA382259  | Hs.95197   | aldehyde dehydrogenase 1 family, me | aldedh;TM;                | 4.2  |
|    | 426723 | AW003069  | Hs.183860  | ESTs                                | GNT-1;TM;SS               | 4.1  |
|    | 409081 | AJ010277  | Hs.50403   | T-box 19                            | T-box;TM;                 | 4.0  |
|    | 407142 | AA412535  |            | gb:z199b10.s1 Soares_testis_NHT Hom | Lrr_sulph_symp;TM;        | 4.0  |
| 55 | 414449 | AA557660  | Hs.76152   | decorin                             | LRRNT,LRR,LRR,LRRNT       | 4.0  |
|    | 444784 | D12485    | Hs.11951   | ectonucleotide pyrophosphatase/phos | Somatomedin_B,Endonucleas | 3.9  |
|    | 420321 | D78761    | Hs.96657   | hypothetical protein                | isp_1;SS                  | 3.8  |
|    | 401700 |           |            | Target Exon                         | TM;                       | 3.8  |
|    | 418807 | NM_004944 | Hs.88646   | deoxyribonuclease I-like 3          | Exo_endo_phos;TM;SS       | 3.8  |
| 60 | 406746 | AA580355  | Hs.279860  | tumor protein, translationally-cont | TCTP;TM;                  | 3.7  |
|    | 449077 | AW262836  | Hs.252844  | ESTs                                |                           | 3.7  |
|    | 415718 | F30631    | Hs.200237  | ESTs                                | isoamylase_N              | 3.7  |
|    | 402449 |           |            | Target Exon                         | pkinese,LRR,LRRCT;TM;SS   | 3.6  |
|    | 457489 | AI693815  | Hs.127179  | cryptic gene                        | TM;SS                     | 3.6  |
| 65 | 406743 | AA911568  | Hs.279860  | tumor protein, translationally-cont | TCTP;TM;                  | 3.6  |
|    | 416950 | AL049798  | Hs.80552   | dermatopontin                       |                           | 3.6  |
|    | 451554 | AI474866  | Hs.193237  | ESTs                                |                           | 3.6  |
|    | 440708 | AF038962  | Hs.7381    | voltage-dependent anion channel 3   | Euk_porin,Enterotoxin_A,P | 3.5  |
|    | 426095 | AI278023  | Hs.89986   | ESTs                                | WD40,none                 | 3.5  |
| 70 | 406742 | AI468091  | Hs.279860  | tumor protein, translationally-cont | TCTP;TM;                  | 3.5  |
|    | 429343 | AK000785  | Hs.199480  | Homo sapiens, Similar to epsin 3, c | VHS,ENTH,UIM;SS           | 3.4  |
|    | 439457 | AF086274  |            | gb:Homo sapiens full length insert  |                           | 3.4  |
|    | 408796 | AA688292  | Hs.170345  | ESTs                                | hormone_rec,zf-C4         | 3.4  |
|    | 440659 | AF134160  | Hs.7327    | claudin 1                           | PMP22,Claudin;TM;SS       | 3.4  |
| 75 | 415042 | NM_006759 | Hs.77837   | UDP-glucose pyrophosphorylase 2     | UDPGP;SS                  | 3.4  |
|    | 417967 | BE244373  | Hs.1119    | nuclear receptor subfamily 4, group | hormone_rec,zf-C4,none    | 3.3  |
|    | 445234 | AW137636  | Hs.146059  | ESTs                                | 14-3-3,none               | 3.3  |
|    | 430511 | BE018156  | Hs.2575    | calpain 1, (mu/l) large subunit     | efhand,Peptidase_C2,Calpa | 3.3  |
|    | 420485 | AF218586  | Hs.288835  | cell death-inducing DFFA-like effec | 7tm_1,CIDE-N;TM;SS        | 3.3  |
| 80 | 413687 | AI522318  | Hs.103819  | ESTs                                | TM;SS                     | 3.3  |
|    | 428928 | BE409838  | Hs.194657  | cadherin 1, type 1, E-cadherin (epi | cadherin,Cadherin_C_term, | 3.3  |
|    | 409738 | BE222975  | Hs.56205   | insulin induced gene 1              |                           | 3.3  |
|    | 442046 | AA974575  | Hs.287385  | ESTs                                | zf-C2H2,SET;TM;           | 3.2  |
|    | 413127 | BE066529  |            | gb:RC3-BT0333-300300-017-a12 BT0333 |                           | 3.2  |
|    | 429350 | AI754634  | Hs.131987  | ESTs                                | MAM;TM;                   | 3.2  |
|    | 427980 | AA418305  | Hs.303205  | EST                                 | LRR,none                  | 3.2  |

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|    |        |           |           |                                     |                           |     |
|----|--------|-----------|-----------|-------------------------------------|---------------------------|-----|
|    | 424498 | AB033043  | Hs.149377 | hypothetical protein DKFZp761L0424  | AIP3;TM;SS                | 3.2 |
|    | 435684 | NM_001290 | Hs.4980   | LIM domain binding 2                | LIM_bind;TM;              | 3.2 |
|    | 402632 |           |           | Target Exon                         | ig;TM;SS                  | 3.1 |
| 5  | 431130 | NM_006103 | Hs.2719   | HE4; epididymis-specific, whey-acid | wap;TM;SS                 | 3.1 |
|    | 410636 | AA088177  | Hs.172870 | ESTs                                | TM;SS                     | 3.1 |
|    | 452658 | N88604    | Hs.30212  | thyroid receptor interacting protei | PCi;TM;                   | 3.1 |
|    | 453180 | N46243    | Hs.110373 | ESTs, Highly similar to T42626 secr | laminin_G,LRRCT,none      | 3.1 |
|    | 430319 | AI480214  | Hs.356075 | ninjunn 2                           | TM;SS                     | 3.1 |
| 10 | 438424 | AI912498  | Hs.25895  | hypothetical protein FLJ14996       | C2;TM;                    | 3.1 |
|    | 456063 | NM_006744 | Hs.76461  | retinol-binding protein 4, intersti | lipocalin,TGF-beta,TGFb_p | 3.1 |
|    | 429798 | AL117578  | Hs.222909 | DKFZP434C128 protein                | TM;                       | 3.1 |
|    | 417677 | NM_016055 | Hs.82389  | CGI-118 protein                     |                           | 3.1 |
|    | 443792 | AI763073  | Hs.204873 | ESTs                                |                           | 3.1 |
| 15 | 445861 | BE293423  | Hs.11809  | single Ig IL-1R-related molecule    | TIR;TM;                   | 3.1 |
|    | 407815 | AW373860  | Hs.183860 | hypothetical protein FLJ20277       | LRR,none                  | 3.1 |
|    | 456689 | NM_002251 | Hs.117780 | potassium voltage-gated channel, de | ion_trans,K_tetra;TM;SS   | 3.1 |
|    | 446492 | AW205115  | Hs.161287 | ESTs                                | SPRY,zf-B_box,PAAD_D      | 3.1 |
|    | 427706 | AW971225  | Hs.293800 | ESTs, Weakly similar to ALU1_HUMAN  |                           | 3.0 |
| 20 | 458008 | AA809314  | Hs.123295 | ESTs                                | SCAN,zf-C2H2,none         | 3.0 |
|    | 449708 | AI694598  | Hs.202126 | ESTs                                |                           | 3.0 |
|    | 410132 | NM_003480 | Hs.300946 | Microfibril-associated glycoprotein | TM;SS                     | 3.0 |
|    | 423778 | Y09267    | Hs.132821 | flavin containing monooxygenase 2   | FMO-like,pyr_redox;TM;S   | 3.0 |
|    | 425280 | U31519    | Hs.1872   | phosphoenolpyruvate carboxykinase 1 | PEPCK;TM;                 | 3.0 |
| 25 | 453177 | AW389509  | Hs.223747 | ESTs                                | zf-C2H2,none              | 3.0 |
|    | 416781 | AF072928  | Hs.79877  | myotubularin related protein 6      |                           | 3.0 |
|    | 447582 | BE293520  | Hs.18910  | prostate cancer overexpressed gene  | sugar_tr;TM;SS            | 3.0 |
|    | 417365 | D50683    | Hs.82028  | transforming growth factor, beta re | kinase,WD40;TM;           | 3.0 |
|    | 452540 | AW161048  | Hs.150549 | ESTs, Weakly similar to T33997 hypo |                           | 2.9 |
| 30 | 430233 | AW367902  | Hs.236443 | Homo sapiens mRNA; cDNA DKFZp564N10 | PH,Ets,CH,spectrin,Ca_cha | 2.9 |
|    | 418127 | BE243982  | Hs.83532  | membrane cofactor protein (CD46, tr | sushi;TM,SS               | 2.9 |
|    | 404445 |           |           | Target Exon                         |                           | 2.9 |
|    | 423323 | AI951628  | Hs.127007 | potassium channel, subfamily K, mem | ion_trans;TM;SS           | 2.9 |
| 35 | 452093 | AA447453  | Hs.27860  | Homo sapiens mRNA; cDNA DKFZp586M07 | 7tm_1,none                | 2.9 |
|    | 427981 | BE275986  | Hs.181311 | asparaginyl-tRNA synthetase         | tRNA-synt_2,tRNA_anti,tRN | 2.9 |
|    | 452242 | R50956    | Hs.159993 | glycosyltransferase                 |                           | 2.9 |
|    | 440232 | AI766925  | Hs.112554 | ESTs                                |                           | 2.9 |
|    | 444634 | AW611988  | Hs.197813 | ESTs                                | CKS                       | 2.9 |
| 40 | 445889 | BE465186  | Hs.266958 | ESTs                                | TM;                       | 2.9 |
|    | 414483 | R25513    | Hs.10683  | ESTs                                |                           | 2.9 |
|    | 453500 | AI478427  | Hs.43125  | esophageal cancer related gene 4 pr | TM;SS                     | 2.9 |
|    | 419768 | T72104    | Hs.93194  | apolipoprotein A-I                  | Apolipoprotein;SS         | 2.9 |
|    | 427804 | AL049654  | Hs.180871 | protein kinase C, alpha binding pro | PDZ;SS                    | 2.9 |
|    | 423753 | Y11312    | Hs.132463 | phosphoinositide-3-kinase, class 2, | C2,P13_P14_kinase,PI3Ka,P | 2.9 |
| 45 | 430699 | AW969847  | Hs.292718 | ESTs, Weakly similar to RET2_HUMAN  | lipocalin;SS              | 2.9 |
|    | 427842 | AW936961  |           | gb.RC1-DT0029-160200-013-a12 DT0029 | efhand,mito_carr,none     | 2.8 |
|    | 432834 | F06459    | Hs.289113 | cytochrome b5 reductase 1 (B5R.1)   | NAD_binding,FAD_binding_6 | 2.8 |
|    | 421435 | AW972072  | Hs.372167 | ESTs                                |                           | 2.8 |
|    | 402458 |           |           | C1002064.gil11993050[gb]AAG42574.1] | TM;SS                     | 2.8 |
| 50 | 410036 | R57171    | Hs.57975  | calsequestrin 2 (cardiac muscle)    | Calsequestrin;SS          | 2.8 |
|    | 412570 | AA033517  | Hs.74047  | electron-transfer-flavoprotein, bet | ETF_beta;SS               | 2.8 |
|    | 459439 | AW402931  | Hs.352411 | gb:UL-HF-BK0-abd-a-01-0-ULr1 NIH_M  |                           | 2.8 |
|    | 438622 | L03151    |           | gb:Homo sapiens cell-type T-cell im |                           | 2.8 |
|    | 417023 | AA192278  | Hs.301596 | ESTs, Moderately similar to S65657  |                           | 2.8 |
| 55 | 453281 | W46280    | Hs.55940  | ESTs, Weakly similar to A25704 syna |                           | 2.8 |
|    | 403028 |           |           | Target Exon                         | trypsin,trefoil           | 2.8 |
|    | 449029 | N28989    | Hs.22891  | solute carrier family 7 (cationic a | aa_permeases;TM;SS        | 2.8 |
|    | 425483 | AF231022  | Hs.158159 | FAT tumor suppressor (Drosophila) h | EGF_cadherin,laminin_G;TM | 2.8 |
| 60 | 406918 | M88357    |           | gb:Homo sapiens DNA-binding protein | zf-C2H2,KRAB,zf-BED;TM;   | 2.7 |
|    | 435213 | AA092510  | Hs.5985   | non-kinase Cdc42 effector protein S | TM;                       | 2.7 |
|    | 443990 | AW205085  | Hs.39557  | ESTs                                |                           | 2.7 |
|    | 451698 | Y16187    | Hs.26880  | endothelin converting enzyme-like 1 | Peptidase_M13;TM;         | 2.7 |
|    | 431713 | AK000388  | Hs.267997 | EHM2 gene                           | Band_41;TM;               | 2.7 |
|    | 431469 | N49424    | Hs.124159 | ESTs                                | SH3                       | 2.7 |
| 65 | 400386 | AF075290  |           | gap junction protein, alpha 3, 46kD | connexin;TM;SS            | 2.7 |
|    | 406684 | X16354    | Hs.50964  | carcinoembryonic antigen-related ce | ig;TM;SS                  | 2.7 |
|    | 449874 | AA135688  | Hs.10083  | Homo sapiens, clone IMAGE:4139786,  | TM;                       | 2.7 |
|    | 403213 |           |           | NM_019595:Homo sapiens intersectin  | SH3,efhand,C2,PH,RhoGEF;T | 2.7 |
|    | 459665 | BE159784  | Hs.47647  | gb:MR0-HT0408-220300-001-h06 HT0408 |                           | 2.7 |
| 70 | 421823 | N40850    | Hs.28625  | ESTs                                |                           | 2.7 |
|    | 422693 | BE300073  | Hs.279860 | tumor protein, translationally-cont | TCTP,none                 | 2.7 |
|    | 454906 | AI219323  | Hs.101077 | ESTs, Weakly similar to T22363 hypo | TM,                       | 2.7 |
|    | 447075 | AV662037  | Hs.124740 | ESTs, Weakly similar to I38022 hypo | TM;                       | 2.7 |
|    | 450273 | AW296454  | Hs.24743  | hypothetical protein FLJ20171       | rm,none                   | 2.7 |
| 75 | 434340 | AI193043  | Hs.128685 | ESTs, Weakly similar to T17226 hypo |                           | 2.7 |
|    | 436972 | AA284679  | Hs.25640  | claudin 3                           | PMP22_Claudin;TM;SS       | 2.7 |
|    | 441379 | AW175787  | Hs.334841 | selenium binding protein 1          | TM;                       | 2.7 |
|    | 421143 | AB024536  | Hs.102171 | immunoglobulin superfamily containi | ig,LRR,LRRNT,LRRCT;TM;S   | 2.7 |
|    | 422558 | NM_006420 | Hs.118249 | brefeldin A-inhibited guanine nucle | Sec7,none                 | 2.7 |
| 80 | 428900 | AA437189  | Hs.352324 | Human DNA sequence from clone RP1-6 | SS                        | 2.7 |
|    | 421153 | AF009267  | Hs.102238 | Homo sapiens clone FBA1 Cri-du-chat |                           | 2.7 |
|    | 427074 | AA527435  | Hs.178589 | hepatocellular carcinoma antigen ge | efhand;TM;                | 2.6 |
|    | 448133 | AA723157  | Hs.73769  | folate receptor 1 (adult)           | Folate_rec,MIP;TM;SS      | 2.6 |
|    | 419158 | AF031475  | Hs.89648  | arginine vasopressin (neurophysin I | hormone5,hormone4;SS      | 2.6 |

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|            |              |   |  |  |                           |     |
|------------|--------------|---|--|--|---------------------------|-----|
|            | 448406       | AW772298  | Hs.21103   | Homo sapiens mRNA; cDNA DKFZp564B07      |                           | 2.6 |
|            | 437176       | AW176909  | Hs.42346   | calcineurin-binding protein calsarc      | Galactosyl_T;TM;SS        | 2.6 |
|            | 435075       | R51094  | Hs.12400   | ESTs                                     |                           | 2.6 |
|            | 403153       |   |  | Target Exon                              |                           | 2.6 |
| 5          | 400387       | AF133131  |  | double homeobox, 5                       |                           | 2.6 |
|            | 425940       | AB023184  | Hs.163990  | KIAA0967 protein                         | PDZ;SS                    | 2.6 |
|            | 416157       | NM_003243   | Hs.342874  | transforming growth factor, beta re      | zona_pellucida;TM;SS      | 2.6 |
|            | 452554       | AW452434  | Hs.58006   | ESTs, Weakly similar to ALU5_HUMAN       | HLH,PAC,PAS:none          | 2.6 |
|            | 453247       | T80198  | Hs.111806  | ESTs                                     | vwa,Cache:none            | 2.6 |
| 10         | 407744       | AB020629  | Hs.38095   | ATP-binding cassette, sub-family A       | ABC_tran,PRK;TM;SS        | 2.6 |
|            | 432877       | AW974111  | Hs.292477  | ESTs                                     | Ets,SAM_PNT:none          | 2.6 |
|            | 450115       | AI591038  | Hs.38132   | ESTs                                     |                           | 2.6 |
|            | 406337       |   |  | C14000021:gi7242973 dbj BAA92547.1       | Peptidase_M22             | 2.6 |
|            | 430877       | NM_005269   | Hs.2693  | glioma-associated oncogene homolog       | zf-C2H2,SS                | 2.6 |
| 15         | 453874       | AW591783  | Hs.36131   | collagen, type XIV, alpha 1 (unduli      |                           | 2.6 |
|            | 450493       | M93718  | Hs.166373  | nitric oxide synthase 3 (endothelia      | NAD_binding,flavodoxin,FA | 2.6 |
|            | 427620       | NM_003705   | Hs.179866  | solute carrier family 25 (mitochond      | efhand,mito_carr;TM;SS=   | 2.6 |
|            | 446585       | AV659397  | Hs.299668  | ESTs, Weakly similar to I38022 hypo      |                           | 2.6 |
| 20         | 427223       | BE208189  | Hs.174031  | cytochrome c oxidase subunit VIb         | tubulin,FKBP,COX6B,7tm_1, | 2.6 |
|            | 428111       | S76617  | Hs.2243  | B lymphoid tyrosine kinase               | SH2,SH3,ptkinase;SS       | 2.6 |
|            | 440133       | AI056255  | Hs.133349  | ESTs                                     |                           | 2.6 |
|            | 419693       | AA133749  | Hs.301350  | FXD domain-containing ion transpor       | ATP1G1_PLM_MAT8;TM;SS     | 2.6 |
|            | 417103       | Z33905  | Hs.81218   | hypothetical protein MGC3597             | TPR,zf-C3HC4,PHD;TM;SS=   | 2.6 |
| 25         | 419100       | AA464362  | Hs.6748  | hypothetical protein PP1665              | squash,GDPD;TM;           | 2.6 |
|            | 449925       | AI342493  | Hs.24192   | Homo sapiens cDNA FLJ20767 fis, clo      |                           | 2.6 |
|            | 430937       | X53463  | Hs.2704  | glutathione peroxidase 2 (gastroint      | GSHPx;SS                  | 2.6 |
|            | 425640       | U34051  | Hs.158460  | cyclin-dependent kinase 5, regulato      | CDK5_activator;TM;        | 2.6 |
|            | 409021       | AA156640  | Hs.49881   | fatty acid binding protein 3, muscl      | lipocalin:none            | 2.6 |
| 30         | 400538       |   |  | ENSP00000239776:BA425A6.2 (similar       | TM;SS                     | 2.6 |
|            | 446947       | AF146747  | Hs.232165  | polycythemia rubra vera 1; cell sur      | TM;SS                     | 2.6 |
|            | 408310       | AW179023  | Hs.191705  | gb:PM3-ST0036-170899-001-e08 ST0036      |                           | 2.6 |
|            | 433032       | AI084066  | Hs.20072   | myosin regulatory light chain inter      | Band_41;                  | 2.6 |
|            | 419389       | AI074951  | Hs.319095  | ESTs                                     | DPPIV_N_term:none         | 2.6 |
| 35         | 453145       | R63438  | Hs.183454  | Homo sapiens cDNA FLJ14883 fis, clo      | STT3;TM;SS                | 2.6 |
|            | 443460       | AL050275  | Hs.9383  | DKFZP566D213 protein                     | EGF,laminin_EGF,EB;TM;S   | 2.6 |
|            | 421903       | AW079940  | Hs.15951   | ESTs, Weakly similar to S32436 coll      | SS                        | 2.5 |
|            | 421757       | Z20897  | Hs.296259  | paraoxonase 3                            | Arylesterase;SS           | 2.5 |
| 40         | 428475       | AF172940  | Hs.184542  | CGI-127 protein                          |                           | 2.5 |
|            | 424657       | AA344719  |  | gb:EST50901 Gall bladder II Homo sa      |                           | 2.5 |
|            | 432862       | AW004958  | Hs.236720  | amniotless protein                       | TM;SS                     | 2.5 |
|            | 427195       | W27230  | Hs.173912  | eukaryotic translation initiation f      | DEAD,helicase_C;          | 2.5 |
|            | 447770       | AB032417  | Hs.19545   | frizzled (Drosophila) homolog 4          | Fz,Frizzled,7tm_2;TM;SS   | 2.5 |
|            | 456523       | AI083668  | Hs.50601   | hypothetical protein MGC10986            | ptkinase:none             | 2.5 |
| 45         | 451846       | T65840  | Hs.11762   | ESTs                                     |                           | 2.5 |
|            | 432906       | BE265489  | Hs.3123  | lethal giant larvae (Drosophila) ho      | WD40;TM;                  | 2.5 |
|            | 453876       | AW021748  | Hs.110406  | ESTs, Weakly similar to I38022 hypo      |                           | 2.5 |
|            | 441488       | AW450935  | Hs.7862  | hypothetical protein FLJ20312            | TM;                       | 2.5 |
|            | 444659       | F18939  | Hs.153827  | ESTs                                     |                           | 2.5 |
| 50         | 452497       | AA732153  | Hs.27865   | Homo sapiens cDNA: FLJ21333 fis, cl      |                           | 2.5 |
| TABLE 31B: |              |   |  |  |                           |     |
|            | Pkey:        | Unique Eos probeset identifier number   |  |  |                           |     |
|            | CAT number:  | Gene cluster number   |  |  |                           |     |
| 55         | Accession:   | Genbank accession numbers   |  |  |                           |     |
|            | Pkey         | CAT Number  | Accession  |  |                           |     |
|            | 439457       | 23338_1   | AF086274 W69434 W69517   |  |                           |     |
|            | 413127       | 151610_1  | BG007296 BF330853 BF747375 BE066356 BE066292 BF330900 BF747142 BE066419 BF742510 BE066529 BE066298 BF742516 BF746603 |  |                           |     |
| 60         |              |   | BE066274 BF334312  |  |                           |     |
|            | 427842       | 1164138_1   | AW936960 AW936961 AA416706 R29415  |  |                           |     |
|            | 438622       | 46171_1   | L03151 L03155 L03161   |  |                           |     |
|            | 424657       | 896375_1  | AW963487 AA365077 AA344719   |  |                           |     |
| TABLE 31C: |              |   |  |  |                           |     |
| 65         | Pkey:        | Unique number corresponding to an Eos probeset  |  |  |                           |     |
|            | Ref:         | Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495. |  |  |                           |     |
|            | Strand:      | Indicates DNA strand from which exons were predicted.   |  |  |                           |     |
| 70         | NL_position: | Indicates nucleotide positions of predicted exons.  |  |  |                           |     |
|            | Pkey         | Ref   | Strand   | NL_position                              |                           |     |
|            | 401700       | 3176654   | Minus  | 35416-35534                              |                           |     |
|            | 402449       | 9796674   | Plus   | 59867-60039,62588-62828,63465-63623,6492 |                           |     |
| 75         | 402632       | 9931268   | Plus   | 101166-101419                            |                           |     |
|            | 404445       | 7596866   | Minus  | 31112-31423                              |                           |     |
|            | 402458       | 9796782   | Plus   | 170479-171134                            |                           |     |
|            | 403028       | 7670577   | Minus  | 114150-114272                            |                           |     |
|            | 403213       | 7630897   | Minus  | 162572-162739,164442-164540              |                           |     |
| 80         | 403153       | 9799871   | Minus  | 42232-43389                              |                           |     |
|            | 406337       | 9213455   | Plus   | 90117-90337                              |                           |     |
|            | 400538       | 9797838   | Plus   | 8752-9822                                |                           |     |

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TABLE 32A: ABOUT 68 GENES UP-REGULATED IN GLIOMA COMPARED TO NORMAL ADULT TISSUES AND TO NON-MALIGNANT BRAIN TISSUES THAT ARE LIKELY TO ENCODE PROTEINS AMENABLE TO MODULATION BY SMALL MOLECULES, PEPTIDES, OR ANTIBODIES

Table 32A lists about 68 genes up-regulated in glioma compared to normal adult tissues and to non-malignant brain tissues that are likely to encode proteins amenable to modulation by small molecules, peptides, or antibodies. These were selected from the starting collection of 59680 probesets on the Affymetrix/Eos-Hu03 GeneChip® array as follows: the ratio of "average" glioma to "average" normal adult tissues was greater than or equal to 2.5, the ratio of "average" glioma to "average" non-malignant brain tissues was greater than or equal to 2.0, the "average" glioma level was set to the 98th percentile value amongst various glioma specimens, the "average" normal adult tissue level was set to the 85th percentile value amongst various non-malignant tissues, the "average" non-malignant brain tissues level was set to the 90th percentile value amongst various non-malignant brain tissues, the "average" glioma value was greater than or equal to 50 units, and the predicted protein contained a structural domain that is indicative of having an oncogenic function or of transducing an intracellular signal, or of being modulatable by small molecules, peptides, or antibodies (e.g. pkinase, death-domain, 7tm, phosphatase, or ion\_transporter). Predicted protein domains are noted.

Key: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenetID: Unigene number  
 Unigene Title: Unigene gene title  
 Protein Domains: Predicted Protein Domains  
 R1: glioma vs. normal adult tissues and non-malignant brain tissues that are likely to encode proteins

| Pkey   | ExAccn    | UniGene ID | Unigene Title                         | Protein Domains               | R1  |
|--------|-----------|------------|---------------------------------------|-------------------------------|-----|
| 424343 | AW956360  | Hs.4748    | adenylate cyclase activating polype   | 7tm_2,HRM                     | 8.8 |
| 418506 | AA084248  | Hs.85339   | unknown protein for MGC:29643 (form   |                               | 7.8 |
| 456723 | Z43902    | Hs.4748    | adenylate cyclase activating polype   | 7tm_2,HRM                     | 7.5 |
| 430228 | AW950939  | Hs.6382    | ESTs, Highly similar to T00391 hypo   |                               | 7.1 |
| 436480 | AJ271643  | Hs.87469   | putative acid-sensing ion channel     | ASC;TM;                       | 6.3 |
| 407603 | AW955705  | Hs.62604   | Homo sapiens, clone IMAGE:4299322,    | TM;                           | 6.0 |
| 414825 | X06370    | Hs.77432   | epidermal growth factor receptor (a   | Furin-like, pkinase, Recep_   | 6.0 |
| 423779 | AW071837  | Hs.57971   | ESTs                                  | TNFR_c6                       | 5.5 |
| 409638 | AW450420  | Hs.21335   | ESTs                                  | 7tm_2,HRM                     | 5.3 |
| 442613 | A1004002  | Hs.130522  | Kv channel-interacting protein 1      | Neur_chan_LBD, Neur_c         | 5.2 |
| 436456 | AW292577  | Hs.248122  | G protein-coupled receptor 24         |                               | 5.1 |
| 424340 | AA339036  | Hs.7033    | ESTs                                  | lig_chan, ANF_receptor, non   | 5.0 |
| 425115 | R44664    | Hs.123956  | ESTs                                  | 7tm_1                         | 4.7 |
| 446809 | AW590171  | Hs.101413  | ESTs                                  | CaMBD, SK_channel, CaMBD, SK  | 4.4 |
| 413278 | BE563085  | Hs.833     | interferon-stimulated protein, 15 k   | ubiquitin; SS                 | 4.4 |
| 454360 | L78207    | Hs.54470   | ATP-binding cassette, sub-family C    | ABC_tran, ABC_membrane, PRK   | 4.2 |
| 414821 | M63835    | Hs.77424   | Fc fragment of IgG, high affinity I   | ig; TM; SS                    | 4.2 |
| 428141 | D50402    | Hs.182611  | solute carrier family 11 (proton-co   | Nramp; TM;                    | 4.1 |
| 435472 | AW972330  | Hs.283022  | triggering receptor expressed on my   | ig; TM; SS                    | 4.1 |
| 435615 | Y15065    | Hs.4975    | potassium voltage-gated channel, KQ   | ion_trans, KCNQ1_channel; T   | 3.8 |
| 448204 | AI475124  | Hs.170561  | ESTs                                  | lig_chan, SBP_bac_3           | 3.7 |
| 433290 | R20077    | Hs.302185  | Homo sapiens clone 23618 mRNA seque   | lig_chan, SBP_bac_3, ANF_re   | 3.6 |
| 408243 | Y00787    | Hs.624     | interleukin 8                         | HLH, PAS; IL8; TM;            | 3.6 |
| 415849 | R20529    | Hs.6806    | ESTs                                  | 7tm_2, GPS, Gal_Lectin, HRM,  | 3.5 |
| 451099 | R52795    | Hs.25954   | interleukin 13 receptor, alpha 2      | fn3; TM; SS                   | 3.4 |
| 445070 | NM_000677 | Hs.258     | adenosine A3 receptor                 | 7tm_1; TM; SS                 | 3.4 |
| 428037 | N47474    | Hs.89230   | potassium intermediate/small conduc   | CaMBD, SK_channel             | 3.2 |
| 444006 | BE395085  | Hs.10086   | type I transmembrane protein Fn14     | td_recept_a, PKD, MHC_1; TM   | 3.1 |
| 447143 | AW292408  | Hs.152290  | ESTs, Highly similar to JC2463 vaso   |                               | 3.0 |
| 418054 | NM_002318 | Hs.83354   | lysyl oxidase-like 2                  | SRQR, Lysyl_oxidase; TM; S    | 3.0 |
| 424441 | X14850    | Hs.147097  | H2A histone family, member X          | histone, CBFD_NFYB_HMF; TM=   | 3.0 |
| 446057 | AI420227  | Hs.366053  | Trp-p8 transient receptor potential   |                               | 2.9 |
| 438204 | AI589645  | Hs.128690  | ESTs                                  | 7tm_1                         | 2.9 |
| 431674 | AA098901  | Hs.301642  | G-protein coupled receptor            | GCV_H                         | 2.9 |
| 424028 | AF055084  | Hs.153692  | Homo sapiens cDNA FLJ14354 fis, clo   |                               | 2.9 |
| 415209 | F00183    | Hs.172004  | titin                                 |                               | 2.8 |
| 438537 | AK000511  | Hs.6294    | hypothetical protein DKFZp434L1435    | IRNA-synt_1; TM;              | 2.8 |
| 431053 | S40369    | Hs.249141  | Glutamate receptor subunit            | lig_chan, ANF_receptor; TM=   | 2.8 |
| 408482 | NM_000676 | Hs.45743   | adenosine A2b receptor                | 7tm_1; TM; SS                 | 2.8 |
| 414774 | X02419    | Hs.77274   | plasminogen activator, urokinase      | knirgle, trypsin, plant_thi   | 2.8 |
| 426865 | D63476    | Hs.172813  | PAK-interacting exchange factor bet   | SH3, PH, RhoGEF, Terpenes_syn | 2.8 |
| 430897 | U71092    | Hs.248122  | G protein-coupled receptor 24         | 7tm_1; TM;                    | 2.7 |
| 438993 | AA828995  | Hs.54929   | gb:od77b08.s1 NCI_CGAP_Ov2 Homo sap   | EGF, metalthio, integrin_B,   | 2.7 |
| 409552 | AL119675  | Hs.74619   | phosphorylase kinase, gamma 1 (muscle | kinase, Bac_DNA_binding; T    | 2.7 |
| 412817 | AL037159  | Hs.197366  | proteasome (prosome, macropain) 26S   | PC_rap; TM;                   | 2.7 |
| 429150 | AF120103  | Hs.90786   | smoothed (Drosophila) homolog         | COX8, SHMT, MIF, GST_C, EF1G_ | 2.7 |
| 419508 | AW997938  | Hs.82848   | ATP-binding cassette, sub-family C    | ABC_tran, ABC_membrane; TM=   | 2.7 |
| 417880 | BE241595  | Hs.149723  | selectin L (lymphocyte adhesion mol   | EGF, lectin_c, sushi; TM; S   | 2.7 |
| 432074 | AA525248  | Hs.149723  | ESTs                                  | Y_phosphatase                 | 2.6 |
| 402154 |           |            | NM_031896: Homo sapiens calcium cha   | PMP22_Claudin; TM; SS         | 2.6 |
| 431222 | X56777    | Hs.273790  | zona pellucida glycoprotein 3A (spe   | zona_pellucida; TM; SS        | 2.6 |
| 419913 | AW270040  | Hs.34455   | ESTs                                  | EPH_lbd, fn3, pkinase,        | 2.6 |
| 412802 | U41518    | Hs.74602   | aquaporin 1 (channel-forming integr   | MIP; TM; SS                   | 2.6 |
| 412070 | AW893260  |            | gb:CM2-NN0010-100300-111-e09 NN0010   | 7tm_2, HRM                    | 2.6 |
| 422676 | D28481    | Hs.1570    | histamine receptor H1                 | 7tm_1; TM; SS                 | 2.6 |
| 422311 | AF073515  | Hs.114948  | cytokine receptor-like factor 1       | fn3; TM;                      | 2.6 |
| 444381 | BE387335  | Hs.283713  | hypothetical protein BC014245         | Collagen; TM; SS              | 2.6 |
| 419972 | AL041465  | Hs.182982  | golgin-57                             |                               | 2.6 |
| 418526 | BE019020  | Hs.85838   | solute carrier family 16 (monocarbo   | TM; SS                        | 2.6 |
| 421997 | R66740    | Hs.110613  | KIAA0220 protein                      | aa_permeases, pyridoxal_de    | 2.6 |
| 430181 | AF065314  | Hs.234785  | cyclic nucleotide gated channel alp   | cNMP_binding, ion_trans; TM   | 2.5 |
| 426318 | AA375125  | Hs.147112  | Homo sapiens cDNA: FLJ23222 fis, cl   | EPH_lbd, pkinase, fn3, SAM, n | 2.5 |
| 434808 | AF155108  | Hs.256150  | NY-REN-41 antigen                     | TM;                           | 2.5 |
| 418843 | AJ251016  | Hs.89230   | potassium intermediate/small conduc   | CaMBD, SK_channel; TM; SS=    | 2.5 |
| 410290 | AA402307  | Hs.322844  | hypothetical protein DKFZp564A176     | Sema, PSI, TIG, integrin_B; T | 2.5 |

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|        |          |           |                                     |              |     |
|--------|----------|-----------|-------------------------------------|--------------|-----|
| 424909 | S78187   | Hs.153752 | cell division cycle 25B             | Rhodanese;SS | 2.5 |
| 408369 | R38438   | Hs.182575 | SLC15A2 Solute carrier family 15 (H | PTR2,TM;     | 2.5 |
| 414561 | A1064813 | Hs.195155 | Homo sapiens amino acid transport s | Aa_trans;TM; | 2.5 |

5

TABLE 32B:

Pkey: Unique Eos probeset identifier number  
 CAT number: Gene cluster number  
 Accession: Genbank accession numbers

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| Pkey   | CAT Number | Accession   |
|--------|------------|---|
| 438993 | 2580163_1  | AI926361 AA834879 AA828995  |
| 412070 | 287551_1   | BG820657 AW890808 BF904755 AW893260 BI034684 BF963423 BF961550 M85689 |

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TABLE 32C:

Pkey: Unique number corresponding to an Eos probeset  
 Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.  
 Strand: Indicates DNA strand from which exons were predicted.  
 NL\_position: Indicates nucleotide positions of predicted exons.

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| Pkey   | Ref     | Strand | NL_position   |
|--------|---------|--------|---------------|
| 402154 | 8516165 | Minus  | 125299-125494 |

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TABLE 33A: ABOUT 798 GENES UP-REGULATED IN KIDNEY CANCER

Table 33A lists about 798 genes up-regulated in kidney cancer compared to normal adult tissues. These were selected from 59680 probesets on the Affymetrix/Eos HuQ3 GeneChip array such that the ratio of "average" kidney cancer to "average" normal adult tissues was greater than or equal to 3.0. The "average" kidney cancer level was set to the 90th percentile amongst various kidney cancers. The "average" normal adult tissue level was set to the 90th percentile amongst various non-malignant tissues. In order to remove gene-specific background levels of non-specific hybridization, the 15th percentile value amongst the various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

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Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 R1: Ratio of tumor to normal tissue

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| Pkey   | ExAccn    | UnigenelD | Unigene Title                            | R1     |
|--------|-----------|-----------|--|--------|
| 421471 | U90545    | Hs.104635 | solute carrier family 17 (sodium phospho | 1007.4 |
| 445178 | AI792241  | Hs.129614 | kidney-specific membrane protein         | 438.0  |
| 452401 | NM_007115 | Hs.29352  | tumor necrosis factor, alpha-induced pro | 336.4  |
| 421727 | Y13153    | Hs.107318 | kynurenine 3-monooxygenase (kynurenine 3 | 323.6  |
| 440304 | BE159984  | Hs.125395 | ESTs                                     | 295.0  |
| 436878 | BE465204  | Hs.47448  | ESTs                                     | 258.8  |
| 452795 | AW392555  | Hs.18878  | hypothetical protein FLJ21520            | 258.6  |
| 421155 | H87879    | Hs.102267 | lysyl oxidase                            | 251.8  |
| 426471 | M22440    | Hs.170009 | transforming growth factor, alpha        | 224.6  |
| 421478 | AI683243  | Hs.97258  | ESTs                                     | 212.6  |
| 424086 | AI351010  | Hs.102267 | lysyl oxidase                            | 199.2  |
| 428296 | NM_003058 | Hs.183572 | solute carrier family 22 (organic cation | 186.4  |
| 426890 | AA393167  | Hs.41294  | ESTs                                     | 183.4  |
| 441031 | AI110684  | Hs.7645   | fibrinogen, B beta polypeptide           | 174.0  |
| 411642 | NM_014932 | Hs.71132  | neurologin 1                             | 172.4  |
| 452838 | U65011    | Hs.30743  | preferentially expressed antigen in mela | 161.4  |
| 425984 | AW836277  | Hs.165636 | hypothetical protein DKFZp761C07121      | 151.0  |
| 438966 | AW979074  |           | gb:EST391184 MAGE resequences, MAGP Homo | 135.0  |
| 453165 | S74727    | Hs.32042  | aspartoacylase (aminoacylase 2, Canavan  | 134.8  |
| 453160 | AI263307  | Hs.146228 | ESTs                                     | 132.6  |
| 452431 | U88879    | Hs.29499  | toll-like receptor 3                     | 130.6  |
| 423508 | AW604297  | Hs.129711 | hepatitis A virus cellular receptor 1    | 120.4  |
| 420642 | AK001520  | Hs.99545  | Homo sapiens cDNA FLJ10658 fis, clone NT | 112.6  |
| 407975 | X89426    | Hs.41716  | endothelial cell-specific molecule 1 (NO | 111.8  |
| 431708 | AI698136  | Hs.108873 | ESTs                                     | 109.8  |
| 446460 | AW013999  | Hs.150164 | ESTs                                     | 103.6  |
| 443450 | N66045    | Hs.133529 | ESTs                                     | 103.0  |
| 432865 | AI753709  | Hs.152484 | ESTs                                     | 101.4  |
| 442438 | AA995998  |           | gb:os26b03.s1 NCI_CGAP_Kid5 Homo sapiens | 98.8   |
| 433447 | U29195    | Hs.3281   | neuronal pentraxin II                    | 98.5   |
| 440311 | AI733079  | Hs.125407 | ESTs, Moderately similar to ALUE_HUMAN ! | 98.2   |
| 415076 | NM_000857 | Hs.77890  | guanylate cyclase 1, soluble, beta 3     | 97.0   |
| 437157 | BE048860  | Hs.120655 | ESTs                                     | 94.4   |
| 453319 | AI985369  | Hs.20117  | ESTs                                     | 91.4   |
| 447046 | AA326187  | Hs.17170  | G protein-coupled receptor 4             | 90.2   |
| 439169 | AI912122  | Hs.41095  | ESTs                                     | 86.6   |
| 431870 | AW449902  | Hs.105500 | ESTs                                     | 84.4   |
| 438993 | AA828995  |           | gb:od77b08.s1 NCI_CGAP_Ov2 Homo sapiens  | 83.8   |
| 445279 | R41900    | Hs.22245  | ESTs                                     | 82.4   |
| 451592 | AI805416  | Hs.213897 | ESTs                                     | 79.4   |
| 422966 | AV648419  | Hs.122613 | dimethylglycine dehydrogenase precursor  | 78.8   |
| 423109 | M59305    | Hs.123655 | natriuretic peptide receptor C/guanylate | 78.0   |
| 415989 | AI267700  | Hs.111128 | ESTs                                     | 77.0   |
| 422544 | AB018259  | Hs.118140 | KIAA0716 gene product                    | 74.8   |
| 425878 | AW964806  | Hs.38085  | ESTs, Weakly similar to putative glycine | 74.8   |
| 429352 | AK001512  | Hs.200097 | hypothetical protein FLJ10650            | 73.0   |

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|    |        |           |           |   |      |
|----|--------|-----------|-----------|---|------|
|    | 453392 | U23752    | Hs.32964  | SRY (sex determining region Y)-box 11     | 72.2 |
|    | 441665 | AI301355  | Hs.151285 | ESTs                                      | 71.6 |
|    | 435094 | AI560129  | Hs.277523 | EST                                       | 71.2 |
|    | 403345 |           |           |   | 69.6 |
| 5  | 430440 | X52599    | Hs.2561   | nerve growth factor, beta polypeptide     | 69.0 |
|    | 440482 | AA886658  | Hs.50873  | ESTs                                      | 67.6 |
|    | 457100 | AA417878  | Hs.48401  | ESTs, Weakly similar to ALU8_HUMAN ALU S  | 67.0 |
|    | 420637 | AW976153  |           | gb:EST388262 MAGE resequences, MAGN Homo  | 65.2 |
| 10 | 407905 | AW103655  | Hs.252905 | ESTs                                      | 63.2 |
|    | 422998 | AK000588  | Hs.122939 | hypothetical protein FLJ20581             | 61.8 |
|    | 432267 | AK000872  | Hs.274227 | Homo sapiens cDNA FLJ10010 fis, clone HE  | 61.2 |
|    | 449448 | D60730    | Hs.57471  | ESTs                                      | 60.6 |
|    | 431941 | AK000106  | Hs.272227 | Homo sapiens cDNA FLJ20099 fis, clone CO  | 59.8 |
| 15 | 419752 | AA249573  | Hs.152618 | ESTs                                      | 58.4 |
|    | 449579 | AW207260  | Hs.134014 | prostate cancer associated protein 6      | 58.2 |
|    | 408609 | AA330431  | Hs.640    | calcitonin receptor                       | 57.4 |
|    | 451009 | AA013140  | Hs.115707 | ESTs                                      | 57.2 |
|    | 435610 | AI862767  | Hs.114157 | ESTs, Weakly similar to putative p150 [H  | 56.4 |
|    | 411893 | R82845    | Hs.273789 | ESTs                                      | 56.2 |
| 20 | 415227 | AW821113  | Hs.72402  | ESTs                                      | 55.2 |
|    | 433859 | AW896758  | Hs.163925 | ESTs                                      | 55.0 |
|    | 450459 | AI697193  | Hs.299254 | ESTs                                      | 54.4 |
|    | 400302 | N48056    | Hs.1915   | folate hydrolase (prostate-specific memb  | 53.4 |
| 25 | 421831 | AA298836  | Hs.22026  | ESTs                                      | 52.8 |
|    | 438617 | AI023799  | Hs.163242 | ESTs                                      | 52.1 |
|    | 449101 | AA205847  | Hs.23016  | G protein-coupled receptor                | 52.0 |
|    | 410025 | BE220489  | Hs.113592 | ESTs                                      | 51.8 |
|    | 423685 | BE350494  | Hs.49753  | Homo sapiens mRNA for KIAA1561 protein,   | 48.0 |
| 30 | 436751 | AA732217  | Hs.294054 | ESTs                                      | 46.6 |
|    | 445424 | AB028945  | Hs.12696  | cortactin SH3 domain-binding protein      | 45.4 |
|    | 444059 | R69743    | Hs.75442  | albumin                                   | 44.8 |
|    | 442671 | AI005668  | Hs.134779 | EST                                       | 44.4 |
|    | 445657 | AW612141  | Hs.279575 | ESTs                                      | 44.3 |
| 35 | 452891 | N75582    | Hs.212875 | ESTs, Weakly similar to KIAA0357 [H.sapi  | 44.0 |
|    | 423735 | AA330259  |           | gb:EST33963 Embryo, 12 week II Homo sapi  | 43.8 |
|    | 422553 | AI697720  | Hs.171455 | ESTs                                      | 43.6 |
|    | 452461 | N78223    | Hs.108106 | transcription factor                      | 42.8 |
|    | 408430 | S79876    | Hs.44926  | dipeptidylpeptidase IV (CD26, adenosine   | 42.6 |
| 40 | 452240 | AI591147  | Hs.61232  | ESTs                                      | 41.7 |
|    | 445186 | AW614544  | Hs.123641 | protein tyrosine phosphatase, receptor t  | 41.4 |
|    | 452788 | AW294571  | Hs.136040 | ESTs                                      | 41.4 |
|    | 419287 | X91906    | Hs.89872  | chloride channel 5 (nephrolithiasis 2, X  | 40.6 |
|    | 428822 | VW28418   | Hs.301148 | potassium voltage-gated channel, Isk-rel  | 40.2 |
| 45 | 412359 | AW837985  |           | gb:QV3-LT0048-140200-083-e05 LT0048 Homo  | 40.0 |
|    | 434208 | T92641    | Hs.127648 | hypothetical protein PRO2176              | 39.2 |
|    | 442168 | AI253165  | Hs.146022 | ESTs                                      | 38.8 |
|    | 400792 | AA635062  | Hs.50094  | Homo sapiens mRNA; cDNA DKFZp434C00515 (f | 38.6 |
|    | 445900 | AF070526  | Hs.13429  | Homo sapiens clone 24787 mRNA sequence    | 38.4 |
|    | 444743 | AA045648  | Hs.11817  | nudix (nucleoside diphosphate linked moi  | 38.4 |
| 50 | 428795 | R45503    | Hs.97469  | ESTs, Weakly similar to I49698 alpha-1,3  | 37.6 |
|    | 406411 |           |           |   | 37.6 |
|    | 423657 | AL045128  | Hs.1691   | glucan (1,4-alpha-), branching enzyme 1   | 37.5 |
|    | 417218 | AA005247  | Hs.285754 | met proto-oncogene (hepatocyte growth fa  | 37.2 |
| 55 | 448788 | AI570286  | Hs.107070 | ESTs                                      | 37.2 |
|    | 441826 | AW503603  | Hs.129915 | phosphotriesterase related                | 37.0 |
|    | 409263 | AA069573  | Hs.50319  | ESTs                                      | 36.8 |
|    | 425577 | BE464496  | Hs.280977 | ESTs                                      | 36.2 |
|    | 452249 | BE394412  | Hs.61252  | ESTs                                      | 34.8 |
|    | 435986 | AA703158  | Hs.187848 | ESTs                                      | 34.4 |
| 60 | 417236 | AI908497  | Hs.170737 | Homo sapiens cDNA: FLJ23251 fis, clone C  | 33.8 |
|    | 440234 | AW117264  | Hs.126252 | ESTs                                      | 33.8 |
|    | 435334 | R94223    | Hs.117747 | ESTs                                      | 33.2 |
|    | 410153 | BE311926  | Hs.15830  | Homo sapiens cDNA FLJ12691 fis, clone NT  | 33.1 |
|    | 424871 | NM_004525 | Hs.153595 | low density lipoprotein-related protein   | 32.8 |
| 65 | 420908 | AL049974  | Hs.100261 | Homo sapiens mRNA; cDNA DKFZp564B222 (fr  | 32.4 |
|    | 423992 | AW898292  | Hs.137206 | Homo sapiens mRNA; cDNA DKFZp564H1663 (f  | 32.4 |
|    | 451050 | AW937420  | Hs.69662  | ESTs                                      | 32.0 |
|    | 449034 | AI624049  |           | gb:ts41a09.x1 NCI_CGAP_U11 Homo sapiens   | 31.6 |
| 70 | 434539 | AW748078  | Hs.214410 | ESTs                                      | 31.0 |
|    | 431595 | AA508196  |           | gb:nh60f07.s1 NCI_CGAP_Pr6 Homo sapiens   | 30.6 |
|    | 449625 | NM_014253 | Hs.23796  | odx (odd Oz/ten-m, Drosophila) homolog 1  | 30.5 |
|    | 448243 | AW369771  | Hs.77496  | small nuclear ribonucleoprotein polypept  | 30.4 |
|    | 413573 | AI733859  | Hs.149089 | ESTs                                      | 30.2 |
| 75 | 421037 | AI684808  | Hs.197653 | ESTs                                      | 30.2 |
|    | 449353 | AA001220  | Hs.271369 | ESTs                                      | 30.2 |
|    | 416548 | H62953    |           | gb:yr47f06.r1 Soares fetal liver spleen   | 29.6 |
|    | 423020 | AA383092  | Hs.1608   | replication protein A3 (14kD)             | 29.6 |
|    | 422420 | U03398    | Hs.1524   | tumor necrosis factor (ligand) superfam   | 29.6 |
| 80 | 459508 | R83265    | Hs.205956 | ESTs                                      | 29.2 |
|    | 414245 | BE148072  | Hs.75850  | WAS protein family, member 1              | 28.8 |
|    | 424565 | AW102723  | Hs.75295  | guanylate cyclase 1, soluble, alpha 3     | 28.6 |
|    | 445925 | AI733820  | Hs.145664 | ESTs                                      | 28.4 |
|    | 412616 | AW970584  | Hs.291033 | ESTs                                      | 28.0 |

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|    | 424638 | AI472106  | Hs.49303  | Homo sapiens cDNA FLJ11663 fis, clone HE   | 27.6 |
|    | 445885 | AI734009  | Hs.127699 | KIAA1603 protein                           | 27.6 |
|    | 410247 | AF181721  | Hs.61345  | RU2S                                       | 27.4 |
|    | 406414 |           |           |  | 27.2 |
| 5  | 435951 | AF269162  | Hs.41267  | c21orf7 form A-D                           | 27.2 |
|    | 458680 | N73773    | Hs.282950 | ESTs                                       | 27.0 |
|    | 419948 | AB041035  | Hs.93847  | NADPH oxidase 4                            | 26.4 |
|    | 423276 | AC003034  | Hs.126261 | Homo sapiens Chromosome 16 BAC clone CIT   | 26.3 |
|    | 427457 | AW779105  | Hs.164682 | ESTs, Weakly similar to ORF2 consensus s   | 26.0 |
| 10 | 446346 | AI290205  |           | gb:q179g06.x1 Soares_NhHMPu_S1 Homo sapi   | 26.0 |
|    | 448595 | AB014544  | Hs.21572  | KIAA0644 gene product                      | 25.8 |
|    | 419569 | AI971651  | Hs.91143  | jagged 1 (Alagille syndrome)               | 25.6 |
|    | 433242 | AB040938  | Hs.113940 | KIAA1505 protein                           | 25.6 |
|    | 453118 | AW195849  | Hs.252757 | ESTs                                       | 25.6 |
| 15 | 412209 | AW901456  |           | gb:RC0-NN1012-270300-031-c07 NN1012 Homo   | 25.2 |
|    | 429710 | AI337113  | Hs.146025 | Homo sapiens cDNA: FLJ23594 fis, clone L   | 25.2 |
|    | 444783 | AK001468  | Hs.62180  | anillin (Drosophila Scraps homolog), act   | 24.6 |
|    | 436788 | AA766908  | Hs.259047 | ESTs                                       | 24.4 |
|    | 427660 | AI741320  | Hs.114121 | Homo sapiens cDNA: FLJ23228 fis, clone C   | 24.4 |
| 20 | 419172 | AW338625  | Hs.22120  | ESTs                                       | 24.3 |
|    | 436061 | AI248584  | Hs.190745 | Homo sapiens cDNA: FLJ21326 fis, clone C   | 24.2 |
|    | 413623 | AA825721  | Hs.246973 | ESTs                                       | 24.0 |
|    | 407615 | AW753085  |           | gb:PM1-CT0247-151299-005-a03 CT0247 Homo   | 23.8 |
| 25 | 452466 | N84635    | Hs.29564  | Human DNA sequence from clone 682J15 on    | 23.8 |
|    | 432809 | AA565509  | Hs.131703 | ESTs                                       | 23.7 |
|    | 440102 | AI672443  | Hs.131190 | ESTs                                       | 23.6 |
|    | 451559 | AL119980  | Hs.128857 | ESTs                                       | 23.2 |
|    | 410811 | AW805687  | Hs.300648 | ESTs                                       | 23.0 |
| 30 | 416778 | M16505    | Hs.79876  | steroid sulfatase (microsomal), arylsulf   | 23.0 |
|    | 453628 | AW243307  | Hs.170187 | ESTs                                       | 22.8 |
|    | 401352 |           |           |  | 22.6 |
|    | 451561 | N52812    | Hs.177403 | ESTs                                       | 22.6 |
|    | 401976 |           |           |  | 22.4 |
| 35 | 410658 | AW105231  | Hs.192035 | ESTs                                       | 22.4 |
|    | 416220 | N49776    | Hs.121773 | ESTs                                       | 22.2 |
|    | 424073 | U03493    | Hs.138959 | gap junction protein, alpha 7, 45kD (con   | 22.0 |
|    | 444575 | AI264847  | Hs.22545  | Homo sapiens cDNA FLJ12935 fis, clone NT   | 22.0 |
|    | 444144 | BE159397  | Hs.7736   | hypothetical protein                       | 21.8 |
| 40 | 438504 | AW665281  | Hs.224625 | ESTs                                       | 21.2 |
|    | 439157 | AA912737  | Hs.20160  | ESTs                                       | 20.8 |
|    | 429006 | AA443143  | Hs.50929  | Homo sapiens cDNA FLJ13842 fis, clone TH   | 20.5 |
|    | 442006 | AW975183  | Hs.292663 | ESTs                                       | 20.2 |
|    | 409569 | AW573153  | Hs.256216 | ESTs                                       | 19.8 |
| 45 | 421160 | AL080215  | Hs.102301 | Homo sapiens mRNA: cDNA DKFZp586J0323 (f   | 19.8 |
|    | 404200 |           |           |  | 19.6 |
|    | 446591 | H44186    | Hs.15456  | PDZ domain containing 1                    | 19.2 |
|    | 420218 | AW958037  | Hs.22437  | Homo sapiens cDNA: FLJ23366 fis, clone H   | 18.9 |
|    | 408390 | AA054222  | Hs.40400  | ESTs                                       | 18.8 |
| 50 | 444038 | AW134509  | Hs.135077 | ESTs                                       | 18.8 |
|    | 446443 | AV659082  | Hs.134228 | ESTs                                       | 18.8 |
|    | 442204 | AI635450  | Hs.21914  | ESTs                                       | 18.4 |
|    | 451177 | AI969716  | Hs.13034  | ESTs                                       | 18.2 |
|    | 453931 | AL121278  | Hs.25144  | ESTs                                       | 18.1 |
| 55 | 437212 | AI765021  | Hs.210775 | ESTs                                       | 18.1 |
|    | 431806 | AF186114  | Hs.270737 | tumor necrosis factor (ligand) superfamily | 18.0 |
|    | 451659 | BE379761  | Hs.14248  | ESTs, Weakly similar to ALU8_HUMAN ALU S   | 17.8 |
|    | 423909 | AJ223183  | Hs.135194 | immunoglobulin superfamily, member 6       | 17.6 |
|    | 441082 | AW444804  | Hs.202655 | ESTs                                       | 17.6 |
| 60 | 446259 | AA425204  | Hs.42278  | Homo sapiens cDNA FLJ13391 fis, clone PL   | 17.6 |
|    | 423609 | AA328348  | Hs.218289 | ESTs                                       | 17.4 |
|    | 428301 | AW628666  | Hs.98440  | ESTs                                       | 17.4 |
|    | 446364 | AB006624  | Hs.14912  | KIAA0286 protein                           | 17.4 |
|    | 419983 | W55956    | Hs.94030  | Homo sapiens mRNA: cDNA DKFZp586E1624 (f   | 17.0 |
| 65 | 424929 | AI640761  | Hs.224988 | ESTs                                       | 17.0 |
|    | 425695 | NM_005401 | Hs.159238 | protein tyrosine phosphatase, non-recept   | 17.0 |
|    | 449122 | AI631310  | Hs.196955 | ESTs                                       | 17.0 |
|    | 409519 | AA075368  |           | gb:zm86h10.r1 Stratagene ovarian cancer    | 16.8 |
|    | 410947 | AK000305  | Hs.67055  | hypothetical protein FLJ20298              | 16.8 |
| 70 | 418053 | AA211493  |           | gb:zn55d06.s1 Stratagene muscle 937209 H   | 16.8 |
|    | 433225 | AW816515  | Hs.173540 | ATPase, Class V, type 10D                  | 16.8 |
|    | 443204 | AW205878  | Hs.29643  | Homo sapiens cDNA FLJ13103 fis, clone NT   | 16.6 |
|    | 421002 | AF116030  | Hs.100932 | transcription factor 17                    | 16.5 |
|    | 419296 | AA236115  | Hs.120785 | ESTs                                       | 16.2 |
| 75 | 421659 | NM_014459 | Hs.105511 | protocadherin 17                           | 16.0 |
|    | 417589 | T82075    | Hs.13911  | ESTs                                       | 16.0 |
|    | 446057 | AI420227  | Hs.149358 | ESTs                                       | 15.8 |
|    | 434636 | AA083764  | Hs.241334 | ESTs                                       | 15.6 |
|    | 446797 | AI682536  | Hs.163495 | Homo sapiens cDNA FLJ13608 fis, clone PL   | 15.6 |
| 80 | 443718 | AI083580  | Hs.221373 | ESTs                                       | 15.4 |
|    | 409748 | AI670776  | Hs.20961  | ESTs                                       | 15.2 |
|    | 443211 | AI128388  | Hs.143655 | ESTs                                       | 15.0 |
|    | 428911 | Z43846    | Hs.194478 | Homo sapiens mRNA: cDNA DKFZp434O1572 (f   | 14.9 |
|    | 444692 | AW779922  | Hs.145047 | ESTs                                       | 14.8 |



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|    | 445436 | AI224105  | Hs.151408 | ESTs                                     | 14.6 |
|    | 408684 | R61377    | Hs.12727  | hypothetical protein FLJ21610            | 14.5 |
|    | 405943 |           |           |  | 14.4 |
|    | 406291 |           |           |  | 14.4 |
| 5  | 458679 | AW975460  | Hs.143563 | ESTs                                     | 14.4 |
|    | 450152 | AI138635  | Hs.22968  | ESTs                                     | 14.4 |
|    | 403899 |           |           |  | 14.2 |
|    | 454490 | AW797778  |           | gb:CM2-UM0041-250200-104-d02 UM0041 Homo | 14.2 |
|    | 451807 | W52854    | Hs.27099  | DKFZP564J0863 protein                    | 14.0 |
| 10 | 452453 | AI902519  |           | gb:QV-BT009-101198-051 BT009 Homo sapien | 13.8 |
|    | 447499 | AW262580  | Hs.147674 | KIAA1621 protein                         | 13.8 |
|    | 406598 |           |           |  | 13.6 |
|    | 430939 | AI269471  | Hs.187018 | ESTs                                     | 13.4 |
|    | 443316 | AI478463  | Hs.18443  | ESTs                                     | 13.4 |
| 15 | 408034 | N26639    | Hs.42192  | Human EST clone 251800 mariner transpos  | 13.2 |
|    | 428508 | BE252383  | Hs.184668 | SBBI31 protein                           | 13.2 |
|    | 447934 | AW631440  | Hs.165596 | ESTs                                     | 13.2 |
|    | 406671 | AA129547  | Hs.285754 | met proto-oncogene (hepatocyte growth fa | 13.1 |
|    | 438199 | AW016531  | Hs.122147 | ESTs                                     | 13.0 |
| 20 | 415511 | AI732617  | Hs.182362 | ESTs                                     | 12.9 |
|    | 426920 | AA393351  | Hs.132121 | ESTs                                     | 12.8 |
|    | 447311 | R37010    | Hs.33417  | Homo sapiens cDNA: FLJ22806 fis, clone K | 12.6 |
|    | 423321 | AB013885  | Hs.126926 | beta-ureidopropionase                    | 12.5 |
|    | 403622 |           |           |  | 12.4 |
| 25 | 439759 | AL359055  | Hs.67709  | Homo sapiens mRNA full length insert cDN | 12.4 |
|    | 422317 | NM_001147 | Hs.115181 | angiopoietin 2                           | 12.2 |
|    | 428637 | AW979268  |           | gb:EST391378 MAGE resequences, MAGP Homo | 12.2 |
|    | 445717 | AW664858  | Hs.149332 | ESTs                                     | 12.2 |
| 30 | 418413 | R95735    | Hs.117753 | ESTs, Weakly similar to antigen of the m | 12.1 |
|    | 405336 |           |           |  | 12.0 |
|    | 437100 | AI761073  | Hs.14535  | Homo sapiens cDNA: FLJ22314 fis, clone H | 12.0 |
|    | 428227 | AA321649  | Hs.2248   | small inducible cytokine subfamily B (Cy | 12.0 |
|    | 414923 | AW445008  | Hs.77637  | homeo box A4                             | 11.9 |
|    | 432009 | AL137424  |           | gb:Homo sapiens mRNA; cDNA DKFZp761G2123 | 11.8 |
| 35 | 433326 | AI379486  | Hs.159430 | ESTs                                     | 11.8 |
|    | 453955 | AW579207  |           | gb:RC1-DT0029-120100-011-h01 DT0029 Homo | 11.8 |
|    | 407510 | U96191    |           | gb:Human trophoblast hypoxia-regulated f | 11.6 |
|    | 433231 | AB040926  | Hs.143552 | KIAA1493 protein                         | 11.6 |
|    | 451651 | AI097337  | Hs.88977  | hypothetical protein dJ511E16.2          | 11.6 |
| 40 | 443672 | AA323362  | Hs.9667   | butyrobetaine (gamma), 2-oxoglutarate di | 11.4 |
|    | 405609 |           |           |  | 11.4 |
|    | 418912 | NM_000685 | Hs.89472  | angiotensin receptor 1                   | 11.4 |
|    | 421306 | AA806207  | Hs.125889 | ESTs                                     | 11.4 |
|    | 428721 | X02158    | Hs.2303   | erythropoietin                           | 11.4 |
| 45 | 419255 | AA235672  | Hs.87491  | ESTs                                     | 11.4 |
|    | 450006 | AI241555  | Hs.60171  | ESTs                                     | 11.3 |
|    | 435420 | AI928513  | Hs.59203  | ESTs                                     | 11.2 |
|    | 449802 | AW901804  | Hs.23984  | hypothetical protein FLJ20147            | 11.2 |
|    | 424647 | W67751    | Hs.137308 | ESTs                                     | 11.0 |
| 50 | 435758 | AI242163  | Hs.22670  | chromodomain helicase DNA binding protei | 11.0 |
|    | 404347 |           |           |  | 10.8 |
|    | 438664 | AI911173  | Hs.213722 | ESTs                                     | 10.8 |
|    | 429125 | AA446854  | Hs.271004 | ESTs                                     | 10.7 |
|    | 416560 | R02818    | Hs.14102  | ESTs                                     | 10.6 |
| 55 | 429945 | NM_006729 | Hs.226483 | diaphanous (Drosophila, homolog) 2       | 10.6 |
|    | 435085 | AW130284  | Hs.192752 | ESTs, Moderately similar to NSD1 protein | 10.6 |
|    | 442409 | BE208843  | Hs.129544 | ESTs, Weakly similar to ORF YLL027w [S.c | 10.6 |
|    | 450644 | AW505496  | Hs.281215 | ESTs                                     | 10.6 |
|    | 448298 | AW137134  | Hs.187203 | ESTs                                     | 10.4 |
| 60 | 404115 |           |           |  | 10.2 |
|    | 406242 |           |           |  | 10.2 |
|    | 420757 | X78592    | Hs.99915  | androgen receptor (dihydrotestosterone r | 10.2 |
|    | 452588 | AA889120  | Hs.110637 | homeo box A10                            | 10.2 |
|    | 457233 | AI355009  | Hs.221698 | ESTs                                     | 10.2 |
| 65 | 416185 | AW975861  | Hs.291995 | ESTs                                     | 10.2 |
|    | 446152 | AI292036  | Hs.150028 | ESTs                                     | 10.1 |
|    | 446298 | AF187813  | Hs.14637  | kidney- and liver-specific gene          | 10.1 |
|    | 423637 | AL137279  | Hs.130187 | Homo sapiens mRNA; cDNA DKFZp43401214 (f | 10.0 |
|    | 442405 | BE465247  | Hs.129530 | ESTs                                     | 9.9  |
| 70 | 419213 | AW749146  |           | gb:PM0-BT0340-170100-004-e03 BT0340 Homo | 9.8  |
|    | 420840 | AI915836  | Hs.294008 | ESTs                                     | 9.8  |
|    | 423355 | AA324856  | Hs.257510 | ESTs                                     | 9.8  |
|    | 444929 | AI685841  | Hs.161354 | ESTs                                     | 9.8  |
|    | 423811 | AW299598  | Hs.50895  | homeo box C4                             | 9.8  |
| 75 | 433527 | AW235613  | Hs.133020 | ESTs                                     | 9.6  |
|    | 429975 | AI167145  | Hs.165538 | ESTs                                     | 9.6  |
|    | 439979 | AW600291  | Hs.6823   | hypothetical protein FLJ10430            | 9.5  |
|    | 433703 | AA210863  | Hs.3532   | nemo-like kinase                         | 9.2  |
|    | 417404 | NM_007350 | Hs.82101  | pleckstrin homology-like domain, family  | 9.2  |
| 80 | 451621 | AI879148  | Hs.26770  | fatty acid binding protein 7, brain      | 9.2  |
|    | 406992 | S82472    |           | gb:beta -pol=DNA polymerase beta (exon a | 9.2  |
|    | 419699 | AA248998  | Hs.31246  | ESTs                                     | 9.2  |
|    | 443740 | R56434    | Hs.21062  | ESTs                                     | 9.2  |

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| 5  | 422728 | AW937826  | Hs.103262 | ESTs   | 9.2 |
|    | 436961 | AW375974  | Hs.156704 | ESTs   | 9.2 |
|    | 431385 | BE178536  | Hs.11090  | high affinity immunoglobulin epsilon rec           | 9.1 |
|    | 411411 | AA345241  | Hs.55950  | ESTs, Weakly similar to KIAA1330 protein           | 9.1 |
|    | 424115 | AA335497  | Hs.293965 | ESTs   | 9.0 |
| 10 | 402045 |           |           |  | 9.0 |
|    | 433426 | H69125    | Hs.133525 | ESTs   | 9.0 |
|    | 425493 | AW363582  | Hs.75323  | prohibitin   | 9.0 |
|    | 447641 | BE619186  |           | gb:601472933F1 NIH_MGC_68 Homo sapiens c           | 9.0 |
|    | 403095 |           |           |  | 8.8 |
| 15 | 407942 | AA378608  | Hs.5894   | hypothetical protein FLJ10305                      | 8.8 |
|    | 423126 | AA322245  | Hs.290165 | ESTs   | 8.8 |
|    | 408134 | AK000184  | Hs.42945  | acid sphingomyelinase-like phosphodiesterase       | 8.7 |
|    | 450375 | AA009647  | Hs.8850   | a disintegrin and metalloproteinase domain         | 8.6 |
|    | 443647 | AV653846  | Hs.126261 | Homo sapiens Chromosome 16 BAC clone CIT           | 8.6 |
| 20 | 401439 |           |           |  | 8.6 |
|    | 449532 | W74653    | Hs.271593 | ESTs   | 8.6 |
|    | 453197 | A1916269  | Hs.109057 | ESTs, Weakly similar to ALU5_HUMAN ALU S           | 8.6 |
|    | 448450 | BE612490  |           | gb:601451884F1 NIH_MGC_66 Homo sapiens c           | 8.5 |
|    | 425176 | AW015644  | Hs.301430 | ESTs, Moderately similar to TEF1_HUMAN T           | 8.4 |
| 25 | 407721 | Y12735    | Hs.38018  | dual-specificity tyrosine-(Y)-phosphoryl           | 8.4 |
|    | 402921 |           |           |  | 8.4 |
|    | 428133 | AW167727  | Hs.11873  | ESTs   | 8.4 |
|    | 419503 | AA243642  | Hs.137422 | ESTs   | 8.4 |
|    | 452644 | AW452616  | Hs.212481 | ESTs   | 8.4 |
| 30 | 452259 | AA317439  | Hs.28707  | signal sequence receptor, gamma (transmembrane)    | 8.4 |
|    | 409695 | AA296961  |           | gb:EST1112514 Adrenal gland tumor Homo sa          | 8.3 |
|    | 418076 | R61388    | Hs.6724   | ESTs   | 8.3 |
|    | 402696 |           |           |  | 8.3 |
|    | 423099 | NM_002837 | Hs.123641 | protein tyrosine phosphatase, receptor type 1      | 8.3 |
| 35 | 413998 | AW103807  | Hs.243933 | ESTs   | 8.2 |
|    | 410008 | AA079552  |           | gb:zm20h12.s1 Stratagene pancreas (93720           | 8.2 |
|    | 416623 | N74925    | Hs.38761  | Homo sapiens cDNA: FLJ21564 fis, clone C           | 8.2 |
|    | 450001 | NM_001044 | Hs.406    | solute carrier family 6 (neurotransmitter)         | 8.1 |
|    | 435496 | AW840171  | Hs.265398 | ESTs, Weakly similar to transformation-related     | 8.0 |
| 40 | 413627 | BE182082  | Hs.246973 | ESTs   | 8.0 |
|    | 415713 | AW968573  |           | gb:EST380649 MAGE resequences, MAGJ Homo           | 8.0 |
|    | 426695 | AW118191  | Hs.112729 | ESTs   | 8.0 |
|    | 452284 | AW451426  | Hs.252740 | ESTs   | 8.0 |
|    | 454933 | BE141714  |           | gb:QV0-HT0101-061099-032-c04 HT0101 Homo           | 8.0 |
| 45 | 426269 | H15302    | Hs.168950 | Homo sapiens mRNA; cDNA DKFZp566A1046 (f           | 8.0 |
|    | 418882 | NM_004996 | Hs.89433  | ATP-binding cassette, sub-family C (CFTR)          | 8.0 |
|    | 444107 | T46839    | Hs.10319  | UDP glycosyltransferase 2 family, polypeptide      | 7.9 |
|    | 445740 | T78281    | Hs.13226  | Homo sapiens clone 25181 mRNA sequence             | 7.9 |
|    | 433190 | M26901    | Hs.3210   | renin  | 7.8 |
| 50 | 432777 | AA564991  | Hs.269477 | ESTs   | 7.8 |
|    | 449444 | AW818436  | Hs.23590  | solute carrier family 16 (monocarboxylic)          | 7.7 |
|    | 444042 | NM_004915 | Hs.10237  | ATP-binding cassette, sub-family G (WHITE)         | 7.7 |
|    | 434032 | AW009951  | Hs.206892 | ESTs   | 7.7 |
|    | 419750 | AL079741  | Hs.183114 | Homo sapiens cDNA FLJ14236 fis, clone NT           | 7.6 |
| 55 | 439024 | R96696    | Hs.35598  | ESTs   | 7.6 |
|    | 437205 | AL110232  |           | gb:Homo sapiens mRNA; cDNA DKFZp564D2071           | 7.4 |
|    | 446030 | AF131805  | Hs.13544  | Homo sapiens clone 24850 mRNA sequence             | 7.4 |
|    | 446311 | AW007294  | Hs.149795 | ESTs, Weakly similar to ALU1_HUMAN ALU S           | 7.4 |
|    | 452883 | X80031    | Hs.150318 | ESTs   | 7.4 |
| 60 | 448253 | H25899    | Hs.201591 | ESTs   | 7.4 |
|    | 406030 |           |           |  | 7.4 |
|    | 437084 | A1911516  | Hs.127811 | ESTs   | 7.3 |
|    | 435013 | H91923    | Hs.110024 | NADH:ubiquinone oxidoreductase MLRQ subunit        | 7.3 |
|    | 432143 | AL040183  | Hs.123484 | ESTs, Weakly similar to The KIAA0149 gene          | 7.3 |
| 65 | 409594 | AA076118  |           | gb:zm18e06.s1 Stratagene pancreas (93720           | 7.2 |
|    | 425151 | AA351814  | Hs.298678 | ESTs   | 7.2 |
|    | 448582 | A1538880  | Hs.94812  | ESTs   | 7.2 |
|    | 455068 | A1807894  | Hs.27910  | centrosomal protein 2                              | 7.2 |
|    | 406504 |           |           |  | 7.2 |
| 70 | 428395 | AA427992  | Hs.104885 | ESTs, Weakly similar to zinc finger protein        | 7.2 |
|    | 421102 | A1470093  | Hs.89217  | ESTs   | 7.2 |
|    | 423161 | AL049227  | Hs.124776 | Homo sapiens mRNA; cDNA DKFZp564N1116 (f           | 7.1 |
|    | 410534 | AW905138  |           | gb:QV0-NN1071-280400-207-g07 NN1071 Homo           | 7.1 |
|    | 415084 | M19267    | Hs.77899  | tropomyosin 1 (alpha)                              | 7.0 |
| 75 | 410274 | AA381807  | Hs.61752  | hypoxia-inducible protein 2                        | 7.0 |
|    | 439416 | W58294    | Hs.56254  | ESTs   | 6.9 |
|    | 420036 | R60336    | Hs.52792  | Homo sapiens mRNA; cDNA DKFZp5861823 (f            | 6.8 |
|    | 423349 | AF010258  | Hs.127428 | homeobox A9  | 6.8 |
|    | 413070 | AA126776  |           | gb:zn88c11.s1 Stratagene lung carcinoma            | 6.8 |
| 80 | 449361 | AW207890  | Hs.201918 | ESTs   | 6.8 |
|    | 459309 | AA040620  | Hs.109144 | ESTs   | 6.8 |
|    | 408771 | AW732573  | Hs.47584  | potassium voltage-gated channel, delayed rectifier | 6.8 |
|    | 416462 | W92845    |           | gb:zh80f05.r1 Soares_fetal_liver_spleen_           | 6.8 |
|    | 447835 | AW591623  | Hs.164129 | ESTs   | 6.7 |
|    | 403563 |           |           |  | 6.7 |
|    | 427897 | NM_017413 | Hs.181060 | apelin; peptide ligand for APJ receptor            | 6.6 |
|    | 422063 | BE156476  |           | gb:QV0-HT0368-040100-082-c05 HT0368 Homo           | 6.6 |

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|    | 455275 | AW977806 |           | gb:EST389810 MAGE resequences, MAGO Homo | 6.6 |
|    | 441350 | AB020690 | Hs.7782   | paraneoplastic antigen MA2               | 6.6 |
|    | 445575 | Z25368   | Hs.172004 | titin                                    | 6.6 |
|    | 446075 | AW451457 | Hs.279179 | ESTs                                     | 6.6 |
| 5  | 405963 |          |           |  | 6.6 |
|    | 423049 | X59373   | Hs.188023 | ESTs                                     | 6.6 |
|    | 436456 | AW292677 | Hs.65909  | ESTs                                     | 6.5 |
|    | 420273 | AI652864 | Hs.197257 | ESTs                                     | 6.5 |
|    | 420831 | AA280824 | Hs.190035 | ESTs                                     | 6.4 |
| 10 | 423739 | AA398155 | Hs.97500  | ESTs                                     | 6.4 |
|    | 441559 | AA938448 | Hs.259733 | ESTs                                     | 6.4 |
|    | 433999 | AA778212 | Hs.191869 | ESTs                                     | 6.4 |
|    | 439703 | AF085538 | Hs.196245 | ESTs                                     | 6.4 |
|    | 433757 | AI949974 | Hs.152670 | ESTs                                     | 6.3 |
| 15 | 422095 | AI868872 | Hs.288966 | ceruloplasmin (ferroxidase)              | 6.3 |
|    | 415138 | C18356   | Hs.78045  | tissue factor pathway inhibitor 2        | 6.3 |
|    | 448515 | H68441   | Hs.13528  | Homo sapiens cDNA FLJ14054 fis, clone HE | 6.3 |
|    | 443595 | AF169312 | Hs.9613   | PPAR(gamma) angiopoietin related protein | 6.3 |
|    | 429357 | AA779725 | Hs.164589 | ESTs                                     | 6.3 |
| 20 | 404939 |          |           |  | 6.3 |
|    | 417071 | N58820   | Hs.275133 | ESTs                                     | 6.2 |
|    | 436209 | AW850417 | Hs.254020 | ESTs, Moderately similar to unnamed prot | 6.2 |
|    | 403111 |          |           |  | 6.2 |
|    | 448796 | AA147829 | Hs.33193  | ESTs, Highly similar to AC007228.3 BC372 | 6.2 |
| 25 | 442353 | BE379594 | Hs.49136  | ESTs                                     | 6.2 |
|    | 451110 | AI955040 | Hs.301584 | ESTs                                     | 6.1 |
|    | 420092 | AA814043 | Hs.88045  | ESTs                                     | 6.1 |
|    | 441801 | AW242799 | Hs.211874 | ESTs                                     | 6.0 |
|    | 407500 | U43279   |           | gb:Human nucleoporin nup.36 mRNA, comple | 6.0 |
| 30 | 450864 | R64139   | Hs.205225 | ESTs                                     | 6.0 |
|    | 455711 | BE069465 |           | gb:RC2-BT0388-290100-012-a11 BT0388 Homo | 6.0 |
|    | 405394 |          |           |  | 6.0 |
|    | 436476 | AA326108 | Hs.53631  | ESTs, Weakly similar to enhancer-of-spli | 6.0 |
| 35 | 454392 | BE260893 |           | gb:G01150677F1 NIH_MGC_19 Homo sapiens c | 6.0 |
|    | 414575 | H11257   | Hs.295233 | ESTs                                     | 5.9 |
|    | 435767 | H73505   | Hs.117874 | ESTs                                     | 5.9 |
|    | 445495 | BE622641 | Hs.38489  | ESTs                                     | 5.9 |
|    | 428372 | AK000684 | Hs.183887 | hypothetical protein FLJ22104            | 5.9 |
| 40 | 436464 | AI016176 | Hs.269783 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 5.9 |
|    | 415910 | U20350   | Hs.78913  | chemokine (C-X3-C) receptor 1            | 5.9 |
|    | 402421 |          |           |  | 5.8 |
|    | 417038 | T85230   |           | gb:yd33f02.r1 Soares fetal liver spleen  | 5.8 |
|    | 436461 | AW511956 | Hs.293261 | ESTs                                     | 5.8 |
|    | 440870 | AI687284 | Hs.150539 | Homo sapiens cDNA FLJ13793 fis, clone TH | 5.8 |
| 45 | 452281 | T93500   | Hs.28792  | Homo sapiens cDNA FLJ11041 fis, clone PL | 5.8 |
|    | 417280 | AW173116 | Hs.262206 | ESTs                                     | 5.7 |
|    | 437259 | AI377755 | Hs.120595 | ESTs                                     | 5.7 |
|    | 425717 | X07282   | Hs.171495 | retinoic acid receptor, beta             | 5.7 |
|    | 443614 | AV655386 | Hs.7645   | fibrinogen, B beta polypeptide           | 5.7 |
| 50 | 450625 | AW970107 |           | gb:EST382188 MAGE resequences, MAGK Homo | 5.6 |
|    | 425305 | AA363025 | Hs.155572 | Human clone 23801 mRNA sequence          | 5.6 |
|    | 430371 | D87466   | Hs.240112 | KIAA0276 protein                         | 5.6 |
|    | 430499 | AW969408 | Hs.231991 | ESTs                                     | 5.6 |
|    | 427920 | Z11502   | Hs.181107 | annexin A13                              | 5.6 |
| 55 | 449318 | AW236021 | Hs.108788 | ESTs, Weakly similar to zeste [D.melanog | 5.6 |
|    | 407864 | AF069291 | Hs.40539  | chromosome 8 open reading frame 1        | 5.5 |
|    | 410754 | T63840   |           | gb:yc16b10.s1 Stratagene lung (937210) H | 5.5 |
|    | 415286 | AW249540 | Hs.72548  | ESTs                                     | 5.5 |
|    | 443297 | AI049864 | Hs.133029 | ESTs                                     | 5.5 |
| 60 | 440138 | AB033023 | Hs.6982   | hypothetical protein FLJ10201            | 5.5 |
|    | 441006 | AW605267 | Hs.7627   | CGI-60 protein                           | 5.4 |
|    | 409348 | AI401535 | Hs.146090 | ESTs                                     | 5.4 |
|    | 449679 | AI823951 | Hs.296668 | Homo sapiens cDNA FLJ11846 fis, clone HE | 5.4 |
|    | 408938 | AA059013 | Hs.22607  | ESTs                                     | 5.4 |
| 65 | 456411 | AA603305 |           | gb:np12d11.s1 NCI_CGAP_Pr3 Homo sapiens  | 5.4 |
|    | 443756 | AW089799 | Hs.153665 | ESTs                                     | 5.4 |
|    | 422232 | D43945   | Hs.113274 | transcription factor EC                  | 5.4 |
|    | 424574 | BE408618 | Hs.150748 | malonyl-CoA decarboxylase                | 5.3 |
|    | 424834 | AK001432 | Hs.153408 | Homo sapiens cDNA FLJ10570 fis, clone NT | 5.3 |
| 70 | 440589 | BE397763 | Hs.194478 | Homo sapiens mRNA; cDNA DKFZp434O1572 (f | 5.3 |
|    | 425782 | U66468   | Hs.159525 | cell growth regulatory with EF-hand doma | 5.3 |
|    | 450236 | AW162998 | Hs.24684  | KIAA1376 protein                         | 5.3 |
|    | 418110 | R43523   | Hs.217754 | Homo sapiens cDNA: FLJ22202 fis, clone H | 5.3 |
|    | 427061 | AB032971 | Hs.173392 | KIAA1145 protein                         | 5.3 |
| 75 | 413841 | M34276   | Hs.75576  | plasminogen                              | 5.3 |
|    | 432358 | AI093491 | Hs.72830  | ESTs                                     | 5.2 |
|    | 416805 | F13271   | Hs.79981  | Human clone 23560 mRNA sequence          | 5.2 |
|    | 438475 | W03856   | Hs.13188  | ESTs, Highly similar to Gene product wit | 5.2 |
|    | 443305 | AI050693 | Hs.133318 | ESTs                                     | 5.2 |
| 80 | 413930 | M86153   | Hs.75618  | RAB11A, member RAS oncogene family       | 5.1 |
|    | 451859 | H44491   | Hs.252938 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 5.1 |
|    | 429826 | N93266   | Hs.40747  | ESTs                                     | 5.1 |
|    | 436032 | AA150797 | Hs.109276 | latexin protein                          | 5.1 |

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|    | 447081 | Y13896    | Hs.17287  | potassium inwardly-rectifying channel, s  | 5.1 |
|    | 438297 | AW515196  | Hs.258238 | ESTs, Moderately similar to ALU1_HUMAN A  | 5.1 |
|    | 421126 | M74587    | Hs.102122 | insulin-like growth factor binding prote  | 5.1 |
| 5  | 440238 | AW451970  | Hs.155644 | paired box gene 2                         | 5.1 |
|    | 426651 | AU076646  | Hs.171683 | nuclear receptor subfamily 1, group H, m  | 5.0 |
|    | 425813 | AA364136  | Hs.210553 | ESTs, Weakly similar to hypothetical pro  | 5.0 |
|    | 432328 | AI572739  | Hs.195471 | 6-phosphofructo-2-kinase/fructose-2,6-bi  | 5.0 |
|    | 430682 | AW971949  | Hs.291252 | ESTs                                      | 5.0 |
|    | 410049 | AW579475  |           | gb:RC0-DT0076-110100-031-d10 DT0076 Homo  | 5.0 |
| 10 | 429222 | AI457692  | Hs.99164  | ESTs                                      | 5.0 |
|    | 446317 | AI287367  | Hs.150906 | ESTs                                      | 5.0 |
|    | 409506 | NM_006153 | Hs.54589  | NCK adaptor protein 1                     | 5.0 |
|    | 407768 | AW002841  | Hs.29475  | ESTs                                      | 5.0 |
|    | 437938 | AI950087  |           | gb:wq05c02.x1 NCI_CGAP_Kid12 Homo sapien  | 5.0 |
| 15 | 430403 | AF039390  | Hs.241382 | tumor necrosis factor (ligand) superfam   | 4.9 |
|    | 426215 | AW963419  | Hs.155223 | stanniocalcin 2                           | 4.9 |
|    | 448570 | AI923944  | Hs.30913  | ESTs                                      | 4.9 |
|    | 445034 | AW293376  | Hs.160323 | ESTs                                      | 4.9 |
| 20 | 410361 | BE391804  | Hs.62661  | guanylate binding protein 1, interferon-  | 4.8 |
|    | 453891 | AB037751  | Hs.36353  | Homo sapiens mRNA full length insert cDN  | 4.8 |
|    | 438492 | AW340048  | Hs.293188 | ESTs                                      | 4.8 |
|    | 446417 | AI299050  |           | gb:qn14d12.x1 NCI_CGAP_Lu5 Homo sapiens   | 4.8 |
|    | 409578 | BE041386  |           | gb:hk88c02.x1 NCI_CGAP_Lu21 Homo sapiens  | 4.8 |
| 25 | 447269 | NM_004861 | Hs.17958  | cerebroside (3'-phosphoadenylylsulfate:g  | 4.8 |
|    | 413795 | AL040178  | Hs.142003 | ESTs                                      | 4.8 |
|    | 422357 | AF016272  | Hs.115418 | cadherin 16, KSP-cadherin                 | 4.8 |
|    | 452208 | AA024792  | Hs.31895  | ESTs, Weakly similar to B9 [H.sapiens]    | 4.7 |
|    | 422711 | D60641    | Hs.21739  | Homo sapiens mRNA; cDNA DKFZp586i1518 (f  | 4.7 |
| 30 | 441392 | AW451831  | Hs.222119 | ESTs, Weakly similar to K1CQ_HUMAN KERAT  | 4.7 |
|    | 439221 | AA737106  | Hs.32250  | ESTs                                      | 4.7 |
|    | 431956 | AK002032  | Hs.272245 | Homo sapiens cDNA FLJ111170 fis, clone PL | 4.7 |
|    | 417355 | D13168    | Hs.82002  | endothelin receptor type B                | 4.7 |
|    | 414700 | H63202    | Hs.38163  | ESTs                                      | 4.7 |
|    | 402739 |           |           |   | 4.6 |
| 35 | 403170 |           |           |   | 4.6 |
|    | 443486 | NM_003428 | Hs.9450   | zinc finger protein 84 (HPF2)             | 4.6 |
|    | 408380 | AF123050  | Hs.44532  | diubiquitin                               | 4.6 |
|    | 427899 | AA829286  | Hs.181062 | serum amyloid A1                          | 4.5 |
| 40 | 446302 | AI285848  | Hs.149757 | ESTs                                      | 4.5 |
|    | 414812 | X72755    | Hs.77367  | monokine induced by gamma interferon      | 4.4 |
|    | 424063 | NM_002019 | Hs.138671 | fms-related tyrosine kinase 1 (vascular   | 4.4 |
|    | 413384 | NM_000401 | Hs.75334  | exostoses (multiple) 2                    | 4.4 |
|    | 421298 | AW172431  | Hs.13012  | ESTs                                      | 4.4 |
|    | 420789 | AI670057  | Hs.199882 | ESTs                                      | 4.4 |
| 45 | 453558 | AI417023  | Hs.40478  | ESTs                                      | 4.4 |
|    | 453745 | AA952989  | Hs.63908  | Homo sapiens HSPC316 mRNA, partial cds    | 4.4 |
|    | 451762 | AF222980  | Hs.26985  | disrupted in schizophrenia 1              | 4.4 |
|    | 410334 | AW979261  | Hs.291993 | ESTs                                      | 4.4 |
| 50 | 457030 | AI301740  | Hs.173381 | dihydropyrimidinase-like 2                | 4.4 |
|    | 452194 | AI694413  | Hs.298262 | ESTs, Weakly similar to dJ88J8.1 [H.sapi  | 4.3 |
|    | 410407 | X66839    | Hs.63287  | carbonic anhydrase IX                     | 4.3 |
|    | 401157 |           |           |   | 4.3 |
|    | 432004 | BE018302  | Hs.2894   | placental growth factor, vascular endoth  | 4.3 |
| 55 | 426866 | U02330    | Hs.172816 | neuregulin 1                              | 4.3 |
|    | 446115 | AI733075  | Hs.292682 | ESTs, Weakly similar to S69913 hypertens  | 4.3 |
|    | 424704 | AI263293  | Hs.152096 | cytochrome P450, subfamily IIJ (arachido  | 4.2 |
|    | 446619 | AU076643  | Hs.313    | secreted phosphoprotein 1 (osteopontin,   | 4.2 |
|    | 433578 | BE336886  | Hs.3416   | adipose differentiation-related protein   | 4.2 |
|    | 407065 | Y10141    |           | gb:H.sapiens DAT1 gene, partial, VNTR.    | 4.2 |
| 60 | 407182 | AA312551  | Hs.230157 | ESTs                                      | 4.2 |
|    | 416565 | AW000960  | Hs.44970  | ESTs                                      | 4.2 |
|    | 442230 | BE219088  | Hs.279547 | ESTs                                      | 4.2 |
|    | 440680 | AA903098  |           | gb ok46f08.s1 NCI_CGAP_Lei2 Homo sapiens  | 4.2 |
|    | 413802 | AW964490  | Hs.32241  | ESTs                                      | 4.2 |
| 65 | 438370 | AA843242  | Hs.48523  | ESTs                                      | 4.2 |
|    | 432731 | R31178    | Hs.287820 | fibronectin 1                             | 4.2 |
|    | 409745 | AA077391  |           | gb:7B14E12 Chromosome 7 Fetal Brain cDNA  | 4.2 |
|    | 441484 | AA935481  | Hs.58972  | ESTs                                      | 4.2 |
| 70 | 411213 | AA676939  | Hs.69285  | neuropilin 1                              | 4.2 |
|    | 453045 | AW418979  | Hs.224502 | ESTs                                      | 4.2 |
|    | 407999 | AI126271  | Hs.49433  | ESTs, Weakly similar to HYPOTHETICAL PRO  | 4.2 |
|    | 409770 | AW499536  |           | gb:U1-HF-BR0p-aji-c-12-0-U1.r1 NIH_MGC_5  | 4.1 |
|    | 449856 | AA203155  | Hs.18200  | ESTs                                      | 4.1 |
| 75 | 430806 | S69377    | Hs.247978 | T-cell acute lymphocytic leukemia 2       | 4.1 |
|    | 412872 | BE006341  |           | gb:RC2-BN0127-240300-011-b05 BN0127 Homo  | 4.1 |
|    | 430719 | AA488988  | Hs.293796 | ESTs                                      | 4.1 |
|    | 409637 | AA323948  | Hs.55407  | Homo sapiens mRNA; cDNA DKFZp434K0621 (f  | 4.1 |
|    | 414696 | AF002020  | Hs.76918  | Niemann-Pick disease, type C1             | 4.1 |
| 80 | 444670 | H58373    | Hs.37494  | ESTs                                      | 4.1 |
|    | 448090 | AI608821  | Hs.270289 | ESTs                                      | 4.1 |
|    | 408830 | AK001709  | Hs.48403  | hypothetical protein FLJ10847             | 4.1 |
|    | 419088 | AI538323  | Hs.77496  | small nuclear ribonucleoprotein polypept  | 4.1 |
|    | 416655 | AW968613  | Hs.79428  | BCL2/adenovirus E1B 19kD-interacting pro  | 4.1 |

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|    | 436772 | AW975688 | Hs.250867 | zona pellucida glycoprotein 3A (sperm re | 4.1 |
|    | 442556 | AL137761 | Hs.8379   | Homo sapiens mRNA: cDNA DKFZp586L2424 (f | 4.1 |
|    | 459595 | AL040421 |           | gb:DKFZp434B0714_r1 434 (synonym: htes3) | 4.1 |
| 5  | 438859 | AI559626 | Hs.164973 | ESTs, Weakly similar to AF231024 1 proto | 4.0 |
|    | 423279 | AW959861 | Hs.290943 | ESTs                                     | 4.0 |
|    | 441592 | AW137071 | Hs.127211 | ESTs                                     | 4.0 |
|    | 411836 | AW901879 |           | gb:QV0-NN1021-280400-212-f10 NN1021 Homo | 4.0 |
|    | 426384 | AI472078 |           | gb:ij85h03.x1 Soares_NSF_F8_9W_OT_PA_P_S | 4.0 |
| 10 | 412494 | AL133900 | Hs.792    | ADP-ribosylation factor domain protein 1 | 4.0 |
|    | 413583 | AL120806 | Hs.5888   | ESTs                                     | 4.0 |
|    | 415610 | L44319   |           | gb:HUMEST1D10 Human thymus NSTH II Homo  | 4.0 |
|    | 430009 | AA894564 | Hs.22242  | ESTs                                     | 4.0 |
|    | 449539 | W80363   | Hs.58446  | ESTs                                     | 4.0 |
| 15 | 438929 | AW195515 | Hs.253177 | ESTs                                     | 4.0 |
|    | 416000 | R82342   | Hs.79856  | ESTs                                     | 4.0 |
|    | 429516 | AI982722 | Hs.120845 | ESTs                                     | 4.0 |
|    | 458471 | AV648609 | Hs.194240 | ESTs                                     | 4.0 |
|    | 453195 | BE241876 | Hs.32352  | hypothetical protein DKFZp434K1210       | 4.0 |
| 20 | 459046 | AA910339 | Hs.26216  | Homo sapiens cDNA: FLJ22811 fis, clone K | 3.9 |
|    | 438177 | BE327015 | Hs.281391 | ESTs                                     | 3.9 |
|    | 422438 | AA445925 | Hs.270896 | ESTs                                     | 3.9 |
|    | 450382 | AA397658 | Hs.60257  | Homo sapiens cDNA FLJ13598 fis, clone PL | 3.9 |
|    | 449611 | AI970394 | Hs.197075 | ESTs                                     | 3.9 |
| 25 | 452030 | AL137578 | Hs.27607  | Homo sapiens mRNA: cDNA DKFZp564N2464 (f | 3.9 |
|    | 452881 | AW135220 | Hs.241921 | ESTs                                     | 3.9 |
|    | 414729 | BE466928 | Hs.281901 | ESTs                                     | 3.9 |
|    | 428816 | AA004986 | Hs.193852 | ATP-binding cassette, sub-family C (CFTR | 3.9 |
|    | 405908 |          |           |  | 3.8 |
| 30 | 445452 | H92975   | Hs.246046 | ESTs, Weakly similar to RET1_HUMAN RETIN | 3.8 |
|    | 447961 | W32791   | Hs.170405 | ESTs                                     | 3.8 |
|    | 446639 | AI016826 | Hs.132501 | ESTs                                     | 3.8 |
|    | 401189 |          |           |  | 3.8 |
|    | 429548 | AW138872 | Hs.135288 | ESTs                                     | 3.8 |
| 35 | 431523 | N55759   | Hs.163674 | ESTs                                     | 3.8 |
|    | 430014 | H59354   | Hs.182485 | actinin, alpha 4                         | 3.8 |
|    | 429250 | H56585   | Hs.198308 | tryptophan rich basic protein            | 3.8 |
|    | 451988 | AF263928 | Hs.27410  | papillomavirus regulatory factor PRF-1   | 3.8 |
|    | 437939 | AW298500 | Hs.141840 | ESTs, Weakly similar to S59501 interfero | 3.8 |
| 40 | 427510 | Z47542   | Hs.179312 | small nuclear RNA activating complex, po | 3.8 |
|    | 433522 | AI821730 | Hs.116524 | ESTs                                     | 3.8 |
|    | 443843 | AW878864 | Hs.13528  | Homo sapiens cDNA FLJ14054 fis, clone HE | 3.7 |
|    | 407305 | AA715284 |           | gb:nv35f03.r1 NCL_CGAP_Br5 Homo sapiens  | 3.7 |
|    | 434613 | AI821826 | Hs.187786 | ESTs, Moderately similar to ALUB_HUMAN!  | 3.7 |
| 45 | 410276 | AI554545 | Hs.68301  | ESTs                                     | 3.7 |
|    | 422504 | AA311407 |           | gb:EST182167 Jurkat T-cells V Homo sapie | 3.7 |
|    | 421013 | M62397   | Hs.1345   | mutated in colorectal cancers            | 3.7 |
|    | 437949 | U78519   | Hs.41654  | ESTs                                     | 3.7 |
|    | 431840 | AA534908 | Hs.2860   | POU domain, class 5, transcription facto | 3.7 |
| 50 | 409446 | AI561173 | Hs.67688  | ESTs                                     | 3.7 |
|    | 415263 | AA948033 | Hs.130853 | ESTs                                     | 3.7 |
|    | 450206 | AI796450 | Hs.201600 | ESTs                                     | 3.7 |
|    | 439444 | AI277652 | Hs.54578  | ESTs                                     | 3.7 |
|    | 437828 | AW976806 | Hs.291805 | ESTs                                     | 3.7 |
| 55 | 453238 | AA033991 | Hs.269234 | ESTs                                     | 3.7 |
|    | 420041 | AB005142 | Hs.94592  | klotho                                   | 3.7 |
|    | 448458 | AW614367 | Hs.171054 | ESTs                                     | 3.7 |
|    | 435080 | AI831760 | Hs.155111 | ESTs                                     | 3.7 |
|    | 444249 | T87398   | Hs.205816 | ESTs                                     | 3.7 |
| 60 | 426595 | AW971980 | Hs.62402  | p21/Cdc42/Rac1-activated kinase 1 (yeast | 3.7 |
|    | 417715 | AW969587 | Hs.86366  | ESTs                                     | 3.7 |
|    | 432579 | AF043244 | Hs.278439 | nucleolar protein 3 (apoptosis repressor | 3.6 |
|    | 440048 | AA897461 | Hs.158469 | ESTs, Weakly similar to envelope protein | 3.6 |
|    | 430091 | AB032958 | Hs.233023 | KIAA1132 protein                         | 3.6 |
| 65 | 438030 | X98427   | Hs.122634 | ESTs                                     | 3.6 |
|    | 453496 | AA442103 | Hs.33084  | solute carrier family 2 (facilitated glu | 3.6 |
|    | 446636 | AC002563 | Hs.15767  | citron (rho-interacting, serine/threonin | 3.6 |
|    | 417860 | AW408557 | Hs.235498 | Homo sapiens cDNA FLJ14075 fis, clone HE | 3.6 |
|    | 435794 | H72108   | Hs.13704  | ESTs                                     | 3.6 |
|    | 449695 | AA164569 | Hs.34550  | ESTs                                     | 3.6 |
| 70 | 411485 | AW848125 |           | gb:IL3-CT0214-301299-048-G04 CT0214 Homo | 3.6 |
|    | 426274 | D38122   | Hs.2007   | tumor necrosis factor (ligand) superfam  | 3.6 |
|    | 458201 | AI989961 | Hs.233477 | ESTs, Moderately similar to A Chain A, S | 3.6 |
|    | 440987 | AA911705 | Hs.130229 | ESTs                                     | 3.6 |
|    | 425178 | H16097   | Hs.161027 | ESTs                                     | 3.6 |
| 75 | 419080 | AW150835 | Hs.18878  | hypothetical protein FLJ21620            | 3.6 |
|    | 436091 | AA704705 | Hs.181044 | ESTs, Weakly similar to A Chain A, Human | 3.6 |
|    | 452671 | AW861074 | Hs.225833 | ESTs                                     | 3.6 |
|    | 437222 | AL117588 | Hs.299963 | ESTs                                     | 3.6 |
| 80 | 437809 | AL137723 | Hs.5855   | Homo sapiens mRNA: cDNA DKFZp434D0818 (f | 3.5 |
|    | 411545 | AW850818 |           | gb:IL3-CT0220-091199-026-A03 CT0220 Homo | 3.5 |
|    | 414799 | AI752416 | Hs.77326  | insulin-like growth factor binding prote | 3.5 |
|    | 439882 | AA847856 | Hs.124565 | ESTs                                     | 3.5 |
|    | 419229 | AI827237 | Hs.282864 | ESTs                                     | 3.5 |

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|    | 431889 | AA521277  | Hs.124946 | ESTs                                     | 3.5 |
|    | 422660 | AW297582  | Hs.237062 | ESTs                                     | 3.5 |
|    | 415122 | D60708    | Hs.22245  | ESTs                                     | 3.5 |
|    | 444127 | N63620    | Hs.13281  | ESTs                                     | 3.5 |
| 5  | 416913 | AW934714  |           | gb:RC1-DT0001-031299-011-a11 DT0001 Homo | 3.5 |
|    | 409044 | AI129586  | Hs.33033  | ESTs                                     | 3.5 |
|    | 453365 | AA035211  | Hs.17404  | ESTs                                     | 3.5 |
|    | 452355 | N54926    | Hs.29202  | G protein-coupled receptor 34            | 3.5 |
| 10 | 423246 | AL119114  | Hs.23107  | ESTs                                     | 3.5 |
|    | 434131 | AI858275  | Hs.143659 | ESTs                                     | 3.5 |
|    | 425304 | AA463844  | Hs.31339  | fibroblast growth factor 11              | 3.5 |
|    | 453775 | NM_002916 | Hs.35120  | replication factor C (activator 1) 4 (37 | 3.4 |
|    | 426559 | AB001914  | Hs.170414 | paired basic amino acid cleaving system  | 3.4 |
| 15 | 456311 | AA225632  | Hs.190016 | ESTs                                     | 3.4 |
|    | 420737 | L08096    | Hs.99899  | tumor necrosis factor (ligand) superfam  | 3.4 |
|    | 448733 | NM_005629 | Hs.187958 | solute carrier family 6 (neurotransmitte | 3.4 |
|    | 401811 |           |           |  | 3.4 |
|    | 404021 |           |           |  | 3.4 |
| 20 | 447175 | AI365208  | Hs.293606 | ESTs                                     | 3.4 |
|    | 453743 | AL120480  |           | gb:DKFZp761K098_r1 761 (synonym: hamy2)  | 3.4 |
|    | 455070 | AA854675  |           | gb:MR1-CT0258-290300-206-a01 CT0258 Homo | 3.4 |
|    | 419546 | AA244199  |           | gb:nc06c05.s1 NCI_CGAP_Pr1 Homo sapiens  | 3.4 |
|    | 449441 | AI656040  | Hs.196532 | ESTs                                     | 3.4 |
| 25 | 441606 | R37263    | Hs.21065  | ESTs                                     | 3.4 |
|    | 446594 | AI311917  | Hs.16292  | ESTs                                     | 3.4 |
|    | 424664 | AI432572  | Hs.164221 | ESTs                                     | 3.4 |
|    | 413719 | BE439580  | Hs.75498  | small inducible cytokine subfamily A (Cy | 3.4 |
|    | 427914 | AA417350  | Hs.20575  | ESTs                                     | 3.4 |
| 30 | 438257 | AW474419  | Hs.224794 | ESTs                                     | 3.4 |
|    | 412642 | BE244598  | Hs.809    | hepatocyte growth factor (hepapoietin A; | 3.4 |
|    | 454690 | AW854639  |           | gb:MR1-CT0258-140100-203-d10 CT0258 Homo | 3.3 |
|    | 428046 | AW812795  | Hs.155381 | ESTs, Moderately similar to I38022 hypot | 3.3 |
|    | 407331 | AI570416  | Hs.99910  | phosphofructokinase, platelet            | 3.3 |
| 35 | 440472 | AA886169  | Hs.169071 | ESTs                                     | 3.3 |
|    | 421893 | NM_001078 | Hs.109225 | vascular cell adhesion molecule 1        | 3.3 |
|    | 403797 |           |           |  | 3.3 |
|    | 417924 | AU077231  | Hs.82932  | cyclin D1 (PRAD1: parathyroid adenomatos | 3.3 |
| 40 | 410623 | AW958932  | Hs.293833 | ESTs                                     | 3.3 |
|    | 449338 | H73444    | Hs.394    | adrenomedullin                           | 3.3 |
|    | 441024 | AW081530  | Hs.137088 | ESTs                                     | 3.3 |
|    | 405257 |           |           |  | 3.3 |
|    | 450396 | AU077002  | Hs.24950  | regulator of G-protein signalling 5      | 3.3 |
|    | 416892 | L24498    | Hs.80409  | growth arrest and DNA-damage-inducible,  | 3.3 |
| 45 | 444471 | AB020684  | Hs.11217  | KIAA0877 protein                         | 3.3 |
|    | 431689 | AA305688  | Hs.267695 | UDP-Gal:betaGlcNAc beta 1,3-galactosyltr | 3.3 |
|    | 452093 | AA447453  | Hs.27860  | Homo sapiens mRNA; cDNA DKFZp586M0723 (I | 3.3 |
|    | 425236 | AW067800  | Hs.155223 | stanniocalcin 2                          | 3.3 |
|    | 428824 | W23624    | Hs.173059 | ESTs                                     | 3.2 |
| 50 | 450101 | AV649989  | Hs.24385  | Human hbc647 mRNA sequence               | 3.2 |
|    | 425260 | L47726    | Hs.1870   | phenylalanine hydroxylase                | 3.2 |
|    | 443830 | AI142095  | Hs.143273 | ESTs                                     | 3.2 |
|    | 415245 | N59650    | Hs.27252  | ESTs                                     | 3.2 |
|    | 405953 |           |           |  | 3.2 |
| 55 | 430812 | L10405    | Hs.247992 | DNA binding protein for surfactant prote | 3.2 |
|    | 418946 | AI798841  | Hs.132103 | ESTs                                     | 3.2 |
|    | 424750 | D29956    | Hs.152818 | ubiquitin specific protease 8            | 3.2 |
|    | 435342 | AW979168  | Hs.163270 | ESTs                                     | 3.2 |
|    | 458860 | AW873557  | Hs.212739 | ESTs                                     | 3.2 |
| 60 | 430172 | AA468591  | Hs.161889 | ESTs                                     | 3.2 |
|    | 431842 | NM_005764 | Hs.271473 | epithelial protein up-regulated in carci | 3.2 |
|    | 451221 | AI949701  | Hs.210589 | ESTs                                     | 3.2 |
|    | 436211 | AK001581  | Hs.80961  | polymerase (DNA directed), gamma         | 3.2 |
|    | 433727 | C16221    | Hs.112608 | ESTs                                     | 3.2 |
| 65 | 424897 | D63216    | Hs.153684 | frizzled-related protein                 | 3.2 |
|    | 414821 | M63835    | Hs.77424  | Fc fragment of IgG, high affinity Ia, re | 3.1 |
|    | 418030 | BE207573  | Hs.83321  | neuromedin B                             | 3.1 |
|    | 417919 | AI928203  | Hs.86379  | ESTs                                     | 3.1 |
|    | 430437 | AI768801  | Hs.169943 | Homo sapiens cDNA FLJ13569 fis, clone PL | 3.1 |
|    | 409663 | AI743750  | Hs.65862  | ESTs                                     | 3.1 |
| 70 | 454024 | AA993527  | Hs.16281  | hypothetical protein FLJ23403            | 3.1 |
|    | 424980 | L42172    | Hs.154078 | lipopolysaccharide-binding protein       | 3.1 |
|    | 421633 | AF121860  | Hs.106260 | sorting nexin 10                         | 3.1 |
|    | 436002 | R68529    | Hs.120967 | ESTs                                     | 3.1 |
| 75 | 437682 | AA476652  | Hs.94952  | Homo sapiens cDNA: FLJ23371 fis, clone H | 3.1 |
|    | 439451 | AF086270  | Hs.278554 | heterochromatin-like protein 1           | 3.1 |
|    | 430183 | BE010038  |           | gb:PM3-BN0176-100400-001-g04 BN0176 Homo | 3.1 |
|    | 428479 | Y00272    | Hs.164572 | cell division cycle 2, G1 to S and G2 to | 3.1 |
| 80 | 441285 | NM_002374 | Hs.167    | microtubule-associated protein 2         | 3.1 |
|    | 456386 | W28481    |           | gb:47e1 Human retina cDNA randomly prime | 3.1 |
|    | 451130 | AI762260  | Hs.211347 | ESTs                                     | 3.1 |
|    | 439702 | AW085525  | Hs.134182 | ESTs                                     | 3.1 |
|    | 453331 | AI240665  | Hs.8895   | ESTs                                     | 3.1 |
|    | 428841 | AI418430  | Hs.104935 | ESTs                                     | 3.1 |

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|    | 449899 | AI610700  | Hs.103280 | ESTs                                     | 3.1 |
|    | 436009 | H57130    | Hs.120925 | ESTs                                     | 3.1 |
|    | 448966 | AW372914  | Hs.287462 | Homo sapiens cDNA FLJ11875 fis, clone HE | 3.1 |
|    | 408239 | AA053401  | Hs.271827 | ESTs, Moderately similar to ALU7_HUMAN A | 3.1 |
| 5  | 418526 | BE019020  | Hs.85838  | solute carrier family 16 (monocarboxylic | 3.1 |
|    | 401260 |           |           |  | 3.1 |
|    | 450705 | U90304    | Hs.25351  | iroquois-class homeodomain protein       | 3.1 |
|    | 447233 | AW246333  | Hs.17901  | Homo sapiens cDNA: FLJ21974 fis, clone H | 3.1 |
| 10 | 424415 | NM_001975 | Hs.146580 | enolase 2, (gamma, neuronal)             | 3.0 |
|    | 403346 |           |           |  | 3.0 |
|    | 446319 | AW207590  | Hs.160711 | ESTs                                     | 3.0 |
|    | 432757 | AF113013  | Hs.278919 | PRO0806 protein                          | 3.0 |
|    | 407921 | AI378617  | Hs.23100  | Homo sapiens cDNA FLJ12592 fis, clone NT | 3.0 |
|    | 414618 | AI204600  | Hs.96978  | ESTs                                     | 3.0 |
| 15 | 434398 | AA121098  | Hs.3838   | serum-inducible kinase                   | 3.0 |
|    | 440113 | AI916532  | Hs.188272 | ESTs                                     | 3.0 |
|    | 424539 | L02911    | Hs.150402 | activin A receptor, type I               | 3.0 |
|    | 428945 | AW192803  | Hs.98974  | ESTs                                     | 3.0 |
|    | 458297 | R54033    | Hs.21245  | ESTs                                     | 3.0 |
| 20 | 424405 | AI076838  | Hs.12967  | ESTs                                     | 3.0 |
|    | 411290 | AW835544  |           | gb:QV4-LT0016-271299-068-f03 LT0016 Homo | 3.0 |
|    | 459068 | BE464396  | Hs.118468 | ESTs                                     | 3.0 |
|    | 459065 | AI373532  | Hs.157910 | ESTs                                     | 3.0 |
|    | 437693 | AI754443  | Hs.185951 | ESTs                                     | 3.0 |
| 25 | 429418 | AI381028  | Hs.99283  | ESTs                                     | 3.0 |
|    | 406117 |           |           |  | 3.0 |
|    | 415492 | R41674    | Hs.16491  | ESTs                                     | 3.0 |
|    | 419854 | AW664873  | Hs.87836  | Homo sapiens PAC clone RP5-1087M19 from  | 3.0 |
| 30 | 453688 | AW381270  | Hs.194110 | Homo sapiens mRNA; cDNA DKFZp434C0814 (f | 3.0 |
|    | 408119 | W26213    |           | gb:22d10 Human retina cDNA randomly prim | 3.0 |
|    | 438358 | AL035992  | Hs.210278 | ESTs                                     | 3.0 |
|    | 412372 | R65998    | Hs.118615 | ESTs                                     | 3.0 |
|    | 431984 | AL080239  | Hs.272284 | Human DNA sequence from clone GS1-256O22 | 3.0 |
|    | 403782 |           |           |  | 3.0 |
| 35 | 443183 | R16258    | Hs.6217   | Homo sapiens cDNA FLJ12521 fis, clone NT | 3.0 |
|    | 456388 | W28557    |           | gb:48d8 Human retina cDNA randomly prime | 3.0 |
|    | 447922 | Z92910    | Hs.20019  | hemochromatosis                          | 3.0 |
|    | 428857 | AF008192  | Hs.194283 | putative GR6 protein                     | 3.0 |
|    | 406991 | S82185    |           | (NONE)                                   | 3.0 |
| 40 | 432596 | AJ224741  | Hs.278461 | matrilin 3                               | 3.0 |
|    | 453202 | AW085781  | Hs.26270  | Homo sapiens cDNA FLJ11588 fis, clone HE | 3.0 |
|    | 414132 | AI801235  | Hs.48480  | ESTs                                     | 3.0 |
|    | 409122 | W07089    | Hs.297873 | ESTs                                     | 3.0 |
|    | 405547 |           |           |  | 3.0 |
| 45 | 422219 | AW978073  |           | gb:EST390182 MAGE resequences, MAGO Homo | 3.0 |
|    | 417227 | T57776    | Hs.191094 | ESTs                                     | 3.0 |
|    | 448592 | N69546    | Hs.141705 | ESTs                                     | 3.0 |
|    | 421477 | AI904743  | Hs.104650 | hypothetical protein FLJ10292            | 3.0 |
| 50 | 400368 | BE779978  | Hs.69149  | proline-serine-threonine phosphatase int | 3.0 |
|    | 455362 | AW902635  |           | gb:QV3-NN1024-100500-181-b02 NN1024 Homo | 3.0 |
|    | 443578 | R97191    | Hs.134106 | ESTs                                     | 3.0 |
|    | 419348 | AA236645  | Hs.98274  | ESTs                                     | 3.0 |
|    | 439138 | AI742605  | Hs.193696 | ESTs                                     | 3.0 |
|    | 449547 | H93543    | Hs.117963 | ESTs                                     | 3.0 |
| 55 | 455180 | AW863503  |           | gb:MR3-SN0009-180400-110-c12 SN0009 Homo | 3.0 |
|    | 444228 | AV648612  | Hs.282396 | ESTs                                     | 3.0 |
|    | 423496 | U91963    | Hs.129700 | tollid-like 1                            | 3.0 |
|    | 401707 |           |           |  | 3.0 |
| 60 | 419276 | BE165909  | Hs.134682 | Homo sapiens cDNA: FLJ23161 fis, clone L | 3.0 |
|    | 441677 | AW271702  | Hs.93739  | ESTs                                     | 3.0 |
|    | 459587 | AA031956  |           | gb:zk15e04.s1 Soares_pregnant_uterus_NbH | 3.0 |
|    | 431311 | AA502552  | Hs.188980 | ESTs                                     | 3.0 |
|    | 426326 | BE165753  | Hs.250528 | ESTs, Weakly similar to unnamed protein  | 3.0 |
| 65 | 412685 | BE092186  |           | gb:IL2-BT0734-200400-075-H05 BT0734 Homo | 3.0 |
|    | 414752 | BE503505  | Hs.248689 | ESTs                                     | 3.0 |
|    | 403144 |           |           |  | 3.0 |
|    | 407539 | X91103    |           | gb:H.sapiens mRNA for Hs44 protein.      | 3.0 |
|    | 412379 | AW947581  |           | gb:RC0-MT0004-140300-031-d08 MT0004 Homo | 3.0 |
| 70 | 407937 | AW297944  | Hs.242811 | ESTs                                     | 3.0 |
|    | 456976 | AI681882  | Hs.270428 | ESTs                                     | 3.0 |
|    | 417066 | AA329572  | Hs.172004 | titin                                    | 3.0 |
|    | 406007 |           |           |  | 3.0 |
|    | 416940 | N75620    | Hs.43157  | ESTs                                     | 3.0 |
| 75 | 433322 | H50621    | Hs.134156 | ESTs                                     | 3.0 |
|    | 406088 |           |           |  | 3.0 |
|    | 416573 | R10356    | Hs.18865  | ESTs, Weakly similar to AC007228 2 BC372 | 3.0 |
|    | 423130 | AW897586  | Hs.21213  | ESTs                                     | 3.0 |
|    | 412721 | AW183165  | Hs.95600  | ESTs                                     | 3.0 |
| 80 | 418375 | NM_003081 | Hs.84389  | synaptosomal-associated protein, 25kD    | 3.0 |
|    | 422992 | AF016833  | Hs.122785 | maltase-glucoamylase (alpha-glucosidase) | 3.0 |
|    | 406506 |           |           |  | 3.0 |
|    | 413472 | BE242870  | Hs.75379  | solute carrier family 1 (glial high affi | 3.0 |
|    | 422650 | D42055    | Hs.1565   | neural precursor cell expressed, develop | 3.0 |

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|   |        |          |            |  |     |
|---|--------|----------|------------|--|-----|
| 5 | 400325 | M85292   | Hs.247924  | Homo sapiens endogenous HIV-1 related se | 3.0 |
|   | 401078 |          |            |  | 3.0 |
|   | 446645 | AI336596 | Hs. 156294 | ESTs                                     | 3.0 |
|   | 446704 | AI337228 | Hs. 197083 | ESTs                                     | 3.0 |
|   | 427072 | H38046   |            | gb:yp58c10.r1 Soares fetal liver spleen  | 3.0 |

TABLE 33B:

|             |                                       |
|-------------|---------------------------------------|
| Pkey:       | Unique Eos probeset identifier number |
| CAT number: | Gene cluster number                   |
| Accession:  | Genbank accession numbers             |

|    |        |            |   |
|----|--------|------------|---|
|    | Pkey   | CAT number | Accession   |
|    | 407615 | 1005404_1  | AW753085 AW753082 AW054744 AW753107 AW753087  |
|    | 408119 | 1040172_1  | W26213 H08055 Z44031 AW954559 R17434  |
| 15 | 409519 | 113722_1   | AA075368 AA075369   |
|    | 409578 | 1140976_1  | BE041386 AW419449 AW663595  |
|    | 409594 | 114249_1   | AA076118 AA975618 AA076220  |
|    | 409695 | 114876_1   | AA296961 AA296889 AA076945 AA077528 AA077497  |
|    | 409745 | 115237_1   | AA077391 AI347618 AI361453 AI088754 AW207491 AW960912 AA921874 AA286833 AA150722 BE152353 AW188822 BE152450                     |
| 20 | 409770 | 1154048_1  | AW499536 AW499553 AW502138 AW499537 AW502136 AW501743   |
|    | 410008 | 116812_1   | AA079552 BE142525 BE142527  |
|    | 410049 | 1172307_1  | AW579475 AW939654 AW939655  |
|    | 410534 | 1207247_1  | AW905138 AW753008 R13818 Z43519   |
|    | 410754 | 1219733_1  | T63840 AW801569 AW801568  |
| 25 | 411290 | 1237738_1  | AW835544 AW835613 AW835711 AW835697 AW835703 BE092535 BE092199 411485 1247181_1AW848125 AW848124 AW848203 AW848695              |
|    |        |            | AW848633 AW848693 BE350771  |
|    | 411545 | 1249138_1  | AW850818 AW850833 AW851100  |
|    | 411836 | 1260619_1  | AW901879 AW901875 AW866247 BE011294 BE504813  |
| 30 | 412209 | 1283610_1  | AW901456 AW901450 AW901441  |
|    | 412359 | 129085_1   | AW837985 AW837938 AA101955 AW837913 AW837935  |
|    | 412379 | 1292479_1  | AW947581 AW947546 AW947545 AW947544   |
|    | 412685 | 1321663_1  | BE092186 BE092157 AW983859  |
|    | 412872 | 1333898_1  | BE006341 BE006307 BE006311  |
| 35 | 413070 | 134815_1   | AA126776 AA133984 BE148613 BE063475 AA358219  |
|    | 415610 | 1540554_1  | L44319 F12851 T75057  |
|    | 415713 | 154859_1   | AW968573 AA167225 AA491129  |
|    | 416462 | 1595954_1  | W92845 H57479   |
|    | 416548 | 1600181_1  | H62953 N76508 N72413  |
| 40 | 416913 | 163001_1   | AW934714 BE161007 BE162500 AW749902 AW749864 BE162498 BE161005 AA190449 AW513465 BE161006 BE162499                              |
|    | 417038 | 164390_1   | T85230 AA192508 T89190  |
|    | 418053 | 171810_1   | AA211493 AW817839 AW817836  |
|    | 419213 | 182860_1   | AW749146 AW749138 AW749123 AW749130 AA235142  |
|    | 419546 | 185766_1   | AA244199 AA244272 H57440  |
| 45 | 420637 | 195241_1   | AW976153 AA278945 AA747691  |
|    | 422063 | 210852_1   | BE156476 BE156473 BE156474 BE156475 AA302839  |
|    | 422219 | 213547_1   | AW978073 AW978072 AA807550 AA306567   |
|    | 422504 | 217160_1   | AA311407 AW958321 N23583 R70050   |
|    | 423735 | 231498_1   | AA330259 AA661806 AA502431 AW974633 AA649496  |
| 50 | 426384 | 266211_1   | AI472078 AA377209 AA865807  |
|    | 427072 | 274884_1   | H38046 W69645 AA397958 H38047   |
|    | 428637 | 293660_1   | AW979268 AA878419 AA431342 AA431628   |
|    | 430183 | 31412_2    | BE010038 AA676833 AI311783 T86895 W68032 BE064393 BE064394 BE157228 BE183282 AI936370 AA552514 T67280 AA039909                  |
|    | 431595 | 335512_1   | AA508196 BE142920 AI280311 AI205616 D61709  |
| 55 | 432009 | 34025_1    | AL137424 BE007148 T52277  |
|    | 437205 | 43463_1    | AL110232 N94765   |
|    | 437938 | 44573_2    | AI950087 N70208 R97040 N36809 AI308119 AW967677 N35320 AI251473 H59397 AW971573 R97278 W01059 AW967671 AA908598 AA251875        |
|    |        |            | AI820501 AI820532 W87891 T85904 U71456 T82391 BE328571 T75102 R34725 AA884922 BE328517 AI219788 AA884444 N92578 F13493 AA927794 |
| 60 |        |            | AI560251 AW874068 AL134043 AW235363 AA663345 AW008282 AA488964 AA283144 AI890387 AI950344 AI741346 AI689062 AA282915 AW102898   |
|    |        |            | AI872193 AI763273 AW173586 AW150329 AI653832 AI762688 AA988777 AA488892 AI356394 AW103813 AI539542 AA642739 AA856975 AW505512   |
|    |        |            | AI961530 AW629970 BE612881 AW276997 AW513601 AW512843 AA044209 AW856538 AA180009 AA337499 AW961101 AA251669 AA251874            |
|    |        |            | AI819225 AW205862 AI683338 AI858509 AW276905 AI633006 AA972584 AA908741 AW072629 AW513996 AA293273 AA969759 N75628 N22388       |
|    |        |            | H84729 H60052 T92487 AI022058 AA780419 AA551005 W80701 AW613456 AI373032 AI564269 F00531 H83488 W37181 W78802 R66056 AI002839   |
|    |        |            | R67840 AA300207 AW959581 T63226 F04005  |
| 65 | 438966 | 467436_1   | AW979074 AA834841 AA828650  |
|    | 438993 | 467651_1   | AA828695 AA834879 AI926351  |
|    | 440680 | 500121_1   | AA903098 AW836693 BE160824 AW606818 AW582699 AW836766   |
|    | 442438 | 542469_1   | AA995998 AI916684 R61781 T77332 F07756 F08149 F07647  |
|    | 446346 | 673545_1   | AI290205 AW235762 AI651268  |
| 70 | 446417 | 676384_1   | AI299050 BE256910   |
|    | 447641 | 73043_1    | BE619186 BE264952 R26042  |
|    | 448450 | 76399_1    | BE612490 T05205 AA481187  |
|    | 449034 | 794817_1   | AI624049 AW117770 AI858360  |
|    | 450625 | 84032_1    | AW970107 AA513951 AA010406  |
| 75 | 452453 | 918300_1   | AI902519 AI902518 AI902516  |
|    | 453743 | 979613_1   | AL120480 AW836448 AW176802  |
|    | 453955 | 989877_1   | AW579207 AW936883 AW008026 N88905   |
|    | 454392 | 115882_1   | BE260893 AA078319 R85057 AW803024 H85811 AA078293   |
|    | 454490 | 1217172_1  | AW797778 AW797781 AW797780  |
| 80 | 454690 | 1229106_1  | AW854639 AW854719 AW854718 BE145880 AW854692 BE145866 AW816154 AW854698 AW854654 AW813335 AW854699                              |
|    | 454933 | 1245515_1  | BE141714 AW845993 AW845989  |
|    | 455070 | 1252209_1  | AW854675 AW854685 AW854716 AW854690 AW854615 AW854624 AW854623 AW854641 AW854632 AW854695 AW854661                              |
|    | 455180 | 1258658_1  | AW863503 AW863362   |
|    | 455275 | 1272255_1  | AW977806 AW887923 AW886321  |



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455362 1284507\_1 AW902635 AW902574 BE011167 BE011329 AW902808 AW902651  
 455711 1352369\_1 BE069465 BE069505  
 456386 1842693\_-1 W28481  
 456388 1842839\_-1 W28557  
 456411 185688\_1 AA603305 AA244095 AA244183  
 459587 94893\_1 AA031956  
 459595 969956\_1 AL040421

TABLE 33C:

Pkey: Unique number corresponding to an Eos probeset  
 Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) Nature 402:489-495.  
 Strand: Indicates DNA strand from which exons were predicted.  
 NT\_position: Indicates nucleotide positions of predicted exons.

| Pkey   | Ref     | Strand | NT_position   |
|--------|---------|--------|---|
| 401078 | 3687273 | Plus   | 105052-105171   |
| 401157 | 9438289 | Minus  | 114133-114247,114567-114645   |
| 401189 | 9690246 | Minus  | 90815-90929   |
| 401260 | 8076883 | Minus  | 86008-86355   |
| 401352 | 9931258 | Minus  | 26064-26208   |
| 401439 | 8246737 | Plus   | 92993-94026   |
| 401707 | 2951946 | Plus   | 21972-22104   |
| 401811 | 6730720 | Plus   | 107002-107209   |
| 401976 | 3095020 | Minus  | 17594-17709,21068-21175   |
| 402045 | 7923943 | Plus   | 5964-5128   |
| 402421 | 9796341 | Minus  | 46609-46662,46758-46811,86293-86346,89776-89829,90048-90101,102817-102924   |
| 402696 | 7328818 | Minus  | 23600-23731   |
| 402739 | 9212192 | Plus   | 60456-61019   |
| 402921 | 7981303 | Minus  | 52242-52384,55599-55858,57124-57309,59633-59761,59957-60123   |
| 403095 | 8954339 | Plus   | 150025-150240,151564-151690   |
| 403111 | 8980970 | Plus   | 175012-175159   |
| 403144 | 9454649 | Minus  | 166200-166628   |
| 403170 | 9838134 | Plus   | 40955-41356   |
| 403345 | 8569726 | Plus   | 77890-78069   |
| 403346 | 8569726 | Plus   | 92752-93015   |
| 403563 | 8101139 | Plus   | 2800-3501   |
| 403622 | 8569879 | Plus   | 1941-2388,2580-2761   |
| 403782 | 8078608 | Plus   | 41326-41633   |
| 403797 | 8099896 | Minus  | 123065-125008   |
| 403899 | 7381715 | Minus  | 9144-9350   |
| 404021 | 8655966 | Plus   | 192534-193489   |
| 404115 | 9621489 | Plus   | 232707-232982   |
| 404200 | 6010176 | Minus  | 7066-7210   |
| 404347 | 9838195 | Plus   | 74493-74829   |
| 404939 | 6862697 | Plus   | 175318-175476   |
| 405257 | 7329310 | Plus   | 73121-73273   |
| 405336 | 6094635 | Plus   | 33267-33563   |
| 405394 | 6624123 | Minus  | 31900-32373   |
| 405547 | 1054740 | Plus   | 124361-124520,124914-125050   |
| 405609 | 5757553 | Minus  | 42814-43010,43583-43783,44863-45033,46429-46554,47815-48018,49961-50153,51624-51727,51823-51959,52702-52918,55469-55601,57111-57307,58169-58296,60215-60332,61482-61727 |
| 405908 | 6758795 | Plus   | 97969-98715   |
| 405943 | 6758796 | Plus   | 20605-20812   |
| 405953 | 7960374 | Minus  | 65101-65574   |
| 405963 | 8247786 | Plus   | 4056-4699   |
| 406007 | 8247802 | Minus  | 13484-13829   |
| 406030 | 8312328 | Minus  | 96123-96547   |
| 406088 | 9123919 | Minus  | 65772-66270   |
| 406117 | 9142932 | Plus   | 54304-54584   |
| 406242 | 7417725 | Minus  | 36736-36951   |
| 406291 | 5686274 | Plus   | 9562-9867   |
| 406411 | 9256407 | Plus   | 7400-7527   |
| 406414 | 9256407 | Plus   | 49593-49850   |
| 406504 | 7711360 | Minus  | 107068-107277   |
| 406506 | 7711374 | Minus  | 6843-8077   |
| 406598 | 8248614 | Plus   | 56373-56849   |

TABLE 34A: ABOUT 197 GENES UP-REGULATED IN KIDNEY CANCER

Table 34A lists about 197 genes up-regulated in kidney cancer compared to normal adult tissues that are likely to be extracellular or cell-surface proteins. These were selected as for Table 33A and the predicted protein contained a structural domain that is indicative of extracellular localization (e.g. ig, fn3, egf, 7tm domains). Predicted protein domains are noted.

Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigeneID: Unigene number  
 Unigene Title: Unigene gene title  
 PSDomain: Protein Structural Domain  
 R1: Ratio of tumor to normal tissue

| Pkey   | ExAccn    | UnigeneID | UnigeneTitle    | PSDomain           | R1     |
|--------|-----------|-----------|-----------------|--------------------|--------|
| 421471 | U90545    | Hs.104635 | solute carrier  | TM,SS              | 1007.4 |
| 452401 | NM_007115 | Hs.29352  | tumor necrosis  | TM,SS,Xlink,CUB    | 336.4  |
| 421727 | Y13153    | Hs.107318 | kynurenine 3-mo | TM,SS,Monoxygenase | 323.6  |

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|    |        |           |           |                 |                                     |       |
|----|--------|-----------|-----------|-----------------|-------------------------------------|-------|
|    | 426471 | M22440    | Hs.170009 | transforming gr | TM,SS,EGF                           | 224.6 |
|    | 441031 | AI110684  | Hs.7645   | fibrinogen, B b | fibrinogen_C                        | 174.0 |
|    | 411642 | NM_014932 | Hs.71132  | neuregulin 1    | TM,SS,C0esterase                    | 172.4 |
| 5  | 452838 | U65011    | Hs.30743  | preferentially  | TM                                  | 161.4 |
|    | 425984 | AW836277  | Hs.165636 | hypothetical pr | TM                                  | 151.0 |
|    | 453165 | S74727    | Hs.32042  | aspartoacylase  | TM                                  | 134.8 |
|    | 452431 | U88879    | Hs.29499  | toll-like recep | TM,SS,TIR,LRRCT                     | 130.6 |
|    | 423508 | AW604297  | Hs.129711 | hepatitis A vir | TM,SS,ig                            | 120.4 |
| 10 | 407975 | X89426    | Hs.41716  | endothelial cel | SS,IGFBP                            | 111.8 |
|    | 415076 | NM_000857 | Hs.77890  | guanylate cycl  | TM,guanylate_cyc                    | 97.0  |
|    | 447046 | AA326187  | Hs.17170  | G protein-coupl | TM,7tm_1                            | 90.2  |
|    | 423109 | M59305    | Hs.123655 | natriuretic pep | TM,SS,ANF_receptor                  | 78.0  |
|    | 422544 | AB018259  | Hs.118140 | KIAA0716 gene p | TM                                  | 74.8  |
| 15 | 429352 | AK001512  | Hs.200097 | hypothetical pr | TM                                  | 73.0  |
|    | 453392 | U23752    | Hs.32964  | SRY (sex determ | TM,HMG_box                          | 72.2  |
|    | 403345 |           |           |                 | TM,alpha-amylase                    | 69.6  |
|    | 430440 | X52599    | Hs.2561   | nerve growth fa | TM,SS,NGF                           | 69.0  |
|    | 408609 | AA330431  | Hs.640    | calcitonin rece | TM,SS,7tm_2                         | 57.4  |
| 20 | 449101 | AA205847  | Hs.23016  | G protein-coupl | TM,7tm_1                            | 52.0  |
|    | 423685 | BE350494  | Hs.49753  | Homo sapiens mR | TM,Myosin_tail                      | 48.0  |
|    | 452891 | N75582    | Hs.212875 | ESTs, Weakly si | SS                                  | 44.0  |
|    | 408430 | S79876    | Hs.44926  | dipeptidylpepti | TM,SS,DPPIV_N_term,Peptidase_S9     | 42.6  |
|    | 419287 | X91906    | Hs.89872  | chloride channe | TM,CBS,voltage_CLC                  | 40.6  |
| 25 | 428822 | W28418    | Hs.301148 | potassium volta | TM                                  | 40.2  |
|    | 434208 | T92641    | Hs.127648 | hypothetical pr | TM,SS                               | 39.2  |
|    | 400792 | AA635062  | Hs.50094  | Homo sapiens mR | TM,BIR_CARD,zf-C3HC4                | 38.6  |
|    | 444743 | AA045648  | Hs.11817  | nudix (nucleosi | TM,muT                              | 38.4  |
|    | 406411 |           |           |                 | TM,vwa,FG-GAP                       | 37.6  |
| 30 | 423657 | AL045128  | Hs.1691   | glucan (1,4-alp | TM,alpha-amylase                    | 37.5  |
|    | 424871 | NM_004525 | Hs.153595 | low density lip | TM,SS,EGF,Idl_recept_a,Idl_recept_b | 32.8  |
|    | 449625 | NM_014253 | Hs.23796  | odx (odd Oz/ten | SH2,EGF                             | 30.5  |
|    | 423020 | AA383092  | Hs.1608   | replication pro | TM                                  | 29.6  |
|    | 422420 | U03398    | Hs.1524   | tumor necrosis  | TM,TNF                              | 29.6  |
| 35 | 414245 | BE148072  | Hs.75850  | WAS protein fam | TM,WH2                              | 28.8  |
|    | 410247 | AF181721  | Hs.61345  | RU2S            | TM                                  | 27.4  |
|    | 406414 |           |           |                 | TM,vwa,FG-GAP                       | 27.2  |
|    | 435951 | AF269162  | Hs.41267  | c21orf7 form A- | TM                                  | 27.2  |
|    | 419948 | AB041035  | Hs.93847  | NADPH oxidase 4 | TM,SS,Femic_reduct                  | 26.4  |
| 40 | 448595 | AB014544  | Hs.21572  | KIAA0544 gene p | TM,SS,LRRCT,LRR                     | 25.8  |
|    | 419569 | AI971651  | Hs.91143  | jagged 1 (Alagi | TM,SS,DSL,EGF                       | 25.6  |
|    | 433242 | AB040938  | Hs.113940 | KIAA1505 protei | SS                                  | 25.6  |
|    | 416778 | M16505    | Hs.79876  | steroid sulfata | TM,Sulfatase                        | 23.0  |
|    | 401352 |           |           |                 | TM                                  | 22.6  |
|    | 404200 |           |           |                 | SS                                  | 19.6  |
| 45 | 446591 | H44186    | Hs.15456  | PDZ domain cont | TM,PDZ                              | 19.2  |
|    | 431806 | AF186114  | Hs.270737 | tumor necrosis  | TM,SS                               | 18.0  |
|    | 423909 | AJ223183  | Hs.135194 | immunoglobulin  | TM,SS,ig                            | 17.6  |
|    | 446364 | AB006624  | Hs.14912  | KIAA0285 protei | TM                                  | 17.4  |
| 50 | 425695 | NM_005401 | Hs.155238 | protein tyrosin | TM,Band_41,Y_phosphatase            | 17.0  |
|    | 410947 | AK000305  | Hs.67055  | hypothetical pr | TM                                  | 16.8  |
|    | 421002 | AF116030  | Hs.100932 | transcription f | TM,KRAB,zf-C2H2                     | 16.5  |
|    | 421659 | NM_014459 | Hs.106511 | protocadherin 1 | TM,SS,cadherin                      | 16.0  |
|    | 458679 | AW975460  | Hs.143563 | ESTs            | SS                                  | 14.4  |
|    | 406598 |           |           |                 | SS                                  | 13.6  |
| 55 | 428508 | BE252383  | Hs.184668 | SBB131 protein  | TM,PX                               | 13.2  |
|    | 423321 | AB013885  | Hs.126926 | beta-ureidoprop | TM,SS,CN_hydrolase                  | 12.5  |
|    | 422317 | NM_001147 | Hs.115181 | angiotensin 2   | fibrinogen_C                        | 12.2  |
|    | 428227 | AA321649  | Hs.2248   | small inducible | IL8                                 | 12.0  |
| 60 | 414923 | AW445008  | Hs.77637  | homeo box A4    | TM,homeobox                         | 11.9  |
|    | 433231 | AB040926  | Hs.143552 | KIAA1493 protei | SS                                  | 11.6  |
|    | 443672 | AA323362  | Hs.9667   | butyrobetaine ( | TM                                  | 11.4  |
|    | 405609 |           |           |                 | TM,Myosin_tail,myosin_head          | 11.4  |
|    | 418912 | NM_000685 | Hs.89472  | angiotensin rec | TM,7tm_1                            | 11.4  |
| 65 | 449802 | AW901804  | Hs.23984  | hypothetical pr | TM                                  | 11.2  |
|    | 404347 |           |           |                 | SS                                  | 10.8  |
|    | 429945 | NM_006729 | Hs.226483 | diaphanous (Dro | TM,FH2                              | 10.6  |
|    | 435085 | AW130284  | Hs.192752 | ESTs, Moderate  | TM                                  | 10.6  |
|    | 404115 |           |           |                 | SS                                  | 10.2  |
|    | 420757 | X78592    | Hs.99915  | androgen recept | TM,Androgen_recep,hormone_rec,zf-C4 | 10.2  |
| 70 | 446298 | AF187813  | Hs.14637  | kidney- and liv | TM,Acetyltransf                     | 10.1  |
|    | 433703 | AA210863  | Hs.3532   | nemo-like kinas | TM,pkinase                          | 9.2   |
|    | 417404 | NM_007350 | Hs.82101  | pleckstrin homo | TM                                  | 9.2   |
|    | 451621 | AI879148  | Hs.26770  | fatty acid bind | TM,SS,lipocalin                     | 9.2   |
| 75 | 402045 |           |           |                 | TM,SS                               | 9.0   |
|    | 403095 |           |           |                 | SS,PAX,homeobox                     | 8.8   |
|    | 401439 |           |           |                 | TM                                  | 8.6   |
|    | 407721 | Y12735    | Hs.38018  | dual-specificit | TM,pkinase                          | 8.4   |
|    | 402921 |           |           |                 | TM                                  | 8.4   |
| 80 | 419503 | AA243642  | Hs.137422 | ESTs            | TM                                  | 8.4   |
|    | 452259 | AA317439  | Hs.28707  | signal sequence | TM                                  | 8.4   |
|    | 402696 |           |           |                 | TM                                  | 8.3   |
|    | 450001 | NM_001044 | Hs.406    | solute carrier  | TM,SS,SNF                           | 8.1   |
|    | 433190 | M26901    | Hs.3210   | renin           | SS,asp                              | 7.8   |

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|    |        |           |           |                 |   |     |
|----|--------|-----------|-----------|-----------------|---|-----|
|    | 449444 | AW818436  | Hs.23590  | solute carrier  | TM,MCT  | 7.7 |
|    | 444042 | NM_004915 | Hs.10237  | ATP-binding cas | TM,ABC_tran                                   | 7.7 |
|    | 452883 | X80031    | Hs.150318 | ESTs            | TM,C4,Collagen                                | 7.4 |
| 5  | 425151 | AA351814  | Hs.298678 | ESTs            | TM  | 7.2 |
|    | 455068 | AI807894  | Hs.27910  | centrosomal pro | TM,SS   | 7.2 |
|    | 406504 |           |           |                 | TM  | 7.2 |
|    | 410274 | AA381807  | Hs.61762  | hypoxia-inducib | SS  | 7.0 |
|    | 423349 | AF010258  | Hs.127428 | homeo box A9    | TM,homeobox                                   | 6.8 |
| 10 | 408771 | AW732573  | Hs.47584  | potassium volta | TM,K_tetra,on_trans                           | 6.8 |
|    | 445575 | Z25368    | Hs.172004 | titin           | TM  | 6.6 |
|    | 415138 | C18356    | Hs.78045  | tissue factor p | Kunitz_BPTI,G-gamma                           | 6.3 |
|    | 443595 | AF169312  | Hs.9613   | PPAR(gamma) ang | TM,SS,fibrinogen_C                            | 6.3 |
|    | 404939 |           |           |                 | TM  | 6.3 |
| 15 | 436209 | AW850417  | Hs.254020 | ESTs, Moderatel | TM,SS   | 6.2 |
|    | 403111 |           |           |                 | TM  | 6.2 |
|    | 405394 |           |           |                 | TM  | 6.0 |
|    | 454392 | BE260893  |           | gb:601150677F1  | TM,SS   | 6.0 |
|    | 415910 | U20350    | Hs.78913  | chemokine (C-X3 | TM,7tm_1                                      | 5.9 |
|    | 402421 |           |           |                 | TM  | 5.8 |
| 20 | 425717 | X07282    | Hs.171495 | retinoic acid r | TM,hormone_rec,zf-C4                          | 5.7 |
|    | 427920 | Z11502    | Hs.181107 | annexin A13     | TM,annexin                                    | 5.6 |
|    | 407864 | AF069291  | Hs.40539  | chromosome 8 op | TM,FHA,BRCT                                   | 5.5 |
|    | 441006 | AW605267  | Hs.7627   | CGI-60 protein  | TM  | 5.4 |
| 25 | 422232 | D43945    | Hs.113274 | transcription f | TM,HLH  | 5.4 |
|    | 425782 | U66468    | Hs.159525 | cell growth reg | SS  | 5.3 |
|    | 450236 | AW162998  | Hs.24684  | KIAA1376 protei | TM,SS   | 5.3 |
|    | 413841 | M34276    | Hs.75576  | plasminogen     | SS,trypsin,kringle,PAN                        | 5.3 |
|    | 436032 | AA150797  | Hs.109276 | latexin protein | TM  | 5.1 |
| 30 | 447081 | Y13896    | Hs.17287  | potassium inwar | TM,IRK  | 5.1 |
|    | 421126 | M74587    | Hs.102122 | insulin-like gr | SS,thyroglobulin_1,IGFBP                      | 5.1 |
|    | 426651 | AU076546  | Hs.171683 | nuclear recepto | TM,zf-C4,hormone_rec                          | 5.0 |
|    | 432328 | AI572739  | Hs.195471 | 6-phosphofructo | TM,6PF2K,PGAM                                 | 5.0 |
|    | 409506 | NM_006153 | Hs.54589  | NCK adaptor pro | TM,SH2,SH3                                    | 5.0 |
| 35 | 410361 | BE391804  | Hs.62661  | guanylate bindi | TM,SS,GBP                                     | 4.8 |
|    | 453891 | AB037751  | Hs.36353  | Homo sapiens mR | TM  | 4.8 |
|    | 447269 | NM_004861 | Hs.17958  | cerebrosida (3' | TM,SS   | 4.8 |
|    | 422357 | AF016272  | Hs.115418 | cadherin 16, KS | TM,cadherin                                   | 4.8 |
|    | 417355 | D13168    | Hs.82002  | endothelin rece | TM,SS,7tm_1,zf-C3HC4                          | 4.7 |
| 40 | 402739 |           |           |                 | SS  | 4.6 |
|    | 443486 | NM_003428 | Hs.9450   | zinc finger pro | TM,KRAB,zf-C2H2                               | 4.6 |
|    | 408380 | AF123050  | Hs.44532  | diubiquitin     | TM,ubiquitin,7tm_3,ANF_receptor,sushi,7tm_1   | 4.6 |
|    | 414812 | X72755    | Hs.77367  | monokine induce | SS,IL8  | 4.4 |
|    | 424053 | NM_002019 | Hs.138671 | fms-related tyr | TM,SS,pkinase,ig                              | 4.4 |
| 45 | 413384 | NM_000401 | Hs.75334  | exos/oses (mult | TM  | 4.4 |
|    | 457030 | AI301740  | Hs.173381 | dihydropyrimidi | TM,SS,Dihydroorotase                          | 4.4 |
|    | 410407 | X66839    | Hs.63287  | carbonic anhydr | TM,SS,carb_anhydrase                          | 4.3 |
|    | 401157 |           |           |                 | TM,citrate_synt                               | 4.3 |
|    | 432004 | BE018302  | Hs.2894   | placental growt | SS,PDGF                                       | 4.3 |
| 50 | 424704 | AI263293  | Hs.152096 | cytochrome P450 | SS,p450                                       | 4.2 |
|    | 407065 | Y10141    |           | gb:H.sapiens DA | TM,SS,SNF                                     | 4.2 |
|    | 411213 | AA676939  | Hs.69285  | neuropilin 1    | TM,CUB,F5_F8_type_C,MAM                       | 4.2 |
|    | 430806 | S69377    | Hs.247978 | T-cell acute ly | TM,HLH  | 4.1 |
|    | 414696 | AF002020  | Hs.76918  | Niemann-Pick di | TM,SS,Palched                                 | 4.1 |
| 55 | 408830 | AK001709  | Hs.48403  | hypothetical pr | TM,UPF0013                                    | 4.1 |
|    | 416655 | AW968613  | Hs.79428  | BCL2/adenovirus | TM  | 4.1 |
|    | 412494 | AL133900  | Hs.792    | ADP-ribosylatio | TM,arf,zf-B_box,zf-C3HC4                      | 4.0 |
|    | 453195 | BE241876  | Hs.32352  | hypothetical pr | TM  | 4.0 |
|    | 428816 | AA004986  | Hs.193852 | ATP-binding cas | TM,ABC_membrane,ABC_tran,COX15-ClaA           | 3.9 |
| 60 | 401189 |           |           |                 | TM,SET,PHD,HMG_box                            | 3.8 |
|    | 451988 | AF263928  | Hs.27410  | papillomavirus  | TM  | 3.8 |
|    | 421013 | M62397    | Hs.1345   | mutated in colo | TM  | 3.7 |
|    | 420041 | AB005142  | Hs.94592  | klotho          | TM,SS,Glyco_hydro_1                           | 3.7 |
|    | 432579 | AF043244  | Hs.278439 | nucleolar prote | TM  | 3.6 |
| 65 | 453496 | AA442103  | Hs.33084  | solute carrier  | TM,SS,sugar_tr                                | 3.6 |
|    | 446636 | AC002563  | Hs.15767  | citron (rho-int | TM,CNH,DAG_PE-bind,PH,pkinase,pkinase_C       | 3.6 |
|    | 426274 | D38122    | Hs.2007   | tumor necrosis  | TM,TNF  | 3.6 |
|    | 452355 | N54926    | Hs.29202  | G protein-coupl | TM,7tm_1                                      | 3.5 |
|    | 453775 | NM_002916 | Hs.35120  | replication fac | TM,SS,AAA                                     | 3.4 |
| 70 | 426559 | AB001914  | Hs.170414 | paired basic am | TM,Peptidase_S8,P                             | 3.4 |
|    | 420737 | L08096    | Hs.99899  | tumor necrosis  | TM,TNF  | 3.4 |
|    | 448733 | NM_005629 | Hs.187958 | solute carrier  | TM,SNF,ABC_tran,isodh,pkinase,Ribosomal_L18ae | 3.4 |
|    | 413719 | BE439580  | Hs.75498  | small inducible | SS,IL8  | 3.4 |
|    | 427914 | AA417350  | Hs.20575  | ESTs            | TM,GAS2                                       | 3.4 |
| 75 | 412642 | BE244598  | Hs.809    | hepatocyte grow | kringle,PAN,trypsin                           | 3.4 |
|    | 421893 | NM_001078 | Hs.109225 | vascular cell a | TM,SS,ig                                      | 3.3 |
|    | 417924 | AU077231  | Hs.82932  | cyclin D1 (PRAD | TM,cyclin                                     | 3.3 |
|    | 405257 |           |           |                 | TM  | 3.3 |
| 80 | 450396 | AU077002  | Hs.24950  | regulator of G- | TM,RGS  | 3.3 |
|    | 415892 | L24498    | Hs.80409  | growth arrest a | TM,Ribosomal_L7Ae                             | 3.3 |
|    | 425236 | AW067800  | Hs.155223 | stanniocalcin 2 | SS  | 3.3 |
|    | 430812 | L10405    | Hs.247992 | DNA binding pro | TM,SS   | 3.2 |
|    | 431842 | NM_005764 | Hs.271473 | epithelial prot | TM,SS   | 3.2 |
|    | 424897 | D63216    | Hs.153684 | frizzled-relate | TM,Fz,NTR                                     | 3.2 |

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|        |              |   |   |   |   |     |
|--------|--------------|---|---|---|---|-----|
| 5      | 414821       | M63835  | Hs.77424  | Fc fragment of  | TM,SS,ig                                      | 3.1 |
|        | 418030       | BE207573  | Hs.83321  | neuromedin B  | SS  | 3.1 |
|        | 421633       | AF121860  | Hs.106260   | sorting nexin 1   | TM,PX   | 3.1 |
|        | 441285       | NM_002374   | Hs.167  | microtubule-ass   | SS,tubulin-binding                            | 3.1 |
|        | 418526       | BE019020  | Hs.85838  | solute carrier  | TM,MCT  | 3.1 |
|        | 401260       |   |   |   | TM,SS   | 3.1 |
|        | 450705       | U90304  | Hs.25351  | iroquois-class  | TM,homeobox                                   | 3.1 |
|        | 424415       | NM_001975   | Hs.146580   | enolase 2, (gam   | TM,SS,enolase                                 | 3.0 |
|        | 403346       |   |   |   | TM,alpha-amylase                              | 3.0 |
|        | 10           | 432757  | AF113013  | Hs.278919   | PRO0806 protein                               | TM  |
| 434398 |              | AA121098  | Hs.3838   | serum-inducible   | TM,pkinase,POLO_box                           | 3.0 |
| 424539 |              | L02911  | Hs.150402   | activin A recep   | TM,Activin_rec,pkinase                        | 3.0 |
| 406117 |              |   |   |   | SS  | 3.0 |
| 15     | 408119       | W26213  |   | gb:22d10 Human  | TM,SS   | 3.0 |
|        | 431984       | AL080239  | Hs.272284   | Human DNA seque   | TM  | 3.0 |
|        | 403782       |   |   |   | TM  | 3.0 |
|        | 447922       | Z92910  | Hs.20019  | hemochromatosis   | TM,SS,ig,MHC_l,histone,SPRY,zf-B_box,zf-C3HC4 | 3.0 |
| 20     | 428857       | AF008192  | Hs.194283   | putative GR6 pr   | SS  | 3.0 |
|        | 432596       | AJ224741  | Hs.278461   | matrilin 3  | SS  | 3.0 |
|        | 453202       | AW085781  | Hs.26270  | Homo sapiens cD   | TM  | 3.0 |
|        | 405547       |   |   |   | TM,SS,ABC_membrane,ABC_tran                   | 3.0 |
|        | 423496       | U91963  | Hs.129700   | tolloid-like 1  | TM,SS,EGF,CUB,Astacin                         | 3.0 |
|        | 401707       |   |   |   | SS  | 3.0 |
| 25     | 403144       |   |   |   | TM,ion_trans,K_tetra                          | 3.0 |
|        | 418375       | NM_003081   | Hs.84389  | synaptosomal-as   | TM,NA   | 3.0 |
|        | 422992       | AF016833  | Hs.122785   | maltase-glucoam   | TM,Glyco_hydro_31,trefoil                     | 3.0 |
|        | 406506       |   |   |   | TM  | 3.0 |
|        | 413472       | BE242870  | Hs.75379  | solute carrier  | TM,SDF  | 3.0 |
| 30     | TABLE 34B:   |   |   |   |   |     |
|        | Pkey:        | Unique Eos probeset identifier number   |   |   |   |     |
|        | CAT number:  | Gene cluster number   |   |   |   |     |
|        | Accession:   | Genbank accession numbers   |   |   |   |     |
| 35     | Pkey         | CAT number  | Accession   |   |   |     |
|        | 408119       | 1040172_1   | W26213 H08055 Z44031 AW954559 R17434              |   |   |     |
|        | 454392       | 115882_1  | BE260893 AA078319 R85057 AW803024 H85811 AA078293 |   |   |     |
| 40     | TABLE 34C:   |   |   |   |   |     |
|        | Pkey:        | Unique number corresponding to an Eos probeset  |   |   |   |     |
|        | Ref:         | Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <u>Nature</u> 402:489-495. |   |   |   |     |
|        | Strand:      | Indicates DNA strand from which exons were predicted.   |   |   |   |     |
|        | Nt_position: | Indicates nucleotide positions of predicted exons.  |   |   |   |     |
| 45     | Pkey         | Ref   | Strand  | Nt_position   |   |     |
|        | 401157       | 9438289   | Minus   | 114133-114247,114567-114645   |   |     |
|        | 401189       | 9690246   | Minus   | 90815-90929   |   |     |
|        | 401260       | 8076883   | Minus   | 86008-86355   |   |     |
|        | 401352       | 9931258   | Minus   | 26064-26208   |   |     |
|        | 401439       | 8246737   | Plus  | 92993-94026   |   |     |
|        | 401707       | 2951946   | Plus  | 21972-22104   |   |     |
|        | 402045       | 7923943   | Plus  | 5964-6128   |   |     |
|        | 402421       | 9796341   | Minus   | 46609-46662,46758-46811,86293-86346,89776-89829,90048-90101,102817-102924   |   |     |
|        | 402696       | 7328818   | Minus   | 23600-23731   |   |     |
| 50     | 402739       | 9212192   | Plus  | 60456-61019   |   |     |
|        | 402921       | 7981303   | Minus   | 52242-52384,55599-55858,57124-57309,59633-59761,59957-60123   |   |     |
|        | 403095       | 8954339   | Plus  | 150025-150240,151564-151690   |   |     |
|        | 403111       | 8980970   | Plus  | 175012-175159   |   |     |
|        | 403144       | 9454649   | Minus   | 166200-166628   |   |     |
|        | 403345       | 8569726   | Plus  | 77890-78069   |   |     |
|        | 403346       | 8569726   | Plus  | 92752-93015   |   |     |
|        | 403782       | 8078608   | Plus  | 41326-41633   |   |     |
|        | 404115       | 9621489   | Plus  | 232707-232982   |   |     |
|        | 404200       | 6010176   | Minus   | 7066-7210   |   |     |
| 55     | 404347       | 9838195   | Plus  | 74493-74829   |   |     |
|        | 404939       | 6862697   | Plus  | 175318-175476   |   |     |
|        | 405257       | 7329310   | Plus  | 73121-73273   |   |     |
|        | 405394       | 6624123   | Minus   | 31900-32373   |   |     |
|        | 405547       | 1054740   | Plus  | 124361-124520,124914-125050   |   |     |
|        | 405609       | 5757553   | Minus   | 42814-43010,43583-43783,44863-45033,46429-46554,47815-48018,49961-50153,51624-51727,51823-51959,52702-52918,55469-55601,57111-57307,58169-58296,60215-60332,61482-61727 |   |     |
|        | 406117       | 9142932   | Plus  | 54304-54584   |   |     |
|        | 406411       | 9256407   | Plus  | 7400-7527   |   |     |
|        | 406414       | 9256407   | Plus  | 49593-49850   |   |     |
|        | 406504       | 7711360   | Minus   | 107068-107277   |   |     |
| 60     | 406506       | 7711374   | Minus   | 6843-8077   |   |     |
|        | 406598       | 8248614   | Plus  | 56373-56849   |   |     |
|        | 406117       | 9142932   | Plus  | 54304-54584   |   |     |
| 65     | 406411       | 9256407   | Plus  | 7400-7527   |   |     |
|        | 406414       | 9256407   | Plus  | 49593-49850   |   |     |
|        | 406504       | 7711360   | Minus   | 107068-107277   |   |     |
| 70     | 406506       | 7711374   | Minus   | 6843-8077   |   |     |
|        | 406598       | 8248614   | Plus  | 56373-56849   |   |     |
|        | 406117       | 9142932   | Plus  | 54304-54584   |   |     |
| 75     | 406411       | 9256407   | Plus  | 7400-7527   |   |     |
|        | 406414       | 9256407   | Plus  | 49593-49850   |   |     |
|        | 406504       | 7711360   | Minus   | 107068-107277   |   |     |

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|    |                |   |           |  |      |
|----|----------------|---|-----------|--|------|
|    | Pkey:          | Unique Eos probeset identifier number               |           |  |      |
|    | ExAccn:        | Exemplar Accession number, Genbank accession number |           |  |      |
|    | UnigeneID:     | Unigene number                                      |           |  |      |
|    | Unigene Title: | Unigene gene title                                  |           |  |      |
| 5  | R1:            | Ratio of tumor to normal tissue                     |           |  |      |
|    | Pkey           | ExAccn  | UnigeneID | UnigeneTitle                             | R1   |
|    | 424704         | AI263293  | Hs.152096 | cytochrome P450, subfamily 11J (arachido | 40.9 |
|    | 426559         | AB001914  | Hs.170414 | paired basic amino acid cleaving system  | 35.6 |
| 10 | 458079         | AI796870  | Hs.54277  | ESTs                                     | 34.6 |
|    | 433447         | U29195  | Hs.3281   | neuronal pentraxin II                    | 32.0 |
|    | 439979         | AW600291  | Hs.6823   | hypothetical protein FLJ10430            | 29.3 |
|    | 446921         | AB012113  | Hs.16530  | small inducible cytokine subfamily A (Cy | 25.9 |
|    | 435359         | T60843  | Hs.189679 | ESTs                                     | 25.4 |
| 15 | 450152         | AI138635  | Hs.22968  | ESTs                                     | 25.2 |
|    | 452401         | NM_007115   | Hs.29352  | tumor necrosis factor, alpha-induced pro | 24.8 |
|    | 440304         | BE159984  | Hs.125395 | ESTs                                     | 24.5 |
|    | 414821         | M63835  | Hs.77424  | Fc fragment of IgG, high affinity Ia, re | 23.4 |
|    | 421155         | H87879  | Hs.102267 | lysyl oxidase                            | 22.4 |
| 20 | 452795         | AW392555  | Hs.18878  | hypothetical protein FLJ21620            | 22.2 |
|    | 414812         | X72755  | Hs.77367  | monokine induced by gamma interferon     | 22.1 |
|    | 426471         | M22440  | Hs.170009 | transforming growth factor, alpha        | 21.3 |
|    | 427897         | NM_017413   | Hs.181060 | apelin; peptide ligand for APJ receptor  | 21.3 |
|    | 449523         | NM_000579   | Hs.54443  | chemokine (C-C motif) receptor 5         | 20.7 |
| 25 | 436961         | AW375974  | Hs.156704 | ESTs                                     | 20.5 |
|    | 447499         | AW262580  | Hs.147674 | KIAA1621 protein                         | 20.4 |
|    | 438817         | AI023799  | Hs.163242 | ESTs                                     | 20.4 |
|    | 430630         | AW269920  | Hs.2621   | cystatin A (stefin A)                    | 19.8 |
| 30 | 428227         | AA321649  | Hs.2248   | small inducible cytokine subfamily B (Cy | 19.5 |
|    | 424086         | AI351010  | Hs.102267 | lysyl oxidase                            | 18.7 |
|    | 425289         | AW139342  | Hs.155530 | interferon, gamma-inducible protein 16   | 18.7 |
|    | 436476         | AA326108  | Hs.53631  | ESTs, Weakly similar to enhancer-of-spli | 18.7 |
|    | 415286         | AW249540  | Hs.72548  | ESTs                                     | 18.2 |
| 35 | 428157         | AI738719  | Hs.298668 | ESTs                                     | 18.1 |
|    | 456804         | AI421645  | Hs.139851 | caveolin 2                               | 17.8 |
|    | 429490         | AI971131  | Hs.293684 | ESTs, Weakly similar to alternatively sp | 17.5 |
|    | 429732         | U20158  | Hs.2488   | lymphocyte cytosolic protein 2 (SH2 doma | 17.1 |
|    | 433757         | AI949974  | Hs.152670 | ESTs                                     | 16.8 |
| 40 | 400419         | AF084545  | Hs.81800  | chondroitin sulfate proteoglycan 2 (vers | 16.4 |
|    | 428046         | AW812795  | Hs.155381 | ESTs, Moderately similar to I38022 hypot | 16.3 |
|    | 411642         | NM_014932   | Hs.71132  | neuroigin 1                              | 16.2 |
|    | 444381         | BE387335  | Hs.283713 | ESTs, Weakly similar to CA54_HUMAN COLLA | 16.0 |
|    | 435767         | H73505  | Hs.117874 | ESTs                                     | 15.7 |
| 45 | 427581         | NM_014788   | Hs.179703 | KIAA0129 gene product                    | 15.6 |
|    | 448019         | AW947164  | Hs.195641 | ESTs                                     | 15.6 |
|    | 406671         | AA129547  | Hs.285754 | met proto-oncogene (hepatocyte growth fa | 15.5 |
|    | 447835         | AW591623  | Hs.164129 | ESTs                                     | 15.4 |
|    | 448520         | AB002367  | Hs.21355  | doublecortin and CaM kinase-like 1       | 14.8 |
| 50 | 417308         | H60720  | Hs.81892  | KIAA0101 gene product                    | 14.8 |
|    | 432731         | R31178  | Hs.287820 | fibronectin 1                            | 14.7 |
|    | 421566         | NM_000399   | Hs.1395   | early growth response 2 (Krox-20 (Drosop | 14.6 |
|    | 419235         | AW470411  | Hs.288433 | neurotrimin                              | 14.6 |
|    | 426490         | NM_001621   | Hs.170087 | aryl hydrocarbon receptor                | 14.4 |
| 55 | 421485         | AA243499  | Hs.104800 | hypothetical protein FLJ10134            | 14.4 |
|    | 422603         | BE242587  | Hs.118651 | hematopoietically expressed homeobox     | 14.4 |
|    | 418110         | R43523  | Hs.217754 | Homo sapiens cDNA: FLJ22202 fis, clone H | 14.2 |
|    | 425984         | AW836277  | Hs.165636 | hypothetical protein DKFZp761C07121      | 14.2 |
|    | 432606         | NM_002104   | Hs.3066   | granzyme K (serine protease, granzyme 3; | 14.1 |
| 60 | 436772         | AW975688  | Hs.250867 | zona pellucida glycoprotein 3A (sperm re | 14.0 |
|    | 444969         | AI203334  | Hs.160628 | ESTs                                     | 13.9 |
|    | 426890         | AA393167  | Hs.41294  | ESTs                                     | 13.8 |
|    | 437330         | AL353944  | Hs.50115  | Homo sapiens mRNA; cDNA DKFZp761J1112 (f | 13.8 |
|    | 458809         | AW972512  | Hs.20985  | sin3-associated polypeptide, 30kD        | 13.7 |
| 65 | 446627         | AI973016  | Hs.15725  | hypothetical protein SBB148              | 13.6 |
|    | 452960         | AK001335  | Hs.31137  | Homo sapiens cDNA: FLJ22681 fis, clone H | 13.3 |
|    | 417280         | AW173116  | Hs.262205 | ESTs                                     | 13.1 |
|    | 422173         | BE385828  | Hs.250619 | phorbolin-like protein MDS019            | 13.0 |
|    | 420552         | AK000492  | Hs.98806  | hypothetical protein                     | 13.0 |
| 70 | 425188         | AK002052  | Hs.155071 | hypothetical protein FLJ11190            | 12.6 |
|    | 427871         | AW992405  | Hs.59622  | ESTs, Weakly similar to unknown [H.sapie | 12.6 |
|    | 446152         | AI292036  | Hs.150028 | ESTs                                     | 12.5 |
|    | 426550         | AA381661  | Hs.119878 | ESTs                                     | 12.4 |
|    | 419034         | NM_002110   | Hs.89555  | hemopoietic cell kinase                  | 12.3 |
| 75 | 456508         | AA502764  | Hs.123469 | ESTs, Weakly similar to AF208855 1 BM-01 | 12.3 |
|    | 452281         | T93500  | Hs.28792  | Homo sapiens cDNA FLJ11041 fis, clone PL | 12.3 |
|    | 442932         | AA457211  | Hs.8858   | bromodomain adjacent to zinc finger doma | 12.3 |
|    | 426075         | AW513691  | Hs.270149 | ESTs                                     | 12.2 |
|    | 434398         | AA121098  | Hs.3838   | serum-inducible kinase                   | 12.2 |
| 80 | 450506         | NM_004460   | Hs.418    | fibroblast activation protein, alpha     | 12.1 |
|    | 425782         | U66468  | Hs.159525 | cell growth regulatory with EF-hand doma | 12.0 |
|    | 426108         | AA622037  | Hs.166468 | programmed cell death 5                  | 11.9 |
|    | 416000         | R82342  | Hs.79856  | ESTs                                     | 11.8 |
|    | 450236         | AW162998  | Hs.24684  | KIAA1376 protein                         | 11.7 |

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|    |        |           |           |   |      |
|----|--------|-----------|-----------|---|------|
|    | 449679 | AI823951  | Hs.296668 | Homo sapiens cDNA FLJ11846 fis, clone HE  | 11.6 |
|    | 441350 | AB020690  | Hs.7782   | paraneoplastic antigen MA2                | 11.4 |
|    | 442227 | AW771958  | Hs.175437 | ESTs                                      | 11.4 |
| 5  | 414004 | AA737033  | Hs.7155   | ESTs, Weakly similar to 2115357A TYKi pr  | 11.4 |
|    | 447056 | N67879    | Hs.157695 | ESTs                                      | 11.3 |
|    | 444863 | AW384082  | Hs.301323 | ESTs                                      | 11.3 |
|    | 452838 | U65011    | Hs.30743  | preferentially expressed antigen in mela  | 11.2 |
|    | 426780 | BE242284  | Hs.172199 | adenylate cyclase 7                       | 11.1 |
| 10 | 453160 | AI263307  | Hs.146228 | ESTs                                      | 11.1 |
|    | 449539 | W80363    | Hs.58446  | ESTs                                      | 11.1 |
|    | 415323 | BE269352  | Hs.949    | neutrophil cytosolic factor 2 (65kD, chr  | 11.0 |
|    | 423508 | AW604297  | Hs.129711 | hepatitis A virus cellular receptor 1     | 11.0 |
|    | 408380 | AF123050  | Hs.44532  | diubiquitin                               | 11.0 |
| 15 | 448410 | AK000227  | Hs.21126  | hypothetical protein FLJ20220             | 11.0 |
|    | 451277 | AK001123  | Hs.26176  | hypothetical protein FLJ10261             | 10.8 |
|    | 453165 | S74727    | Hs.32042  | aspartoacylase (aminoacylase 2, Canavan   | 10.8 |
|    | 435380 | AA679001  | Hs.192221 | ESTs                                      | 10.7 |
|    | 447183 | AI554733  | Hs.173182 | ESTs                                      | 10.7 |
|    | 438330 | AW450572  | Hs.257316 | ESTs                                      | 10.6 |
| 20 | 441392 | AW451831  | Hs.222119 | ESTs, Weakly similar to K1CQ_HUMAN KERAT  | 10.5 |
|    | 418036 | Z37976    | Hs.83337  | latent transforming growth factor beta b  | 10.5 |
|    | 452862 | AW378065  | Hs.8687   | ESTs                                      | 10.4 |
|    | 431512 | BE270734  | Hs.2795   | lactate dehydrogenase A                   | 10.3 |
| 25 | 421478 | AI683243  | Hs.97258  | ESTs                                      | 10.3 |
|    | 413879 | AA132961  | Hs.212533 | Homo sapiens cDNA: FLJ22572 fis, clone H  | 10.3 |
|    | 411800 | N39342    | Hs.5184   | TH1 drosophila homolog                    | 10.3 |
|    | 433862 | D86960    | Hs.3610   | KIAA0205 gene product                     | 10.3 |
|    | 440594 | AW445167  | Hs.126036 | ESTs                                      | 10.2 |
| 30 | 414504 | AW069181  | Hs.293523 | ESTs, Weakly similar to transformation-r  | 10.2 |
|    | 431211 | M86849    | Hs.5566   | gap junction protein, beta 2, 26kD (conn  | 10.2 |
|    | 437682 | AA476652  | Hs.94952  | Homo sapiens cDNA: FLJ23371 fis, clone H  | 10.1 |
|    | 430097 | AI523245  | Hs.127638 | ESTs                                      | 10.1 |
|    | 432579 | AF043244  | Hs.278439 | nucleolar protein 3 (apoptosis repressor  | 10.0 |
| 35 | 434927 | H46612    | Hs.293815 | Homo sapiens HSPC285 mRNA, partial cds    | 9.9  |
|    | 424113 | AI743880  | Hs.12876  | ESTs                                      | 9.9  |
|    | 439981 | AI348408  | Hs.124675 | ESTs, Weakly similar to unnamed protein   | 9.9  |
|    | 411937 | AW876526  | Hs.6631   | gb:RC3-PT0028-120200-013-d08 PT0028 Homo  | 9.9  |
|    | 439653 | AW021103  | Hs.6631   | hypothetical protein FLJ20373             | 9.9  |
| 40 | 428862 | NM_000346 | Hs.2316   | SRY (sex-determining region Y)-box 9 (ca  | 9.8  |
|    | 424623 | AW963062  | Hs.165809 | ESTs                                      | 9.8  |
|    | 410762 | AF226053  | Hs.66170  | HSKM-B protein                            | 9.8  |
|    | 433285 | AW975944  | Hs.237396 | ESTs                                      | 9.7  |
|    | 413795 | AL040178  | Hs.142003 | ESTs                                      | 9.6  |
| 45 | 434382 | AW983709  | Hs.268051 | ESTs                                      | 9.6  |
|    | 435542 | AA687376  | Hs.269533 | ESTs                                      | 9.6  |
|    | 430887 | N65801    | Hs.260287 | ESTs, Weakly similar to ALU7_HUMAN ALU S  | 9.5  |
|    | 410339 | AI916499  | Hs.298258 | ESTs                                      | 9.5  |
|    | 452431 | U88879    | Hs.29499  | toll-like receptor 3                      | 9.5  |
| 50 | 405121 | AB028989  | Hs.88500  | mitogen-activated protein kinase 8 inter  | 9.5  |
|    | 408134 | AK000184  | Hs.42945  | acid sphingomyelinase-like phosphodiester | 9.4  |
|    | 438966 | AW979074  | Hs.23796  | gb:EST391184 MAGE resequences, MAGP Homo  | 9.4  |
|    | 449625 | NM_014253 | Hs.23796  | odx (odd Oz/ten-m, Drosophila) homolog 1  | 9.4  |
|    | 441024 | AW081530  | Hs.137088 | ESTs                                      | 9.3  |
| 55 | 445900 | AF070526  | Hs.13429  | Homo sapiens clone 24787 mRNA sequence    | 9.2  |
|    | 433001 | AF217513  | Hs.279905 | clone HQ0310 PRO0310p1                    | 9.2  |
|    | 440074 | AA863045  | Hs.199057 | ESTs, Weakly similar to T00050 hypotheti  | 9.2  |
|    | 421659 | NM_014459 | Hs.106511 | protocadherin 17                          | 9.2  |
|    | 434542 | AA769310  | Hs.61260  | hypothetical protein FLJ13164             | 9.1  |
| 60 | 427283 | AL119796  | Hs.174185 | ectonucleotide pyrophosphatase/phosphodi  | 9.1  |
|    | 428820 | AA436187  | Hs.172631 | integrin, alpha M (complement component   | 9.1  |
|    | 419441 | AW023731  | Hs.274368 | Homo sapiens mRNA; cDNA DKFZp586i1524 (f  | 9.0  |
|    | 407856 | AA045281  | Hs.266175 | phosphoprotein associated with GEMs       | 9.0  |
|    | 431941 | AK000106  | Hs.272227 | Homo sapiens cDNA FLJ20099 fis, clone CO  | 9.0  |
|    | 446460 | AW013999  | Hs.150164 | ESTs                                      | 8.9  |
| 65 | 452598 | AI831594  | Hs.68647  | ESTs, Weakly similar to ALU7_HUMAN ALU S  | 8.9  |
|    | 407975 | X89426    | Hs.41716  | endothelial cell-specific molecule 1 (NO  | 8.9  |
|    | 437259 | AI377755  | Hs.120695 | ESTs                                      | 8.7  |
|    | 420235 | AA256756  | Hs.311178 | ESTs                                      | 8.7  |
| 70 | 436959 | AL133076  | Hs.5354   | hypothetical protein FLJ12716             | 8.7  |
|    | 413554 | AA319146  | Hs.75426  | secretogranin II (chromogranin C)         | 8.6  |
|    | 435894 | AI076667  | Hs.188011 | ESTs                                      | 8.6  |
|    | 418693 | AI750878  | Hs.87409  | thrombospondin 1                          | 8.6  |
|    | 425770 | NM_014363 | Hs.159492 | spastic ataxia of Charlevoix-Saguenay (s  | 8.6  |
| 75 | 456249 | AI206144  | Hs.82508  | HRHFB2206 protein                         | 8.6  |
|    | 437672 | AW748265  | Hs.5741   | flavohemoprotein b5+b5R                   | 8.6  |
|    | 430268 | AK000737  | Hs.237480 | hypothetical protein FLJ20730             | 8.5  |
|    | 417225 | AA815048  | Hs.24078  | Homo sapiens cDNA FLJ12649 fis, clone NT  | 8.5  |
|    | 435266 | AK001942  | Hs.4863   | Homo sapiens cDNA FLJ11080 fis, clone PL  | 8.4  |
| 80 | 447974 | R76886    | Hs.19822  | gb:yi64b03.s1 Soares placenta Nb2HP Homo  | 8.4  |
|    | 447850 | AB018298  | Hs.19822  | SEC24 (S. cerevisiae) related gene famil  | 8.4  |
|    | 429525 | N92540    | Hs.205353 | ectonucleoside triphosphate diphosphohyd  | 8.3  |
|    | 435717 | AF227905  | Hs.105794 | UDP-glucose:glycoprotein glucosyltransfe  | 8.3  |
|    | 445784 | AI253155  | Hs.146065 | ESTs                                      | 8.3  |

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|    |        |           |           |   |     |
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|    | 454024 | AA993527  | Hs.16281  | hypothetical protein FLJ23403             | 8.3 |
|    | 443885 | H91806    | Hs.15284  | ESTs                                      | 8.3 |
|    | 403713 |           |           |   | 8.3 |
| 5  | 433376 | AI249361  | Hs.74122  | caspase 4, apoptosis-related cysteine pr  | 8.2 |
|    | 419490 | NM_006144 | Hs.90708  | granzyme A (granzyme 1, cytotoxic T-lymp  | 8.2 |
|    | 444670 | H58373    | Hs.37494  | ESTs                                      | 8.2 |
|    | 408761 | AA057264  | Hs.238936 | ESTs                                      | 8.2 |
|    | 453033 | AA325869  | Hs.31463  | KIAA0281 gene product                     | 8.2 |
| 10 | 441224 | AU076964  | Hs.7753   | calumenin                                 | 8.1 |
|    | 441689 | AI123705  | Hs.106932 | ESTs                                      | 8.1 |
|    | 440283 | AI732892  | Hs.190489 | ESTs                                      | 8.1 |
|    | 429598 | AA811257  | Hs.269710 | ESTs                                      | 8.1 |
|    | 424775 | AB014540  | Hs.153026 | SWAP-70 protein                           | 8.1 |
| 15 | 451292 | AB037716  | Hs.26204  | KIAA1295 protein                          | 8.0 |
|    | 453951 | AI676235  | Hs.24789  | ESTs                                      | 8.0 |
|    | 416200 | AI188972  | Hs.44257  | Homo sapiens mRNA; cDNA DKFpZp762O2215 (f | 8.0 |
|    | 431087 | H12723    | Hs.290791 | ESTs                                      | 8.0 |
|    | 432328 | AI572739  | Hs.195471 | 6-phosphofructo-2-kinase/fructose-2,6-bi  | 7.9 |
| 20 | 419474 | AW968619  | Hs.155849 | ESTs                                      | 7.9 |
|    | 418342 | BE002723  | Hs.293504 | ESTs, Moderately similar to ALU1_HUMAN A  | 7.9 |
|    | 408088 | AW157022  | Hs.4947   | Homo sapiens cDNA: FLJ22584 fis, clone H  | 7.9 |
|    | 413719 | BE439580  | Hs.75498  | small inducible cytokine subfamily A (Cy  | 7.9 |
|    | 440987 | AA911705  | Hs.130229 | ESTs                                      | 7.9 |
| 25 | 412448 | L12964    | Hs.73895  | tumor necrosis factor receptor superfam   | 7.9 |
|    | 415737 | AA167626  | Hs.118743 | ESTs                                      | 7.9 |
|    | 412959 | D87458    | Hs.75090  | KIAA0282 protein                          | 7.8 |
|    | 424247 | X14008    | Hs.234734 | lysozyme (renal amyloidosis)              | 7.8 |
|    | 453331 | AI240655  | Hs.8895   | ESTs                                      | 7.8 |
| 30 | 421991 | NM_014918 | Hs.110488 | KIAA0990 protein                          | 7.8 |
|    | 443450 | N65045    | Hs.133529 | ESTs                                      | 7.8 |
|    | 431876 | AA521183  | Hs.269678 | ESTs                                      | 7.8 |
|    | 432582 | AI623817  | Hs.168457 | ESTs                                      | 7.7 |
|    | 445800 | AA126419  | Hs.301632 | ESTs                                      | 7.7 |
|    | 424636 | AA453734  | Hs.10198  | ESTs                                      | 7.7 |
| 35 | 432134 | AI816782  | Hs.122583 | Homo sapiens cDNA: FLJ21934 fis, clone H  | 7.7 |
|    | 446873 | AI554439  | Hs.30724  | ESTs                                      | 7.7 |
|    | 400793 | AA635062  | Hs.50094  | Homo sapiens mRNA; cDNA DKFpZp434Q0515 (f | 7.7 |
|    | 436061 | AI248584  | Hs.190745 | Homo sapiens cDNA: FLJ21326 fis, clone C  | 7.7 |
| 40 | 442028 | AI239437  | Hs.48945  | ESTs                                      | 7.7 |
|    | 442760 | BE075297  | Hs.10067  | ESTs, Weakly similar to KIAA1205 protein  | 7.7 |
|    | 442152 | R39246    | Hs.239666 | Homo sapiens cDNA FLJ13495 fis, clone PL  | 7.7 |
|    | 427944 | AA417878  | Hs.48401  | ESTs, Weakly similar to ALU8_HUMAN ALU S  | 7.6 |
|    | 414646 | AA353776  | Hs.901    | CD48 antigen (B-cell membrane protein)    | 7.6 |
| 45 | 407634 | AW016569  | Hs.301280 | ESTs, Highly similar to AF241831 1 intra  | 7.6 |
|    | 418372 | AA311833  | Hs.84318  | replication protein A1 (70kD)             | 7.6 |
|    | 434666 | AF151103  | Hs.112259 | T cell receptor gamma locus               | 7.6 |
|    | 442432 | BE093589  | Hs.38178  | Homo sapiens cDNA: FLJ23468 fis, clone H  | 7.6 |
|    | 408418 | AW963897  | Hs.44743  | KIAA1435 protein                          | 7.6 |
| 50 | 418805 | AI829520  | Hs.227513 | ESTs                                      | 7.5 |
|    | 425354 | U62027    | Hs.155935 | complement component 3a receptor 1        | 7.5 |
|    | 408743 | AL110246  | Hs.47367  | hypothetical protein from EUROIMAGE 7836  | 7.5 |
|    | 444836 | AI589825  | Hs.173504 | ESTs, Weakly similar to JC5238 galactosy  | 7.5 |
|    | 421810 | AK001718  | Hs.108530 | hypothetical protein FLJ10856             | 7.4 |
| 55 | 432753 | NM_014075 | Hs.278915 | PRO0593 protein                           | 7.4 |
|    | 420061 | AW024937  | Hs.29410  | ESTs                                      | 7.4 |
|    | 432865 | AI753709  | Hs.152484 | ESTs                                      | 7.4 |
|    | 419070 | AW979068  | Hs.182503 | ESTs                                      | 7.4 |
|    | 430172 | AA468591  | Hs.161889 | ESTs                                      | 7.4 |
| 60 | 446343 | AW771414  | Hs.8314   | ESTs                                      | 7.4 |
|    | 424125 | M31669    | Hs.1735   | inhibin, beta B (activin AB beta polypep  | 7.4 |
|    | 453818 | BE256832  | Hs.10711  | Homo sapiens cDNA FLJ13449 fis, clone PL  | 7.4 |
|    | 447046 | AA326187  | Hs.17170  | G protein-coupled receptor 4              | 7.4 |
|    | 410577 | X91911    | Hs.64639  | glioma pathogenesis-related protein       | 7.4 |
| 65 | 452240 | AI591147  | Hs.61232  | ESTs                                      | 7.3 |
|    | 450375 | AA009647  | Hs.8850   | a disintegrin and metalloproteinase doma  | 7.3 |
|    | 422631 | BE218919  | Hs.118753 | hypothetical protein FLJ10688             | 7.3 |
|    | 450205 | AI219748  | Hs.11356  | ESTs                                      | 7.3 |
|    | 437212 | AI765021  | Hs.210775 | ESTs                                      | 7.3 |
| 70 | 440193 | AW902312  | Hs.7037   | pallid (mouse) homolog, pallidin          | 7.2 |
|    | 417022 | NM_014737 | Hs.80905  | Ras association (RalGDS/AF-6) domain fam  | 7.2 |
|    | 451818 | AI819018  |           | gb:ts54f01.x1 NCI_CGAP_Kid8 Homo sapiens  | 7.2 |
|    | 453013 | AA031407  |           | gb:zk15g12.r1 Soares_pregnant_uterus_NbH  | 7.2 |
|    | 430105 | X70297    | Hs.2540   | cholinergic receptor, nicotinic, alpha p  | 7.2 |
| 75 | 451621 | AI879148  | Hs.26770  | fatty acid binding protein 7, brain       | 7.2 |
|    | 442438 | AA995998  |           | gb:os26b03.s1 NCI_CGAP_Kid5 Homo sapiens  | 7.2 |
|    | 415138 | C18356    | Hs.78045  | tissue factor pathway inhibitor 2         | 7.2 |
|    | 407305 | AA715284  |           | gb:nv35f03.r1 NCI_CGAP_Br5 Homo sapiens   | 7.2 |
|    | 452814 | AI092790  | Hs.55016  | hypothetical protein FLJ21935             | 7.2 |
| 80 | 426028 | NM_001110 | Hs.172028 | a disintegrin and metalloproteinase doma  | 7.2 |
|    | 443462 | AI054690  | Hs.171176 | ESTs                                      | 7.2 |
|    | 422060 | R20893    | Hs.75613  | CD36 antigen (collagen type I receptor,   | 7.2 |
|    | 434096 | AW652958  | Hs.75825  | pleiomorphic adenoma gene-like 1          | 7.1 |
|    | 443161 | AI038316  |           | gb:ox48c08.x1 Soares_total_fetus_Nb2HF8_  | 7.1 |

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|    | 458725 | AW970192  | Hs.171942 | ras responsive element binding protein 1  | 7.1 |
|    | 426423 | NM_012446 | Hs.169833 | single-stranded-DNA-binding protein       | 7.1 |
|    | 412783 | BE276738  | Hs.74578  | DEAD/H (Asp-Glu-Ala-Asp/His) box polypep  | 7.1 |
| 5  | 435664 | AI032087  | Hs.269819 | ESTs                                      | 7.0 |
|    | 431708 | AI698136  | Hs.108873 | ESTs                                      | 7.0 |
|    | 426501 | AW043782  | Hs.293616 | ESTs                                      | 7.0 |
|    | 453548 | AL079983  | Hs.75442  | albumin                                   | 7.0 |
|    | 426595 | AW971980  | Hs.62402  | p21/Cdc42/Rac1-activated kinase 1 (yeast  | 7.0 |
| 10 | 412490 | AW803564  | Hs.288850 | Homo sapiens cDNA: FLJ22528 fis, clone H  | 7.0 |
|    | 431556 | AF016028  | Hs.260039 | sarcospan (Kras oncogene-associated gene  | 6.9 |
|    | 420018 | U56387    | Hs.94376  | proprotein convertase subtilisin/kexin 1  | 6.9 |
|    | 418986 | AI123555  | Hs.81796  | ESTs                                      | 6.9 |
|    | 430290 | AI734110  | Hs.136355 | ESTs                                      | 6.9 |
| 15 | 427472 | AA522539  | Hs.131250 | transposon-derived Busler3 transposase-1  | 6.9 |
|    | 444042 | NM_004915 | Hs.10237  | ATP-binding cassette, sub-family G (WHIT  | 6.9 |
|    | 414737 | AI160386  | Hs.125087 | ESTs                                      | 6.9 |
|    | 420479 | AW183695  | Hs.186572 | ESTs                                      | 6.9 |
|    | 432656 | NM_000246 | Hs.3076   | MHC class II transactivator               | 6.9 |
| 20 | 414217 | AI309298  | Hs.279898 | Homo sapiens cDNA: FLJ23165 fis, clone L  | 6.9 |
|    | 431870 | AW449902  | Hs.106500 | ESTs                                      | 6.9 |
|    | 415788 | AW628686  | Hs.78851  | KIAA0217 protein                          | 6.9 |
|    | 430066 | AI929659  | Hs.237825 | signal recognition particle 72kD          | 6.9 |
|    | 437156 | AI916600  | Hs.121194 | Homo sapiens cDNA: FLJ21569 fis, clone C  | 6.8 |
|    | 401539 |           |           |   | 6.8 |
| 25 | 412782 | AI189211  | Hs.173044 | ESTs                                      | 6.8 |
|    | 416058 | LO8895    | Hs.78995  | MADS box transcription enhancer factor 2  | 6.8 |
|    | 437205 | AL110232  |           | gb:Homo sapiens mRNA; cDNA DKFZp564D02071 | 6.7 |
|    | 458814 | AI498957  | Hs.170861 | ESTs                                      | 6.7 |
| 30 | 452106 | AI141031  | Hs.21342  | ESTs                                      | 6.7 |
|    | 413249 | AF167160  | Hs.75251  | DEAD/H (Asp-Glu-Ala-Asp/His) box binding  | 6.7 |
|    | 420910 | AL049437  | Hs.100292 | Homo sapiens mRNA; cDNA DKFZp586E1120 (f  | 6.7 |
|    | 445527 | W39694    | Hs.83286  | ESTs                                      | 6.7 |
|    | 424063 | NM_002019 | Hs.138671 | fms-related tyrosine kinase 1 (vascular   | 6.7 |
| 35 | 421977 | W94197    | Hs.110165 | ribosomal protein L26 homolog             | 6.7 |
|    | 430280 | AA361258  | Hs.237868 | interleukin 7 receptor                    | 6.7 |
|    | 415989 | AI267700  | Hs.111128 | ESTs                                      | 6.7 |
|    | 418026 | BE379727  | Hs.83213  | fatty acid binding protein 4, adipocyte   | 6.6 |
|    | 425295 | AA431366  | Hs.37251  | ESTs                                      | 6.6 |
| 40 | 438619 | AB032773  | Hs.6341   | TU12B1-TY protein                         | 6.6 |
|    | 424916 | AW867440  | Hs.23096  | ESTs                                      | 6.6 |
|    | 429697 | AW296451  | Hs.24605  | ESTs                                      | 6.6 |
|    | 408741 | M73720    | Hs.646    | carboxypeptidase A3 (mast cell)           | 6.6 |
|    | 403549 |           |           |   | 6.6 |
| 45 | 449008 | AW578003  | Hs.22826  | tropomodulin 3 (ubiquitous)               | 6.6 |
|    | 435798 | BE395289  | Hs.12720  | elf4E-transporter                         | 6.6 |
|    | 447217 | BE465754  | Hs.17778  | neuropilin 2                              | 6.6 |
|    | 453070 | AK001465  | Hs.31575  | SEC63, endoplasmic reticulum translocon   | 6.6 |
|    | 410276 | AI554545  | Hs.68301  | ESTs                                      | 6.6 |
| 50 | 435391 | AA704588  | Hs.58934  | ESTs                                      | 6.6 |
|    | 421878 | AA299652  | Hs.111496 | Homo sapiens cDNA FLJ11643 fis, clone HE  | 6.6 |
|    | 452092 | BE245374  | Hs.27842  | hypothetical protein FLJ11210             | 6.5 |
|    | 448789 | BE539108  | Hs.22051  | Homo sapiens mRNA; cDNA DKFZp434O119 (fr  | 6.5 |
|    | 425331 | AW962128  |           | gb:EST374201 MAGE resequences, MAGG Homo  | 6.5 |
| 55 | 431956 | AK002032  | Hs.272245 | Homo sapiens cDNA FLJ11170 fis, clone PL  | 6.5 |
|    | 444880 | AW118683  | Hs.154150 | ESTs                                      | 6.5 |
|    | 434131 | AI858275  | Hs.143659 | ESTs                                      | 6.5 |
|    | 446658 | AI440137  | Hs.164989 | ESTs                                      | 6.5 |
|    | 408150 | BE620274  | Hs.43112  | Homo sapiens mRNA; cDNA DKFZp434B1620 (f  | 6.5 |
|    | 403790 |           |           |   | 6.5 |
| 60 | 417129 | AI381800  | Hs.143275 | Homo sapiens cDNA FLJ13233 fis, clone OV  | 6.5 |
|    | 452119 | AI656378  | Hs.33461  | ESTs                                      | 6.4 |
|    | 437396 | BE140396  | Hs.21621  | hypothetical protein DKFZp762O076         | 6.4 |
|    | 458946 | AA009716  | Hs.42311  | ESTs                                      | 6.4 |
| 65 | 452110 | T47667    | Hs.28005  | Homo sapiens mRNA; cDNA DKFZp564G2463 (f  | 6.4 |
|    | 449318 | AW236021  | Hs.108788 | ESTs, Weakly similar to zeste [D.melanog  | 6.4 |
|    | 408308 | AL033377  | Hs.44197  | hypothetical protein DKFZp564D0462        | 6.4 |
|    | 402474 |           |           |   | 6.4 |
|    | 430712 | AW044647  | Hs.196284 | ESTs                                      | 6.4 |
| 70 | 418299 | AA279530  | Hs.83968  | integrin, beta 2 (antigen CD18 (p95), ly  | 6.4 |
|    | 432683 | AW995441  | Hs.10475  | ESTs                                      | 6.4 |
|    | 423764 | AF054589  | Hs.132739 | ESTs                                      | 6.4 |
|    | 409571 | AA504249  | Hs.187585 | ESTs                                      | 6.4 |
|    | 401600 | BE247275  | Hs.151787 | U5 snRNP-specific protein, 116 kD         | 6.4 |
| 75 | 415076 | NM_000857 | Hs.77890  | guanylate cyclase 1, soluble, beta 3      | 6.4 |
|    | 432925 | AA878324  | Hs.192734 | ESTs                                      | 6.4 |
|    | 427528 | AU077143  | Hs.179565 | minichromosome maintenance deficient (S.  | 6.4 |
|    | 453894 | AW937825  | Hs.56847  | Homo sapiens cDNA FLJ12874 fis, clone NT  | 6.4 |
|    | 430335 | D80007    | Hs.239499 | KIAA0185 protein                          | 6.3 |
| 80 | 453370 | AI470523  | Hs.182356 | ESTs, Moderately similar to translation   | 6.3 |
|    | 421327 | AA837295  | Hs.188802 | ESTs                                      | 6.3 |
|    | 450654 | AJ245587  | Hs.25275  | Kruppel-type zinc finger protein          | 6.3 |
|    | 413497 | BE177661  |           | gb:RC1-HT0598-020300-011-h02 HT0598 Homo  | 6.3 |
|    | 445279 | R41900    | Hs.22245  | ESTs                                      | 6.3 |



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|    | 429747 | M87507    | Hs.2490   | caspase 1, apoptosis-related cysteine pr | 6.3 |
|    | 421252 | AA765930  | Hs.130878 | ESTs                                     | 6.3 |
|    | 432140 | AK000404  | Hs.272688 | hypothetical protein FLJ20397            | 6.3 |
|    | 434203 | BE262677  | Hs.283558 | hypothetical protein PRO1855             | 6.2 |
| 5  | 419436 | AA991639  | Hs.15036  | ESTs, Highly similar to AF161358.1 HSPC0 | 6.2 |
|    | 430287 | AW182459  | Hs.125759 | ESTs, Weakly similar to tumor suppressor | 6.2 |
|    | 409690 | W45393    | Hs.94542  | ESTs, Highly similar to ATFa [H.sapiens] | 6.2 |
|    | 420101 | AW500529  | Hs.95180  | Homo sapiens mRNA; cDNA DKFZp434A205 (fr | 6.1 |
| 10 | 435889 | AI249107  | Hs.269901 | ESTs                                     | 6.1 |
|    | 417259 | AW903838  | Hs.81800  | chondroitin sulfate proteoglycan 2 (vers | 6.1 |
|    | 448030 | N30714    | Hs.20161  | HDCME31P protein                         | 6.1 |
|    | 442571 | C06338    | Hs.165464 | ESTs                                     | 6.1 |
|    | 421202 | AF193339  | Hs.102506 | eukaryotic translation initiation factor | 6.1 |
| 15 | 415558 | AA885143  | Hs.125719 | ESTs                                     | 6.1 |
|    | 408042 | AL049233  | Hs.42244  | Homo sapiens mRNA; cDNA DKFZp564A023 (fr | 6.1 |
|    | 438086 | AA336519  | Hs.301167 | Homo sapiens cDNA: FLJ21545 fis, clone C | 6.1 |
|    | 427390 | AI432163  | Hs.268231 | Homo sapiens cDNA: FLJ23111 fis, clone L | 6.0 |
|    | 440749 | W22335    | Hs.7392   | Homo sapiens mRNA; cDNA DKFZp761E0323 (f | 6.0 |
| 20 | 448822 | BE149845  | Hs.289038 | Homo sapiens cDNA: FLJ20994 fis, clone C | 6.0 |
|    | 424806 | AA382523  | Hs.105689 | ESTs                                     | 6.0 |
|    | 435185 | AA669490  | Hs.289109 | dimethylarginine dimethylaminohydrolase  | 6.0 |
|    | 452235 | AL039743  | Hs.28514  | Homo sapiens mRNA; cDNA DKFZp434H092 (fr | 6.0 |
|    | 432415 | T16971    | Hs.289014 | ESTs                                     | 6.0 |
| 25 | 436345 | AA873008  | Hs.121572 | ESTs                                     | 6.0 |
|    | 439451 | AF086270  | Hs.278554 | heterochromatin-like protein 1           | 6.0 |
|    | 434674 | AA831879  | Hs.136985 | ESTs                                     | 6.0 |
|    | 429653 | NM_005955 | Hs.211581 | metal-regulatory transcription factor 1  | 6.0 |
|    | 446822 | AB037794  | Hs.16229  | KIAA1373 protein                         | 6.0 |
| 30 | 423590 | AW952412  | Hs.65874  | ESTs                                     | 6.0 |
|    | 424026 | AI798295  | Hs.123218 | ESTs                                     | 5.9 |
|    | 423246 | AL119114  | Hs.23107  | ESTs                                     | 5.9 |
|    | 420982 | AW576160  | Hs.100729 | KIAA0692 protein                         | 5.9 |
|    | 435008 | AF150262  | Hs.162898 | ESTs                                     | 5.9 |
| 35 | 420092 | AA814043  | Hs.89045  | ESTs                                     | 5.9 |
|    | 444484 | AK002126  | Hs.11260  | hypothetical protein FLJ11264            | 5.9 |
|    | 410193 | AJ132592  | Hs.59757  | zinc finger protein 281                  | 5.9 |
|    | 450534 | AI570189  | Hs.25132  | KIAA0470 gene product                    | 5.9 |
|    | 440146 | AW014231  | Hs.90790  | Homo sapiens cDNA: FLJ22930 fis, clone K | 5.9 |
| 40 | 425361 | AA355933  | Hs.132221 | Homo sapiens cDNA FLJ12401 fis, clone MA | 5.9 |
|    | 425174 | D87450    | Hs.154978 | KIAA0261 protein                         | 5.9 |
|    | 458287 | AA987556  | Hs.12867  | ESTs                                     | 5.9 |
|    | 433793 | AW975959  | Hs.107513 | ESTs, Moderately similar to KIAA1058 pro | 5.8 |
|    | 443228 | W24781    | Hs.293798 | ESTs                                     | 5.8 |
| 45 | 419983 | W55956    | Hs.94030  | Homo sapiens mRNA; cDNA DKFZp586E1624 (f | 5.8 |
|    | 410361 | BE391804  | Hs.62661  | guanylate binding protein 1, interferon- | 5.8 |
|    | 415714 | NM_002290 | Hs.78672  | laminin, alpha 4                         | 5.8 |
|    | 421689 | N87820    | Hs.105826 | hypothetical protein                     | 5.8 |
|    | 431176 | AI026984  | Hs.293662 | ESTs                                     | 5.8 |
| 50 | 443837 | AI984625  | Hs.9884   | spindle pole body protein                | 5.8 |
|    | 410623 | AW958932  | Hs.293833 | ESTs                                     | 5.8 |
|    | 421298 | AW172431  | Hs.13012  | ESTs                                     | 5.8 |
|    | 449052 | AW029507  | Hs.161102 | ESTs                                     | 5.8 |
|    | 433043 | W57554    | Hs.125019 | ESTs, Highly similar to KIAA0886 protein | 5.8 |
| 55 | 439444 | AI277652  | Hs.54578  | ESTs                                     | 5.7 |
|    | 428698 | AA852773  | Hs.297939 | ESTs, Weakly similar to T17344 hypotheti | 5.7 |
|    | 411928 | AA888624  | Hs.19121  | adaptor-related protein complex 2, alpha | 5.7 |
|    | 442242 | AV647908  | Hs.90424  | Homo sapiens cDNA: FLJ23285 fis, clone H | 5.7 |
|    | 417315 | AI080042  | Hs.180450 | ribosomal protein S24                    | 5.7 |
| 60 | 422544 | AB018259  | Hs.118140 | KIAA0716 gene product                    | 5.7 |
|    | 412584 | X54870    | Hs.74085  | DNA segment on chromosome 12 (unique) 24 | 5.7 |
|    | 433505 | AW504027  | Hs.15301  | Homo sapiens NY-REN-25 antigen mRNA, par | 5.7 |
|    | 410425 | BE278367  | Hs.63510  | KIAA0141 gene product                    | 5.7 |
|    | 457292 | AI921270  | Hs.214178 | Homo sapiens cDNA FLJ14251 fis, clone OV | 5.7 |
| 65 | 457100 | AA417878  | Hs.48401  | ESTs, Weakly similar to ALU8_HUMAN ALU S | 5.7 |
|    | 436995 | AI160015  | Hs.118112 | ESTs                                     | 5.7 |
|    | 426283 | NM_003937 | Hs.169139 | kynureninase (L-kynurenine hydrolase)    | 5.7 |
|    | 441518 | AW161697  | Hs.294150 | ESTs                                     | 5.7 |
|    | 448807 | AI571940  | Hs.7549   | ESTs                                     | 5.7 |
| 70 | 449656 | AA002008  | Hs.188633 | ESTs                                     | 5.7 |
|    | 439211 | AI890347  | Hs.271923 | Homo sapiens cDNA: FLJ22785 fis, clone K | 5.7 |
|    | 430440 | X52599    | Hs.2561   | nerve growth factor, beta polypeptide    | 5.7 |
|    | 413551 | BE242639  | Hs.75425  | ubiquitin associated protein             | 5.7 |
|    | 441633 | AW958544  | Hs.112242 | ESTs                                     | 5.7 |
| 75 | 427093 | AA398118  | Hs.97579  | ESTs                                     | 5.6 |
|    | 418250 | U29926    | Hs.83918  | adenosine monophosphate deaminase (isofo | 5.6 |
|    | 432267 | AK000872  | Hs.274227 | Homo sapiens cDNA FLJ10010 fis, clone HE | 5.6 |
|    | 419839 | U24577    | Hs.93304  | phospholipase A2, group VII (platelet-ac | 5.6 |
|    | 430253 | AK001514  | Hs.236844 | hypothetical protein FLJ10652            | 5.6 |
| 80 | 450447 | AF212223  | Hs.25010  | hypothetical protein P15-2               | 5.6 |
|    | 434623 | AB023163  | Hs.4014   | KIAA0946 protein; Huntingtin interacting | 5.6 |
|    | 420642 | AK001520  | Hs.99545  | Homo sapiens cDNA FLJ10658 fis, clone NT | 5.6 |
|    | 414020 | NM_002984 | Hs.75703  | small inducible cytokine A4 (homologous  | 5.6 |
|    | 420825 | AI656727  |           | gb:tt53f12.x1 NCI_CGAP_GC6 Homo sapiens  | 5.6 |

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|    | 422363 | T55979    | Hs.115474 | replication factor C (activator 1) 3 (38 | 5.6 |
|    | 452046 | AB018345  | Hs.27657  | KIAA0802 protein                         | 5.6 |
|    | 408911 | AW294772  | Hs.98321  | Homo sapiens cDNA FLJ14103 fis, clone MA | 5.6 |
|    | 414844 | AA296874  | Hs.77494  | deoxyguanosine kinase                    | 5.6 |
| 5  | 416498 | U33632    | Hs.79351  | potassium channel, subfamily K, member 1 | 5.6 |
|    | 430512 | AF182294  | Hs.241578 | U6 snRNA-associated Sm-like protein LSM8 | 5.6 |
|    | 430339 | W28608    | Hs.239625 | integral membrane protein 2B             | 5.6 |
|    | 420153 | N22120    | Hs.75277  | hypothetical protein FLJ13910            | 5.6 |
| 10 | 420892 | AW975076  | Hs.172589 | nuclear phosphoprotein similar to S. cer | 5.6 |
|    | 441568 | AI733322  | Hs.127176 | ESTs                                     | 5.5 |
|    | 414575 | H11257    | Hs.295233 | ESTs                                     | 5.5 |
|    | 419929 | U90268    | Hs.93810  | cerebral cavernous malformations 1       | 5.5 |
|    | 438613 | C05569    | Hs.243122 | hypothetical protein FLJ13057 similar to | 5.5 |
| 15 | 453064 | R40334    | Hs.301395 | Homo sapiens cDNA: FLJ21204 fis, clone C | 5.5 |
|    | 433409 | AI278802  | Hs.25661  | ESTs                                     | 5.5 |
|    | 407094 | AF000574  | Hs.22405  | leukocyte immunoglobulin-like receptor,  | 5.5 |
|    | 425234 | AW152225  | Hs.165909 | ESTs                                     | 5.5 |
|    | 447644 | AW861622  | Hs.108646 | Homo sapiens cDNA FLJ12534 fis, clone NT | 5.5 |
| 20 | 411653 | AF070578  | Hs.71168  | Homo sapiens clone 24674 mRNA sequence   | 5.5 |
|    | 446534 | AI307356  | Hs.175225 | ESTs                                     | 5.5 |
|    | 452355 | N54926    | Hs.29202  | G protein-coupled receptor 34            | 5.5 |
|    | 434715 | BE005346  | Hs.116410 | ESTs                                     | 5.5 |
|    | 440486 | BE243513  | Hs.7212   | hypothetical protein PP1044              | 5.5 |
| 25 | 444825 | AW167613  | Hs.248    | mitogen-activated protein kinase kinase  | 5.5 |
|    | 419172 | AW338625  | Hs.22120  | ESTs                                     | 5.4 |
|    | 444931 | AV652066  | Hs.75113  | general transcription factor IIIA        | 5.4 |
|    | 413940 | AI633205  | Hs.159914 | ESTs                                     | 5.4 |
|    | 410480 | R97457    | Hs.63984  | cadherin 13, H-cadherin (heart)          | 5.4 |
| 30 | 447072 | D61594    | Hs.17279  | tyrosylprotein sulfotransferase 1        | 5.4 |
|    | 434361 | AF129755  | Hs.117772 | ESTs                                     | 5.4 |
|    | 453392 | U23752    | Hs.32964  | SRY (sex determining region Y)-box 11    | 5.4 |
|    | 445175 | AV652851  | Hs.300846 | ESTs                                     | 5.4 |
|    | 411213 | AA676939  | Hs.69285  | neuropilin 1                             | 5.4 |
| 35 | 412530 | AA766268  | Hs.265273 | Homo sapiens cDNA FLJ13346 fis, clone OV | 5.4 |
|    | 422667 | H25642    | Hs.133471 | ESTs                                     | 5.4 |
|    | 434064 | AL049045  | Hs.180758 | hypothetical protein PRO0082             | 5.4 |
|    | 429688 | BE245169  | Hs.211610 | CUG triplet repeat, RNA-binding protein  | 5.4 |
|    | 452060 | W26980    | Hs.153612 | ATP-binding cassette, sub-family F (GCN2 | 5.4 |
| 40 | 419093 | AI804054  | Hs.112885 | ESTs                                     | 5.4 |
|    | 436267 | AW450938  | Hs.180115 | ESTs                                     | 5.4 |
|    | 405257 |           |           |  | 5.4 |
|    | 431154 | AW971228  | Hs.290259 | ESTs                                     | 5.4 |
|    | 415511 | AI732617  | Hs.182362 | ESTs                                     | 5.4 |
| 45 | 419175 | AW270037  | Hs.179507 | KIAA0779 protein                         | 5.3 |
|    | 454117 | BE410100  | Hs.40368  | adaptor-related protein complex 1, sigma | 5.3 |
|    | 423720 | AL044191  | Hs.23388  | Homo sapiens cDNA: FLJ21310 fis, clone C | 5.3 |
|    | 409995 | AW960597  | Hs.30164  | ESTs                                     | 5.3 |
|    | 414911 | NM_000107 | Hs.77602  | damage-specific DNA binding protein 2 (4 | 5.3 |
| 50 | 455716 | BE070263  |           | gb:QV4-BT0407-280100-090-e07 BT0407 Homo | 5.3 |
|    | 430598 | AK001764  | Hs.247112 | hypothetical protein FLJ10902            | 5.3 |
|    | 419985 | H66373    | Hs.15973  | ESTs, Highly similar to bA393J16.3 [H.sa | 5.3 |
|    | 428753 | AW939252  | Hs.192927 | hypothetical protein FLJ20251            | 5.3 |
|    | 423099 | NM_002837 | Hs.123641 | protein tyrosine phosphatase, receptor t | 5.3 |
|    | 404176 |           |           |  | 5.3 |
| 55 | 431475 | AI567669  | Hs.287316 | ESTs                                     | 5.3 |
|    | 406625 | Y13647    | Hs.119597 | stearoyl-CoA desaturase (delta-9-desatur | 5.3 |
|    | 405475 |           |           |  | 5.3 |
|    | 430180 | AA331406  | Hs.75456  | A kinase (PRKA) anchor protein 10        | 5.3 |
| 60 | 446183 | AA354991  | Hs.14222  | Homo sapiens mRNA: cDNA DKFZp761P019 (fr | 5.3 |
|    | 417381 | AF164142  | Hs.82042  | solute carrier family 23 (nucleobase tra | 5.3 |
|    | 433029 | NM_014322 | Hs.279926 | opsin 3 (encephalopsin)                  | 5.3 |
|    | 442837 | AI022082  | Hs.50492  | ESTs                                     | 5.3 |
|    | 437140 | AA312799  | Hs.283689 | activator of CREM in testis              | 5.3 |
| 65 | 408989 | AW361666  | Hs.49500  | KIAA0746 protein                         | 5.3 |
|    | 417355 | D13168    | Hs.82002  | endothelin receptor type B               | 5.3 |
|    | 407361 | AA744622  | Hs.292645 | ESTs, Weakly similar to ALU5_HUMAN ALU S | 5.3 |
|    | 437734 | AA693951  | Hs.180284 | ESTs                                     | 5.3 |
|    | 452234 | AW084176  | Hs.223296 | ESTs                                     | 5.3 |
| 70 | 423057 | AW961597  | Hs.130816 | ESTs                                     | 5.3 |
|    | 439593 | BE073597  | Hs.124863 | ESTs                                     | 5.3 |
|    | 446501 | AI302616  | Hs.150819 | ESTs                                     | 5.3 |
|    | 416406 | D86961    | Hs.79299  | lipoma HMGIC fusion partner-like 2       | 5.2 |
|    | 427164 | AB037721  | Hs.173871 | KIAA1300 protein                         | 5.2 |
| 75 | 416815 | AI41514   | Hs.80120  | UDP-N-acetyl-alpha-D-galactosamine:polyp | 5.2 |
|    | 448212 | AI475858  |           | gb:tc87d07.x1 NCI_CGAP_CLL1 Homo sapiens | 5.2 |
|    | 412420 | AL035668  | Hs.73853  | bone morphogenetic protein 2             | 5.2 |
|    | 416975 | NM_004131 | Hs.1051   | granzyme B (granzyme 2, cytotoxic T-lymp | 5.2 |
|    | 406815 | AA833930  | Hs.288036 | tRNA isopentenylpyrophosphate transferas | 5.2 |
| 80 | 451418 | BE387790  | Hs.26369  | hypothetical protein FLJ20287            | 5.2 |
|    | 425322 | U63630    | Hs.155637 | protein kinase, DNA-activated, catalytic | 5.2 |
|    | 451156 | AI983569  | Hs.232042 | ESTs                                     | 5.2 |
|    | 415910 | U20350    | Hs.78913  | chemokine (C-X3-C) receptor 1            | 5.2 |
|    | 423024 | AA593731  | Hs.75613  | CD36 antigen (collagen type I receptor,  | 5.2 |

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|    | 428593 | AW207440  | Hs.185973 | degenerative spermatocyte (homolog Dros  | 5.2 |
|    | 451149 | AL047586  | Hs.10283  | ESTs                                     | 5.2 |
|    | 429458 | BE161832  | Hs.292689 | ESTs                                     | 5.2 |
| 5  | 422241 | Y00062    | Hs.170121 | protein tyrosine phosphatase, receptor t | 5.2 |
|    | 432383 | AK000144  | Hs.274449 | Homo sapiens cDNA FLJ20137 fis, clone CO | 5.2 |
|    | 417696 | BE241624  | Hs.82401  | CD69 antigen (p60, early T-cell activati | 5.2 |
|    | 442991 | BE281238  | Hs.8886   | hypothetical protein FLJ20424            | 5.2 |
|    | 426711 | AA383471  | Hs.180669 | conserved gene amplified in osteosarcoma | 5.2 |
| 10 | 438995 | AI277986  | Hs.164875 | ESTs                                     | 5.1 |
|    | 438582 | AI521310  | Hs.283365 | ESTs, Weakly similar to ALU5_HUMAN ALU S | 5.1 |
|    | 424859 | U92014    | Hs.153527 | Homo sapiens pTMS mariner-like transpos  | 5.1 |
|    | 445563 | AW873606  | Hs.149006 | ESTs                                     | 5.1 |
|    | 416852 | AF283776  | Hs.80285  | Homo sapiens mRNA; cDNA DKFZp586C1723 (f | 5.1 |
| 15 | 420567 | AK000812  | Hs.98874  | similar to proline-rich protein 48       | 5.1 |
|    | 420630 | AL133101  | Hs.99508  | Homo sapiens mRNA; cDNA DKFZp434C0921 (f | 5.1 |
|    | 455510 | AA422029  | Hs.143640 | ESTs, Weakly similar to hyperpolarizatio | 5.1 |
|    | 412676 | NM_000165 | Hs.74471  | gap junction protein, alpha 1, 43kD (con | 5.1 |
|    | 438146 | Z36842    | Hs.57548  | ESTs                                     | 5.1 |
| 20 | 423430 | AF112481  | Hs.128501 | RAD54, S. cerevisiae, homolog of, B      | 5.1 |
|    | 421633 | AF121860  | Hs.106260 | sorting nexin 10                         | 5.1 |
|    | 447197 | R36075    |           | gb:yh88b01.s1 Soares placenta NbZHP Homo | 5.1 |
|    | 436943 | AA773838  | Hs.5353   | caspase 10, apoptosis-related cysteine p | 5.1 |
|    | 456210 | N49729    | Hs.156875 | ESTs                                     | 5.1 |
| 25 | 411893 | R82845    | Hs.273789 | ESTs                                     | 5.1 |
|    | 432331 | W37862    | Hs.274368 | Homo sapiens mRNA; cDNA DKFZp586I1524 (f | 5.1 |
|    | 414696 | AF002020  | Hs.76918  | Niemann-Pick disease, type C1            | 5.1 |
|    | 426822 | W78950    | Hs.220823 | ESTs                                     | 5.1 |
|    | 444269 | AI590346  | Hs.146220 | ESTs                                     | 5.1 |
| 30 | 437204 | AL110216  | Hs.12285  | ESTs                                     | 5.1 |
|    | 443180 | R15875    | Hs.70945  | ESTs                                     | 5.1 |
|    | 431510 | AA580082  | Hs.112264 | ESTs                                     | 5.0 |
|    | 446312 | BE087853  |           | gb:QV1-BT0681-290400-181-h05 BT0681 Homo | 5.0 |
|    | 449870 | AI672487  | Hs.15423  | hypothetical protein HDCMC04P            | 5.0 |
| 35 | 430462 | AI584156  | Hs.105640 | ESTs                                     | 5.0 |
|    | 457452 | AW972675  |           | gb:EST384766 MAGE resequences, MAGL Homo | 5.0 |
|    | 420397 | NM_007018 | Hs.97437  | centrosomal protein 1                    | 5.0 |
|    | 408750 | BE294069  | Hs.93581  | hypothetical protein FLJ10512            | 5.0 |
|    | 426874 | N67325    | Hs.247132 | ESTs                                     | 5.0 |
| 40 | 419746 | AW867943  | Hs.127216 | Homo sapiens cDNA FLJ13465 fis, clone PL | 5.0 |
|    | 434237 | AF119908  | Hs.235516 | hypothetical protein PRO2955             | 5.0 |
|    | 410274 | AA381807  | Hs.61762  | hypoxia-inducible protein 2              | 5.0 |

TABLE 35B:

|    |             |                                       |
|----|-------------|---------------------------------------|
| 45 | Pkey:       | Unique Eos probeset identifier number |
|    | CAT number: | Gene cluster number                   |
|    | Accession:  | Genbank accession numbers             |

|    |        |            |   |
|----|--------|------------|---|
|    | Pkey   | CAT number | Accession   |
| 50 | 411937 | 1266219_1  | AW876626 AW876622 AW876624  |
|    | 413497 | 1373771_1  | BE177661 H05215 BE144709 BE144829   |
|    | 420825 | 196769_1   | AI655727 AI697887 AI802122 AA910877 Z28718 T16711 AA651731 AL047264 BE000621 R68736 AW992695 AI768764 AW271284 AW974653 AI308951 AW055146 R93609 AW467031 AI096865 AI371871 AI126182 AI554756 AI361460 AI358914 AI419231 AW439733 R87059 AA628064 AW088970 AW008695 R68682 AI719136 R97752 AW196262 |
| 55 | 425331 | 250199_1   | AW962128 AA355353 AA427363  |
|    | 437205 | 43463_1    | AL110232 N94765   |
|    | 438966 | 467436_1   | AW979074 AA834841 AA828650  |
|    | 442438 | 542469_1   | AA995998 AI916584 R61781 T77332 F07756 F08149 F07647  |
|    | 443161 | 561305_1   | AI038316 AI344631 AI261653  |
| 60 | 446312 | 671114_1   | BE087853 AI286184   |
|    | 447197 | 711623_1   | R36075 AI366546 R36167  |
|    | 447974 | 745643_1   | R76886 AI453674 R77049  |
|    | 448212 | 755099_1   | AI475858 AW969013   |
|    | 451818 | 887271_1   | AI819018 R05492 W27615  |
|    | 453013 | 94390_1    | AA031407 N85751 AW974119 AA031408 AA572965  |
| 65 | 455716 | 1352695_1  | BE070263 BE070195 BE070265 BE070202 BE070233 BE070399 BE070203  |
|    | 457452 | 339381_1   | AW972675 AA541366 AA523039  |
|    | 407305 | 312657     | AA715284  |

TABLE 35C:

|    |              |   |
|----|--------------|---|
| 70 | Pkey:        | Unique number corresponding to an Eos probeset  |
|    | Ref:         | Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <u>Nature</u> 402:489-495. |
|    | Strand:      | Indicates DNA strand from which exons were predicted.   |
| 75 | NL_position: | Indicates nucleotide positions of predicted exons.  |

|    |        |         |        |                                     |
|----|--------|---------|--------|-------------------------------------|
|    | Pkey   | Ref     | Strand | NL_position                         |
| 80 | 401539 | 8072433 | Minus  | 62028-62608                         |
|    | 402474 | 7547175 | Minus  | 53526-53628,55755-55920,57530-57757 |
|    | 403549 | 8081591 | Minus  | 137150-137362                       |
|    | 403713 | 6573831 | Minus  | 152769-153155                       |
|    | 403790 | 8084957 | Minus  | 87826-87947,89835-90002             |
|    | 404176 | 9931122 | Plus   | 52685-52800                         |
|    | 405257 | 7329310 | Plus   | 73121-73273                         |

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405475 1931025 Plus 1548-1702

TABLE 36A: ABOUT 169 GENES UP-REGULATED IN KIDNEY CANCER

Table 36A lists about 169 genes up-regulated in kidney cancer compared to normal kidney that are likely to be extracellular or cell-surface proteins. These were selected as for Table 35A and the predicted protein contained a structural domain that is indicative of surface or extracellular localization (e.g. ig, fn3, egf, 7tm domains). Predicted protein domains are noted.

Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigeneID: Unigene number  
 Unigene Title: Unigene gene title  
 PSDomain: Protein Structural Domain  
 R1: Ratio of tumor to normal tissue

| Pkey   | ExAccn    | UnigeneID | Unigene Title   | PSDomain                                    | R1   |
|--------|-----------|-----------|-----------------|---|------|
| 424704 | AI263293  | Hs.152096 | cytochrome P450 | SS,p450                                     | 40.9 |
| 426559 | AB001914  | Hs.170414 | paired basic am | TM,Peptidase_S8,P                           | 35.6 |
| 458079 | AI796870  | Hs.54277  | ESTs            | TM  | 34.6 |
| 446921 | AB012113  | Hs.16530  | small inducible | SS,IL8                                      | 25.9 |
| 452401 | NM_007115 | Hs.29352  | tumor necrosis  | TM,SS,Xlink,CUB                             | 24.8 |
| 414821 | M63835    | Hs.77424  | Fc fragment of  | TM,SS,ig                                    | 23.4 |
| 414812 | X72755    | Hs.77357  | monokine induce | SS,IL8                                      | 22.1 |
| 426471 | M22440    | Hs.170009 | transforming gr | TM,SS,EGF                                   | 21.3 |
| 449523 | NM_000579 | Hs.54443  | chemokine (C-C  | TM,7tm_1                                    | 20.7 |
| 428227 | AA321649  | Hs.2248   | small inducible | IL8   | 19.5 |
| 456804 | AI421645  | Hs.139851 | caveolin 2      | TM,Caveolin                                 | 17.8 |
| 411642 | NM_014932 | Hs.71132  | neurologin 1    | TM,SS,COesterase                            | 16.2 |
| 427581 | NM_014788 | Hs.179703 | KIAA0129 gene p | TM  | 15.6 |
| 448520 | AB002367  | Hs.21355  | doublecortin an | TM,pkinase                                  | 14.8 |
| 417308 | H60720    | Hs.81892  | KIAA0101 gene p | TM  | 14.8 |
| 421566 | NM_000399 | Hs.1395   | early growth re | TM,zf-C2H2                                  | 14.6 |
| 422603 | BE242587  | Hs.118651 | hematopoietical | TM,SS,homeobox                              | 14.4 |
| 425984 | AW836277  | Hs.165636 | hypothetical pr | TM  | 14.2 |
| 432606 | NM_002104 | Hs.3066   | granzyme K (ser | TM,SS,trypsin                               | 14.1 |
| 458809 | AW972512  | Hs.20985  | sin3-associated | SS  | 13.7 |
| 446627 | AI973016  | Hs.15725  | hypothetical pr | TM  | 13.6 |
| 452960 | AK001335  | Hs.31137  | Homo sapiens cD | TM,Y_phosphatase                            | 13.3 |
| 420552 | AK000492  | Hs.98806  | hypothetical pr | TM,SS                                       | 13.0 |
| 425188 | AK002052  | Hs.155071 | hypothetical pr | TM  | 12.6 |
| 419034 | NM_002110 | Hs.89555  | hemopoietic cel | TM,pkinase,SH2,SH3                          | 12.3 |
| 442932 | AA457211  | Hs.8858   | bromodomain adj | TM,bromodomain,PHD                          | 12.3 |
| 434398 | AA121098  | Hs.3838   | serum-inducible | TM,pkinase,POLO_box                         | 12.2 |
| 450506 | NM_004460 | Hs.418    | fibroblast acti | SS,DPPIV_N_term,Peptidase_S9                | 12.1 |
| 425782 | U66468    | Hs.159525 | cell growth reg | SS  | 12.0 |
| 426108 | AA622037  | Hs.166468 | programmed cell | TM,DUF122                                   | 11.9 |
| 450236 | AW162998  | Hs.24684  | KIAA1376 protei | TM,SS                                       | 11.7 |
| 452838 | U65011    | Hs.30743  | preferentially  | TM  | 11.2 |
| 426780 | BE242284  | Hs.172199 | adenylate cycla | TM,guanylate_cyc                            | 11.1 |
| 415323 | BE269352  | Hs.949    | neutrophil cyto | TM,SH3,TPR                                  | 11.0 |
| 423508 | AW604297  | Hs.129711 | hepatitis A vir | TM,SS,ig                                    | 11.0 |
| 408380 | AF123050  | Hs.44532  | diubiquitin     | TM,ubiquitin,7tm_3,ANF_receptor,sushi,7tm_1 | 11.0 |
| 448410 | AK000227  | Hs.21126  | hypothetical pr | TM  | 11.0 |
| 451277 | AK001123  | Hs.26176  | hypothetical pr | TM  | 10.8 |
| 453165 | S74727    | Hs.32042  | aspartoacylase  | TM  | 10.8 |
| 418036 | Z37976    | Hs.83337  | latent transfor | SS,TB,EGF                                   | 10.5 |
| 431512 | BE270734  | Hs.2795   | lactate dehydro | TM,ldh                                      | 10.3 |
| 433862 | D86960    | Hs.3510   | KIAA0205 gene p | TM,SS                                       | 10.3 |
| 431211 | M86849    | Hs.5566   | gap junction pr | TM,connexin                                 | 10.2 |
| 432579 | AF043244  | Hs.278439 | nucleolar prote | TM  | 10.0 |
| 439653 | AW021103  | Hs.6631   | hypothetical pr | TM,SS                                       | 9.9  |
| 428862 | NM_000346 | Hs.2316   | SRY (sex-determ | TM,HMG_box                                  | 9.8  |
| 410762 | AF226053  | Hs.66170  | HSKM-B protein  | SS,zf-MYND                                  | 9.8  |
| 452431 | U88879    | Hs.29499  | toll-like recep | TM,SS,TIR,LRRC                              | 9.5  |
| 405121 | AB028989  | Hs.88500  | mitogen-activat | SS,vwa,vwd,TIL,Cys_knot,vwc                 | 9.5  |
| 449625 | NM_014253 | Hs.23796  | odf (odd Oz/ten | SH2,EGF                                     | 9.4  |
| 421659 | NM_014459 | Hs.106511 | protocadherin 1 | TM,SS,cadherin                              | 9.2  |
| 427283 | AL119796  | Hs.174185 | ectonucleotide  | TM,SS,Phosphodiester,Somatomedin_B          | 9.1  |
| 407975 | X89426    | Hs.41716  | endothelial cel | SS,IGFBP                                    | 8.9  |
| 413554 | AA319146  | Hs.75426  | secretogranin I | TM,SS,Granin                                | 8.6  |
| 418693 | AI750878  | Hs.87409  | thrombospondin  | EGF,TSPN,tsp_1,tsp_3,vwc                    | 8.6  |
| 437672 | AW748265  | Hs.5741   | flavohepotei    | TM,heme_1,oxidoreductase                    | 8.6  |
| 430268 | AK000737  | Hs.237480 | hypothetical pr | TM,SS                                       | 8.5  |
| 447850 | AB018298  | Hs.19822  | SEC24 (S. cerev | TM  | 8.4  |
| 435717 | AF227905  | Hs.105794 | UDP-glucose:gly | TM,Glyco_transf_8                           | 8.3  |
| 433376 | AI249361  | Hs.74122  | caspase 4, apop | TM,ICE_p20,ICE_p10,CARD                     | 8.2  |
| 419490 | NM_006144 | Hs.90708  | granzyme A (gra | TM,SS,trypsin                               | 8.2  |
| 453033 | AA325869  | Hs.31463  | KIAA0281 gene p | TM  | 8.2  |
| 432328 | AI572739  | Hs.195471 | 6-phosphofructo | TM,6PF2K,PGAM                               | 7.9  |
| 413719 | BE439580  | Hs.75498  | small inducible | SS,IL8                                      | 7.9  |
| 412448 | L12964    | Hs.73895  | tumor necrosis  | TM,SS,TNFR_c6                               | 7.9  |
| 424247 | X14008    | Hs.234734 | lysozyme (renal | SS,lys                                      | 7.8  |
| 421991 | NM_014918 | Hs.110488 | KIAA0990 protei | SS  | 7.8  |
| 400793 | AA635062  | Hs.50094  | Homo sapiens mR | TM,BIR,CARD,zf-C3HC4                        | 7.7  |

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|    |        |           |           |                     |  |     |
|----|--------|-----------|-----------|---------------------|--|-----|
|    | 414646 | AA353776  | Hs.901    | CD48 antigen (B     | TM,Ig                                  | 7.6 |
|    | 418372 | AA311833  | Hs.84318  | replication pro     | TM                                     | 7.6 |
|    | 408418 | AW963897  | Hs.44743  | KIAA1435 protei     | TM,WD40,FYVE                           | 7.6 |
|    | 425354 | U62027    | Hs.155935 | complement comp     | TM,7tm_1                               | 7.5 |
| 5  | 432753 | NM_014075 | Hs.278915 | PRO0593 protein     | TM,ptkinase                            | 7.4 |
|    | 447046 | AA326187  | Hs.17170  | G protein-coupl     | TM,7tm_1                               | 7.4 |
|    | 410577 | X91911    | Hs.64639  | glioma pathogen     | TM,SCP                                 | 7.4 |
|    | 422631 | BE218919  | Hs.118793 | hypothetical pr     | TM                                     | 7.3 |
|    | 417022 | NM_014737 | Hs.80905  | Ras association     | TM,RA                                  | 7.2 |
| 10 | 430105 | X70297    | Hs.2540   | cholinergic rec     | TM,neur_chan                           | 7.2 |
|    | 451621 | AI879148  | Hs.26770  | fatty acid bind     | TM,SS,lipocalin                        | 7.2 |
|    | 415138 | C18356    | Hs.78045  | tissue factor p     | Kunitz_BPT1,G-gamma                    | 7.2 |
|    | 426028 | NM_001110 | Hs.172028 | alpha disintegrin a | TM,SS,disintegrin,Reprolysin           | 7.2 |
|    | 434096 | AW662958  | Hs.75825  | pleiomorphic ad     | TM,zf-C2H2                             | 7.1 |
| 15 | 426423 | NM_012446 | Hs.169833 | single-stranded     | TM                                     | 7.1 |
|    | 412783 | BE276738  | Hs.74578  | DEAD/H (Asp-Glu     | TM,dsm,helicase_C                      | 7.1 |
|    | 431556 | AF016028  | Hs.260039 | sarcospan (Kras     | TM                                     | 6.9 |
|    | 420018 | U56387    | Hs.94376  | proprotein conv     | TM,SS,Peptidase_S8,P                   | 6.9 |
|    | 444042 | NM_004915 | Hs.10237  | ATP-binding cas     | TM,ABC_tran                            | 6.9 |
| 20 | 432656 | NM_000246 | Hs.3076   | MHC class II tr     | TM,LRR                                 | 6.9 |
|    | 430066 | AI929659  | Hs.237825 | signal recognit     | TM,TPR                                 | 6.9 |
|    | 401539 |           |           |                     | TM,SS,zf-B_box,zf-C3HC4,Lysyl_oxidase  | 6.8 |
|    | 416058 | L08895    | Hs.78995  | MADS box transc     | TM,SRF-TF                              | 6.8 |
|    | 413249 | AF167160  | Hs.75251  | DEAD/H (Asp-Glu     | TM,SAP                                 | 6.7 |
| 25 | 424063 | NM_002019 | Hs.138671 | fms-related tyr     | TM,SS,ptkinase,Ig                      | 6.7 |
|    | 418026 | BE379727  | Hs.83213  | fatty acid bind     | TM,SS,lipocalin                        | 6.6 |
|    | 438619 | AB032773  | Hs.6341   | TU12B1-TY prote     | TM                                     | 6.6 |
|    | 408741 | M73720    | Hs.646    | carboxypeptidas     | SS,Zn_carbOpept,Propep_M14             | 6.6 |
|    | 403549 |           |           |                     | TM,ptkinase                            | 6.6 |
| 30 | 435798 | BE395289  | Hs.12720  | elf4E-transport     | TM                                     | 6.6 |
|    | 453070 | AK001465  | Hs.31575  | SEC63, endoplas     | TM,SS,DnaJ                             | 6.6 |
|    | 452092 | BE245374  | Hs.27842  | hypothetical pr     | TM,SS,Acytransferase                   | 6.5 |
|    | 437396 | BE140396  | Hs.21621  | hypothetical pr     | TM                                     | 6.4 |
|    | 402474 |           |           |                     | TM,Peptidase_C1                        | 6.4 |
| 35 | 401600 | BE247275  | Hs.151787 | U5 snRNP-specif     | TM,SS,HECT                             | 6.4 |
|    | 415076 | NM_000857 | Hs.77890  | guanylate cycla     | TM,guanylate_cyc                       | 6.4 |
|    | 430335 | D80007    | Hs.239499 | KIAA0185 protei     | TM,S1                                  | 6.3 |
|    | 434203 | BE262677  | Hs.283558 | hypothetical pr     | TM                                     | 6.2 |
|    | 430287 | AW182459  | Hs.125759 | ESTs, Weakly si     | TM,SS                                  | 6.2 |
| 40 | 417259 | AW903838  | Hs.81800  | chondroitin sul     | TM,Xlink,lectin_c,sushi,EGF,Ig         | 6.1 |
|    | 421202 | AF193339  | Hs.102506 | eukaryotic tran     | TM,SS                                  | 6.1 |
|    | 452235 | AL039743  | Hs.28514  | Homo sapiens mR     | TM                                     | 6.0 |
|    | 429653 | NM_005955 | Hs.211581 | metal-regulator     | TM,zf-C2H2                             | 6.0 |
|    | 444484 | AK002126  | Hs.11260  | hypothetical pr     | TM                                     | 5.9 |
| 45 | 410193 | AJ132592  | Hs.59757  | zinc finger pro     | TM,zf-C2H2                             | 5.9 |
|    | 425361 | AA355933  | Hs.132221 | Homo sapiens cD     | TM                                     | 5.9 |
|    | 410361 | BE391804  | Hs.62661  | guanylate bindi     | TM,SS,GBP                              | 5.8 |
|    | 415714 | NM_002290 | Hs.78572  | laminin, alpha      | TM,SS,laminin_G,laminin_EGF            | 5.8 |
|    | 421689 | N87820    | Hs.106826 | hypothetical pr     | TM,SS,PHD                              | 5.8 |
| 50 | 443837 | AI984625  | Hs.9884   | spindle pole bo     | SS                                     | 5.8 |
|    | 422544 | AB018259  | Hs.118140 | KIAA0716 gene p     | TM                                     | 5.7 |
|    | 412584 | X54870    | Hs.74085  | DNA segment on      | TM,lectin_c                            | 5.7 |
|    | 410425 | BE278367  | Hs.63510  | KIAA0141 gene p     | TM                                     | 5.7 |
|    | 426283 | NM_003937 | Hs.169139 | kynureninase (L     | TM                                     | 5.7 |
| 55 | 430440 | X52599    | Hs.2561   | nerve growth fa     | TM,SS,NGF                              | 5.7 |
|    | 413551 | BE242639  | Hs.75425  | ubiquitin assoc     | TM,SS,UBA                              | 5.7 |
|    | 418250 | U29926    | Hs.83918  | adenosine monop     | TM,A_deaminase                         | 5.6 |
|    | 419839 | U24577    | Hs.93304  | phospholipase A     | SS                                     | 5.6 |
|    | 430253 | AK001514  | Hs.236844 | hypothetical pr     | TM                                     | 5.6 |
| 60 | 450447 | AF212223  | Hs.25010  | hypothetical pr     | TM,ANF_receptor,guanylate_cyc,ptkinase | 5.6 |
|    | 414020 | NM_002984 | Hs.75703  | small inducible     | SS,IL8                                 | 5.6 |
|    | 414844 | AA296874  | Hs.77494  | deoxyguanosine      | SS,dNK                                 | 5.6 |
|    | 416498 | U33632    | Hs.79351  | potassium chann     | TM                                     | 5.6 |
|    | 430512 | AF182294  | Hs.241578 | U6 snRNA-associ     | SS                                     | 5.6 |
| 65 | 419929 | U90268    | Hs.93810  | cerebral cavern     | SS,ank,Band_41                         | 5.5 |
|    | 407094 | AF000574  | Hs.22405  | leukocyte immun     | TM,SS,Ig                               | 5.5 |
|    | 411653 | AF070578  | Hs.71168  | Homo sapiens cl     | TM,SS,Aa_trans                         | 5.5 |
|    | 452355 | N54926    | Hs.29202  | G protein-coupl     | TM,7tm_1                               | 5.5 |
|    | 440486 | BE243513  | Hs.7212   | hypothetical pr     | TM                                     | 5.5 |
| 70 | 444825 | AW167613  | Hs.248    | mitogen-activat     | TM,SS,ptkinase                         | 5.5 |
|    | 447072 | D61594    | Hs.17279  | tyrosylprotein      | SS                                     | 5.4 |
|    | 453392 | U23752    | Hs.32964  | SRY (sex determ     | TM,HMG_box                             | 5.4 |
|    | 411213 | AA676939  | Hs.69285  | neuropilin 1        | TM,CUB,F5_F8_type_C,MAM                | 5.4 |
|    | 429688 | BE245169  | Hs.211610 | CUG triplet rep     | TM,rrm                                 | 5.4 |
| 75 | 405257 |           |           |                     | TM                                     | 5.4 |
|    | 414911 | NM_000107 | Hs.77602  | damage-specific     | TM,WD40                                | 5.3 |
|    | 430598 | AK001764  | Hs.247112 | hypothetical pr     | TM                                     | 5.3 |
|    | 428753 | AW939252  | Hs.192927 | hypothetical pr     | TM,SS                                  | 5.3 |
|    | 406625 | Y13647    | Hs.119597 | stearoyl-CoA de     | TM,Desaturase                          | 5.3 |
| 80 | 405475 |           |           |                     | TM,sugar_tr                            | 5.3 |
|    | 430180 | AA331406  | Hs.75456  | A kinase (PRKA)     | TM                                     | 5.3 |
|    | 417381 | AF164142  | Hs.82042  | solute carrier      | TM,xan_ur_permease                     | 5.3 |
|    | 433029 | NM_014322 | Hs.279926 | opsin 3 (enceph     | TM,7tm_1                               | 5.3 |

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|    |        |           |           |                 |                                |     |
|----|--------|-----------|-----------|-----------------|--------------------------------|-----|
| 5  | 417355 | D13168    | Hs.82002  | endothelin rece | TM,SS,7tm_1,zf-C3HC4           | 5.3 |
|    | 412420 | AL035668  | Hs.73853  | bone morphogene | SS,TGFb_propeptide,TGF-beta    | 5.2 |
|    | 416975 | NM_004131 | Hs.1051   | granzyme B (gra | SS,trypsin                     | 5.2 |
|    | 451418 | BE387790  | Hs.26369  | hypothetical pr | TM                             | 5.2 |
|    | 425322 | U63630    | Hs.155637 | protein kinase, | TM,MCM,FAT,FATC,P13_P14_kinase | 5.2 |
|    | 415910 | U20350    | Hs.78913  | chemokine (C-X3 | TM,7tm_1                       | 5.2 |
|    | 428593 | AW207440  | Hs.185973 | degenerative sp | TM                             | 5.2 |
|    | 417696 | BE241624  | Hs.82401  | CD69 antigen (p | TM,lectin_c                    | 5.2 |
| 10 | 442991 | BE281238  | Hs.8885   | hypothetical pr | TM                             | 5.2 |
|    | 420567 | AK000812  | Hs.98874  | similar to prol | TM                             | 5.1 |
|    | 412676 | NM_000165 | Hs.74471  | gap junction pr | TM,connexin                    | 5.1 |
|    | 423430 | AF112481  | Hs.128501 | RAD54, S. cerev | TM,SNF2_N,helicase_C           | 5.1 |
|    | 421633 | AF121860  | Hs.106260 | sorting nexin 1 | TM,PX                          | 5.1 |
| 15 | 436943 | AA773838  | Hs.5353   | caspase 10, apo | TM,ICE_p10,ICE_p20,DED         | 5.1 |
|    | 414696 | AF002020  | Hs.76918  | Niemann-Pick di | TM,SS,Patched                  | 5.1 |
|    | 446312 | BE087853  |           | gb:QV1-BT0681-2 | TM                             | 5.0 |
|    | 420397 | NM_007018 | Hs.97437  | centrosomal pro | TM                             | 5.0 |
|    | 410274 | AA381807  | Hs.61762  | hypoxia-inducib | SS                             | 5.0 |

|    |             |                                       |  |  |  |  |
|----|-------------|---------------------------------------|--|--|--|--|
| 20 | TABLE 36B*  |                                       |  |  |  |  |
|    | Pkey:       | Unique Eos probeset identifier number |  |  |  |  |
|    | CAT number: | Gene cluster number                   |  |  |  |  |
|    | Accession:  | Genbank accession numbers             |  |  |  |  |

|    |        |            |                   |
|----|--------|------------|-------------------|
| 25 | Pkey   | CAT number | Accession         |
|    | 446312 | 671114_1   | BE087853 AI286184 |

|    |              |  |  |  |  |  |
|----|--------------|--|--|--|--|--|
| 30 | TABLE 36C:   |  |  |  |  |  |
|    | Pkey:        | Unique number corresponding to an Eos probeset   |  |  |  |  |
|    | Ref:         | Sequence source. The 7 digit numbers in this column are Genbank identifier (GI) numbers. *Dunham, et al. refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495. |  |  |  |  |
|    | Strand:      | Indicates DNA strand from which exons were predicted.  |  |  |  |  |
|    | NL_position: | Indicates nucleotide positions of predicted exons.   |  |  |  |  |

|    |        |         |        |                                     |
|----|--------|---------|--------|-------------------------------------|
| 35 | Pkey   | Ref     | Strand | NL_position                         |
|    | 401539 | 8072433 | Minus  | 62028-62608                         |
|    | 402474 | 7547175 | Minus  | 53526-53628,55755-55920,57530-57757 |
|    | 403549 | 8081591 | Minus  | 137150-137362                       |
| 40 | 405257 | 7329310 | Plus   | 73121-73273                         |
|    | 405475 | 1931025 | Plus   | 1548-1702                           |

|    |   |  |  |  |  |  |
|----|---|--|--|--|--|--|
| 45 | TABLE 37A: ABOUT 280 GENES DOWN-REGULATED IN KIDNEY CANCER  |  |  |  |  |  |
|    | Table 37A lists about 280 genes significantly down-regulated in kidney cancer compared to normal kidney. These were selected as for Table 35A, except that the numerator and denominator were switched. |  |  |  |  |  |

|    |                |   |  |  |  |  |
|----|----------------|---|--|--|--|--|
| 50 | Pkey:          | Unique Eos probeset identifier number               |  |  |  |  |
|    | ExAccn:        | Exemplar Accession number, Genbank accession number |  |  |  |  |
|    | UnigeneID:     | Unigene number                                      |  |  |  |  |
|    | Unigene Title: | Unigene gene title                                  |  |  |  |  |
|    | R1:            | Ratio of normal to tumor tissue                     |  |  |  |  |

|    |        |           |           |  |       |
|----|--------|-----------|-----------|--|-------|
|    | Pkey   | ExAccn    | UnigeneID | UnigeneTitle                             | R1    |
|    | 425260 | L47726    | Hs.1870   | phenylalanine hydroxylase                | 50.20 |
| 55 | 445635 | AI769774  | Hs.209831 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 48.14 |
|    | 440243 | BE301029  | Hs.226422 | ESTs                                     | 42.54 |
|    | 431657 | AI345227  | Hs.105448 | ESTs, Weakly similar to B34087 hypotheti | 40.14 |
|    | 441120 | AI632015  | Hs.164492 | ESTs                                     | 34.56 |
|    | 432488 | AA551010  | Hs.216640 | ESTs                                     | 33.16 |
| 60 | 416854 | H40164    | Hs.80295  | Purkinje cell protein 4                  | 32.06 |
|    | 438452 | AI220911  | Hs.288959 | Homo sapiens cDNA: FLJ20920 fis, clone A | 29.54 |
|    | 414523 | AU076633  | Hs.76353  | serine (or cysteine) proteinase inhibito | 28.26 |
|    | 430250 | NM_016929 | Hs.283021 | chloride intracellular channel 5         | 28.16 |
|    | 446795 | AI797713  | Hs.156471 | ESTs                                     | 27.23 |
|    | 451949 | U03884    | Hs.463    | potassium inwardly-rectifying channel, s | 26.98 |
| 65 | 432128 | AA127221  | Hs.117037 | ESTs                                     | 26.54 |
|    | 448178 | AI479482  | Hs.170789 | ESTs                                     | 25.42 |
|    | 436639 | D14838    | Hs.111    | fibroblast growth factor 9 (glia-activat | 23.99 |
|    | 426770 | AI948618  | Hs.150178 | ESTs                                     | 23.78 |
|    | 428839 | AI767756  | Hs.82302  | ESTs                                     | 23.04 |
| 70 | 431124 | AF284221  | Hs.59506  | doublesex and mab-3 related transcriptio | 22.38 |
|    | 413333 | M74028    | Hs.75297  | fibroblast growth factor 1 (acidic)      | 22.28 |
|    | 437575 | AW954355  | Hs.36529  | ESTs                                     | 22.14 |
|    | 451062 | AL110125  | Hs.25910  | Homo sapiens mRNA; cDNA DKFZp564C1416 (f | 22.12 |
|    | 447350 | AI375572  | Hs.172634 | ESTs                                     | 20.40 |
| 75 | 425920 | AL049977  | Hs.162209 | claudin 8                                | 20.30 |
|    | 446293 | AI420213  | Hs.149722 | ESTs                                     | 19.48 |
|    | 425075 | AA506324  | Hs.1852   | acid phosphatase, prostate               | 19.10 |
|    | 418318 | U47732    | Hs.84072  | transmembrane 4 superfamily member 3     | 18.74 |
|    | 430130 | AL137311  | Hs.234074 | Homo sapiens mRNA; cDNA DKFZp761G02121 ( | 18.56 |
| 80 | 441560 | F13386    | Hs.7888   | Homo sapiens clone 23736 mRNA sequence   | 17.40 |
|    | 434880 | U02388    | Hs.101    | cytochrome P450, subfamily IVF, polypept | 17.30 |
|    | 406667 | M12523    | Hs.75442  | albumin                                  | 17.06 |
|    | 414602 | AW630088  | Hs.76550  | Homo sapiens mRNA; cDNA DKFZp564B1264 (f | 16.54 |

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|    |        |           |           |   |       |
|----|--------|-----------|-----------|---|-------|
|    | 18021  | M15881    | Hs.1137   | uromodulin (uromucoid, Tamm-Horsfall gly  | 16.11 |
|    | 410681 | AW246890  | Hs.65425  | calbindin 1, (28kD)                       | 15.84 |
|    | 443324 | R44013    | Hs.164225 | ESTs                                      | 15.68 |
| 5  | 421285 | NM_000102 | Hs.1363   | cytochrome P450, subfamily XVII (steroid  | 15.46 |
|    | 436637 | AI783629  | Hs.26766  | ESTs                                      | 15.18 |
|    | 448406 | AW772298  | Hs.21103  | Homo sapiens mRNA; cDNA DKFZp564B076 (fr  | 14.52 |
|    | 434874 | N62448    | Hs.135906 | ESTs                                      | 14.46 |
|    | 407744 | AB020629  | Hs.38095  | ATP-binding cassette, sub-family A (ABC1  | 13.84 |
| 10 | 453685 | AL110309  |           | gb:DKFZp564L0278_r1 564 (synonym: hibr2)  | 13.48 |
|    | 451939 | U80456    | Hs.27311  | single-minded (Drosophila) homolog 2      | 13.24 |
|    | 436624 | T64297    | Hs.5241   | fatty acid binding protein 1, liver       | 13.05 |
|    | 428931 | AA994979  | Hs.98967  | ATPase, H(+) -transporting, lysosomal, no | 12.97 |
|    | 424823 | NM_006226 | Hs.153322 | phospholipase C, epsilon                  | 12.66 |
| 15 | 431713 | AK000388  | Hs.267997 | EHM2 gene                                 | 12.66 |
|    | 436679 | AI127483  | Hs.120451 | ESTs, Weakly similar to unnamed protein   | 12.36 |
|    | 413859 | AW992356  | Hs.8354   | pyruvate dehydrogenase kinase, isoenzyme  | 12.32 |
|    | 425707 | AF115402  | Hs.11713  | E74-like factor 5 (els domain transcript  | 11.92 |
|    | 440504 | AI948966  | Hs.130017 | ESTs, Weakly similar to VATX_HUMAN VACUO  | 11.66 |
| 20 | 417275 | X63578    | Hs.81849  | parvalbumin                               | 11.48 |
|    | 410929 | H47233    | Hs.30643  | ESTs                                      | 11.40 |
|    | 427167 | AI239607  | Hs.99196  | ESTs                                      | 11.34 |
|    | 445591 | AI471866  | Hs.149095 | ESTs                                      | 11.30 |
|    | 443622 | AI911527  | Hs.11805  | ESTs                                      | 11.23 |
| 25 | 438935 | H40665    | Hs.31564  | ESTs                                      | 11.16 |
|    | 438461 | AW075485  | Hs.286049 | phosphoserine aminotransferase            | 11.00 |
|    | 415539 | AI733881  | Hs.72472  | ESTs                                      | 10.84 |
|    | 438081 | H49546    | Hs.298964 | ESTs                                      | 9.76  |
|    | 421688 | AK000307  | Hs.106825 | hypothetical protein FLJ20300             | 9.74  |
| 30 | 407280 | AI241296  | Hs.145609 | ESTs                                      | 9.71  |
|    | 427969 | NM_001963 | Hs.2230   | epidermal growth factor (beta-urogastron  | 9.61  |
|    | 442448 | AI733144  | Hs.129611 | ESTs                                      | 9.52  |
|    | 442308 | AA989402  | Hs.45194  | ESTs                                      | 9.51  |
|    | 410467 | AF102546  | Hs.63931  | dachshund (Drosophila) homolog            | 9.35  |
| 35 | 429469 | M64590    | Hs.27     | glycine dehydrogenase (decarboxylating;   | 9.32  |
|    | 418058 | AW971155  | Hs.293902 | ESTs, Weakly similar to prolyl 4-hydroxy  | 9.31  |
|    | 459247 | N46243    | Hs.110373 | ESTs                                      | 9.20  |
|    | 423629 | AW021173  | Hs.18612  | Homo sapiens cDNA: FLJ21909 fis, clone H  | 9.16  |
| 40 | 410247 | AF181721  | Hs.61345  | RU2S                                      | 9.10  |
|    | 430573 | AA744550  | Hs.136345 | ESTs                                      | 9.08  |
|    | 457411 | AW085961  | Hs.130093 | ESTs                                      | 8.99  |
|    | 443790 | NM_003500 | Hs.9795   | acyl-Coenzyme A oxidase 2, branched chai  | 8.92  |
|    | 435024 | AI863518  | Hs.127743 | ESTs, Weakly similar to V-ATPase G-subun  | 8.76  |
|    | 435056 | AW023337  | Hs.5422   | glycoprotein M6B                          | 8.74  |
| 45 | 426451 | AI908165  | Hs.169946 | GATA-binding protein 3                    | 8.50  |
|    | 450648 | AI703366  | Hs.26766  | ESTs                                      | 8.38  |
|    | 426255 | BE262530  | Hs.2006   | glutathione S-transferase M3 (brain)      | 8.31  |
|    | 431820 | AW410408  | Hs.271167 | L-pipecolic acid oxidase                  | 8.28  |
| 50 | 451027 | AW519204  | Hs.40808  | ESTs                                      | 8.10  |
|    | 435823 | R07856    | Hs.16355  | ESTs                                      | 8.06  |
|    | 429269 | AA449013  | Hs.99203  | ESTs                                      | 8.02  |
|    | 438199 | AW016531  | Hs.122147 | ESTs                                      | 7.94  |
|    | 442176 | AA983764  | Hs.128910 | ESTs                                      | 7.94  |
|    | 450164 | AI239923  | Hs.30098  | ESTs                                      | 7.86  |
| 55 | 445627 | AW818475  | Hs.7363   | ESTs                                      | 7.85  |
|    | 445779 | AI253104  | Hs.189267 | ESTs                                      | 7.82  |
|    | 407178 | AA195651  | Hs.104106 | ESTs                                      | 7.68  |
|    | 426966 | AI493134  | Hs.159125 | ESTs                                      | 7.68  |
|    | 445659 | AW300508  | Hs.149229 | ESTs                                      | 7.50  |
| 60 | 403204 |           |           |   | 7.46  |
|    | 448037 | AW195634  | Hs.170401 | ESTs                                      | 7.30  |
|    | 413589 | AW452631  | Hs.258811 | coatomer protein complex, subunit gamma   | 7.26  |
|    | 446063 | AI720140  | Hs.151079 | ESTs                                      | 7.26  |
|    | 424626 | AA344308  | Hs.128427 | ESTs                                      | 7.25  |
| 65 | 403381 |           |           |   | 7.16  |
|    | 414807 | AI738616  | Hs.77348  | hydroxyprostaglandin dehydrogenase 15-(N  | 7.12  |
|    | 432102 | AW015506  | Hs.130730 | ESTs                                      | 7.12  |
|    | 442315 | AA173592  | Hs.7956   | ESTs                                      | 7.10  |
|    | 453698 | AA037615  | Hs.42746  | ESTs                                      | 7.02  |
| 70 | 415003 | M11437    | Hs.77741  | kininogen                                 | 6.95  |
|    | 426418 | M90464    | Hs.169825 | collagen, type IV, alpha 5 (Alport syndr  | 6.92  |
|    | 452883 | X80031    | Hs.150318 | ESTs                                      | 6.88  |
|    | 408521 | AI970672  | Hs.46638  | chromosome 11 open reading frame 8        | 6.76  |
|    | 410781 | AI375672  | Hs.165028 | ESTs                                      | 6.74  |
| 75 | 424596 | AB020639  | Hs.151017 | estrogen-related receptor gamma           | 6.66  |
|    | 441031 | AI110684  | Hs.7645   | fibrinogen, B beta polypeptide            | 6.66  |
|    | 451099 | R52795    | Hs.25954  | interleukin 13 receptor, alpha 2          | 6.64  |
|    | 437553 | AI829935  | Hs.130497 | ESTs, Weakly similar to MAT8_HUMAN CHLOR  | 6.63  |
|    | 445286 | U03886    | Hs.264    | GS2 gene                                  | 6.54  |
| 80 | 408427 | AW194270  | Hs.177236 | ESTs                                      | 6.52  |
|    | 410442 | X73424    | Hs.63788  | propionyl Coenzyme A carboxylase, beta p  | 6.45  |
|    | 457001 | J03258    | Hs.2062   | vitamin D (1,25- dihydroxyvitamin D3) re  | 6.45  |
|    | 420205 | AA256395  | Hs.88156  | ESTs                                      | 6.42  |
|    | 441364 | AW450466  | Hs.126830 | ESTs                                      | 6.36  |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 425649 | U30930    | Hs.158540 | UDP glycosyltransferase 8 (UDP-galactose | 6.34 |
|    | 405373 |           |           |  | 6.32 |
|    | 431322 | AW970622  |           | gb:EST382704 MAGE resequences, MAGK Homo | 6.32 |
| 5  | 440094 | AI651558  | Hs.270372 | ESTs                                     | 6.27 |
|    | 442764 | AI762254  | Hs.131122 | ESTs                                     | 6.21 |
|    | 424433 | H04607    | Hs.9218   | ESTs                                     | 6.20 |
|    | 415025 | AW207091  | Hs.72307  | ESTs                                     | 6.16 |
|    | 428927 | AA441837  | Hs.90250  | ESTs                                     | 6.16 |
|    | 439145 | H67346    | Hs.269187 | ESTs                                     | 6.06 |
| 10 | 424683 | N87519    | Hs.27196  | ESTs                                     | 6.04 |
|    | 415314 | N88802    | Hs.5422   | glycoprotein M6B                         | 5.94 |
|    | 424025 | AI701852  | Hs.301296 | ESTs                                     | 5.90 |
|    | 445911 | AI985987  | Hs.145645 | ESTs, Moderately similar to ALU1_HUMAN A | 5.89 |
|    | 417332 | AW972717  | Hs.288462 | Homo sapiens cDNA: FLJ21511 fis, clone C | 5.86 |
| 15 | 440102 | AI672443  | Hs.131190 | ESTs                                     | 5.84 |
|    | 429609 | AF002246  | Hs.210863 | cell adhesion molecule with homology to  | 5.82 |
|    | 411665 | AF106564  | Hs.71346  | neurofilament 3 (150kD medium)           | 5.82 |
|    | 446224 | AW450551  | Hs.13308  | ESTs                                     | 5.74 |
|    | 422305 | AI928242  | Hs.293438 | ESTs, Highly similar to AF198488 1 trans | 5.72 |
| 20 | 436802 | N34486    | Hs.170504 | ESTs                                     | 5.72 |
|    | 412452 | AA215731  | Hs.283446 | ESTs, Weakly similar to ALAT_HUMAN ALANI | 5.70 |
|    | 445611 | AW418497  | Hs.145583 | ESTs                                     | 5.66 |
|    | 440038 | AA861627  | Hs.243989 | ESTs                                     | 5.66 |
|    | 424028 | AF055084  | Hs.153692 | KIAA0686 protein                         | 5.61 |
| 25 | 410530 | M25809    | Hs.64173  | ESTs, Highly similar to VAB1_HUMAN VACUO | 5.60 |
|    | 425907 | AA365752  | Hs.155965 | ESTs                                     | 5.60 |
|    | 428523 | AW974540  | Hs.98626  | ESTs                                     | 5.58 |
|    | 429918 | AW873986  | Hs.119383 | ESTs                                     | 5.58 |
|    | 408369 | R38438    | Hs.182575 | solute carrier family 15 (H+/peptide tra | 5.56 |
| 30 | 446163 | AA026880  | Hs.25252  | Homo sapiens cDNA FLJ13603 fis, clone PL | 5.56 |
|    | 427398 | AW390020  | Hs.20415  | chromosome 21 open reading frame 11      | 5.52 |
|    | 418504 | BE159718  | Hs.85335  | Homo sapiens mRNA: cDNA DKFZp564D1462 (f | 5.51 |
|    | 440666 | AA902650  | Hs.192742 | Homo sapiens cDNA FLJ12785 fis, clone NT | 5.50 |
| 35 | 432286 | AW327432  | Hs.255843 | ESTs                                     | 5.48 |
|    | 451236 | AI767406  | Hs.207026 | ESTs, Weakly similar to B56205 transcrip | 5.46 |
|    | 422746 | NM_004484 | Hs.119651 | glypican 3                               | 5.43 |
|    | 416426 | AA180256  | Hs.210473 | ESTs, Weakly similar to GELS_HUMAN GELSO | 5.37 |
|    | 414449 | AA557660  | Hs.76152  | decorin                                  | 5.36 |
|    | 445898 | AF070623  | Hs.13423  | Homo sapiens clone 24468 mRNA sequence   | 5.34 |
| 40 | 451835 | T63643    | Hs.209715 | ESTs, Weakly similar to ALU7_HUMAN ALU S | 5.32 |
|    | 424566 | M16801    | Hs.1790   | nuclear receptor subfamily 3, group C, m | 5.22 |
|    | 408604 | D51408    | Hs.21925  | ESTs                                     | 5.18 |
|    | 456576 | AA287443  |           | gb:zs52c10.r1 NCI_CGAP_GCB1 Homo sapiens | 5.18 |
| 45 | 433212 | BE218049  | Hs.121820 | ESTs                                     | 5.16 |
|    | 452114 | N22687    | Hs.8236   | ESTs                                     | 5.14 |
|    | 458072 | AI890347  | Hs.271923 | Homo sapiens cDNA: FLJ22785 fis, clone K | 5.14 |
|    | 443005 | AI027184  | Hs.200918 | ESTs                                     | 5.14 |
|    | 408554 | AA836381  | Hs.7323   | ESTs                                     | 5.12 |
| 50 | 438609 | T62870    | Hs.291991 | ESTs                                     | 5.10 |
|    | 429343 | AK000785  | Hs.199480 | epsin 3                                  | 5.10 |
|    | 452223 | AA425467  | Hs.8035   | ESTs                                     | 5.10 |
|    | 446925 | AW974605  | Hs.176669 | ESTs                                     | 5.09 |
|    | 407654 | AW063476  | Hs.279080 | ESTs                                     | 5.08 |
| 55 | 414654 | AA587775  | Hs.66295  | Homo sapiens HSPC311 mRNA, partial cds   | 5.06 |
|    | 407978 | AW385129  | Hs.41717  | phosphodiesterase 1A, calmodulin-depende | 5.04 |
|    | 436343 | AW194962  | Hs.199028 | ESTs                                     | 5.04 |
|    | 419150 | T29618    | Hs.89640  | TEK tyrosine kinase, endothelial (venous | 5.04 |
|    | 442317 | AI915599  | Hs.129225 | ESTs                                     | 5.02 |
| 60 | 404319 |           |           |  | 5.02 |
|    | 433637 | AW024214  | Hs.135405 | ESTs                                     | 4.92 |
|    | 440205 | T86950    | Hs.188465 | ESTs                                     | 4.84 |
|    | 432029 | D31628    | Hs.2899   | 4-hydroxyphenylpyruvate dioxygenase      | 4.83 |
|    | 453125 | AW779544  | Hs.115497 | Homo sapiens cDNA: FLJ22655 fis, clone H | 4.80 |
|    | 407788 | BE514982  | Hs.38991  | S100 calcium-binding protein A2          | 4.78 |
| 65 | 439750 | AL359053  | Hs.57664  | Homo sapiens mRNA full length insert cDN | 4.75 |
|    | 443633 | AL031290  | Hs.9654   | similar to pregnancy-associated plasma p | 4.74 |
|    | 449050 | AW302858  | Hs.187333 | ESTs                                     | 4.69 |
|    | 422237 | M13149    | Hs.1498   | histidine-rich glycoprotein              | 4.67 |
|    | 442476 | AF069475  |           | gb:AF069475 Homo sapiens astrocytoma lib | 4.64 |
| 70 | 431130 | NM_006103 | Hs.2719   | epididymis-specific, whey-acidic protein | 4.58 |
|    | 440624 | AF017987  | Hs.7306   | secreted frizzled-related protein 1      | 4.58 |
|    | 403046 |           |           |  | 4.51 |
|    | 450838 | R65841    | Hs.28653  | ESTs                                     | 4.48 |
| 75 | 455887 | BE154173  |           | gb:PM1-HT0340-201299-004-f12 HT0340 Homo | 4.47 |
|    | 453500 | AI478427  | Hs.43125  | ESTs                                     | 4.40 |
|    | 405701 |           |           |  | 4.37 |
|    | 426657 | NM_015865 | Hs.171731 | solute carrier family 14 (urea transport | 4.37 |
|    | 451032 | W03692    | Hs.25832  | Homo sapiens mRNA: cDNA DKFZp564P116 (fr | 4.37 |
|    | 426200 | AA371876  | Hs.234786 | KIAA0707 protein                         | 4.35 |
| 80 | 418836 | AI655499  | Hs.161712 | ESTs                                     | 4.34 |
|    | 447754 | AW073310  | Hs.163533 | Homo sapiens cDNA FLJ14142 fis, clone MA | 4.32 |
|    | 438209 | AL120659  | Hs.6111   | KIAA0307 gene product                    | 4.23 |
|    | 404559 |           |           |  | 4.22 |



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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 413272 | AA127923  | Hs.293256 | ESTs                                     | 4.21 |
|    | 423068 | M25629    | Hs.123107 | kalikrein 1, renal/pancreas/salivary     | 4.19 |
|    | 416982 | J05401    | Hs.80691  | creatine kinase, mitochondrial 2 (sarcom | 4.18 |
|    | 445512 | A1241246  | Hs.148903 | EST                                      | 4.17 |
| 5  | 445177 | A1215070  | Hs.16135  | ESTs                                     | 4.16 |
|    | 448475 | BE613134  | Hs.247474 | Homo sapiens cDNA: FLJ21032 fis, clone C | 4.14 |
|    | 402072 |           |           |  | 4.09 |
|    | 439285 | AL133916  | Hs.298998 | ESTs                                     | 4.02 |
|    | 429621 | A1823386  | Hs.130874 | Homo sapiens cDNA FLJ14181 fis, clone NT | 3.99 |
| 10 | 450273 | AW296454  | Hs.24743  | hypothetical protein FLJ20171            | 3.97 |
|    | 453511 | AL031224  | Hs.33102  | transcription factor AP-2 beta (activati | 3.94 |
|    | 452620 | AA436504  | Hs.119286 | ESTs                                     | 3.92 |
|    | 425642 | X91220    | Hs.158452 | solute carrier family 12 (sodium/chlorid | 3.91 |
|    | 435884 | AA701443  | Hs.192868 | ESTs                                     | 3.90 |
| 15 | 416889 | AW250318  | Hs.80395  | mal, T-cell differentiation protein      | 3.89 |
|    | 419677 | N77342    | Hs.21851  | Homo sapiens cDNA FLJ12900 fis, clone NT | 3.88 |
|    | 431958 | X63629    | Hs.2877   | cadherin 3, type 1, P-cadherin (placenta | 3.84 |
|    | 456844 | A1264155  | Hs.152981 | CDP-diacylglycerol synthase (phosphatida | 3.82 |
|    | 442306 | A1820660  | Hs.129205 | ESTs                                     | 3.82 |
| 20 | 438453 | D17056    | Hs.288959 | Homo sapiens cDNA: FLJ20920 fis, clone A | 3.81 |
|    | 407198 | H91679    |           | gb:yy04a07.s1 Soares fetal liver spleen  | 3.80 |
|    | 431441 | U81961    | Hs.2794   | sodium channel, nonvoltage-gated 1 alpha | 3.79 |
|    | 413841 | M34276    | Hs.75576  | plasminogen                              | 3.77 |
|    | 431161 | AA493591  |           | gb:nh01a12.s1 NCI_CGAP_Thy1 Homo sapiens | 3.76 |
| 25 | 428544 | AA430034  | Hs.191611 | ESTs                                     | 3.74 |
|    | 453903 | AW299606  | Hs.232777 | ESTs                                     | 3.74 |
|    | 434061 | AW024973  | Hs.283675 | NPD009 protein                           | 3.73 |
|    | 444805 | AB007899  | Hs.12017  | KIAA0439 protein; homolog of yeast ubiq  | 3.73 |
|    | 440080 | AW051597  | Hs.143707 | ESTs                                     | 3.71 |
| 30 | 440230 | A1732970  | Hs.126246 | ESTs                                     | 3.70 |
|    | 428735 | AJ279246  | Hs.192657 | NPHS2 gene (podocin)                     | 3.68 |
|    | 421832 | NM_016098 | Hs.108725 | HSPC040 protein                          | 3.66 |
|    | 430135 | NM_000035 | Hs.234234 | aldolase B, fructose-bisphosphate        | 3.65 |
|    | 453055 | AW291436  | Hs.31917  | ESTs                                     | 3.65 |
| 35 | 450696 | A1654223  | Hs.16026  | Homo sapiens cDNA: FLJ23191 fis, clone L | 3.59 |
|    | 440232 | A1766925  | Hs.112554 | ESTs                                     | 3.57 |
|    | 432099 | U20760    | Hs.272429 | calcium-sensing receptor (hypocalciuric  | 3.57 |
|    | 445924 | A1264671  | Hs.164166 | ESTs                                     | 3.56 |
| 40 | 411356 | H45377    |           | gb:yn99h03.r1 Soares adult brain N2b5HB5 | 3.56 |
|    | 431103 | M57399    | Hs.44     | pleiotrophin (heparin binding growth fac | 3.55 |
|    | 413752 | BE161807  |           | gb:MR3-HT0446-300300-203-h01 HT0446 Homo | 3.53 |
|    | 416298 | NM_003891 | Hs.1011   | protein Z, vitamin K-dependent plasma gl | 3.53 |
|    | 423603 | AB007880  | Hs.129883 | KIAA0420 gene product                    | 3.53 |
|    | 436610 | AW611912  | Hs.120414 | ESTs                                     | 3.50 |
| 45 | 425905 | AB032959  | Hs.161700 | KIAA1133 protein                         | 3.48 |
|    | 403625 |           |           |  | 3.47 |
|    | 425210 | AA054679  | Hs.155150 | ribonuclease P (14kD)                    | 3.45 |
|    | 430168 | AW968343  | Hs.300896 | ESTs, Highly similar to AF128113 1 promi | 3.42 |
| 50 | 448877 | A1583696  | Hs.253313 | ESTs                                     | 3.40 |
|    | 456686 | A1554303  | Hs.35982  | Homo sapiens cDNA FLJ12776 fis, clone NT | 3.38 |
|    | 414725 | AA769791  | Hs.120355 | Homo sapiens cDNA FLJ13148 fis, clone NT | 3.37 |
|    | 453574 | A1767947  | Hs.50841  | ESTs, Weakly similar to tuftelin [M.musc | 3.32 |
|    | 438535 | L09078    |           | gb:Homo sapiens mRNA fragment            | 3.31 |
|    | 414040 | N58513    | Hs.32171  | ESTs                                     | 3.30 |
| 55 | 451416 | AW631469  | Hs.203213 | ESTs                                     | 3.30 |
|    | 444564 | A1167877  | Hs.143716 | ESTs                                     | 3.29 |
|    | 408001 | AA046458  | Hs.95296  | ESTs                                     | 3.27 |
|    | 406666 | V00495    | Hs.75442  | albumin                                  | 3.24 |
| 60 | 421750 | AK000768  | Hs.107872 | hypothetical protein FLJ20761            | 3.24 |
|    | 445337 | NM_013280 | Hs.12523  | fibronectin leucine rich transmembrane p | 3.23 |
|    | 423968 | AF098277  | Hs.136529 | solute carrier family 23 (nucleobase tra | 3.21 |
|    | 427209 | H06509    | Hs.92423  | KIAA1566 protein                         | 3.20 |
|    | 403442 |           |           |  | 3.20 |
|    | 419713 | AW968058  | Hs.92381  | nudix (nucleoside diphosphate linked moi | 3.19 |
| 65 | 425548 | AA890023  | Hs.1906   | prolactin receptor                       | 3.17 |
|    | 414502 | AL133721  | Hs.224680 | ESTs                                     | 3.16 |
|    | 427811 | M81057    | Hs.180884 | carboxypeptidase B1 (tissue)             | 3.14 |
|    | 436330 | NM_004413 | Hs.109    | dipeptidase 1 (renal)                    | 3.11 |
|    | 433942 | AW272166  | Hs.123465 | ESTs                                     | 3.11 |
| 70 | 408692 | AL040127  | Hs.34074  | dipeptidylpeptidase VI                   | 3.10 |
|    | 448819 | A1589190  | Hs.188372 | ESTs                                     | 3.10 |
|    | 423041 | BE170842  | Hs.123123 | chloride channel Ka                      | 3.10 |
|    | 454554 | AW847505  |           | gb:RC0-CT0210-280999-021-c10 CT0210 Homo | 3.10 |
|    | 406664 | L34041    | Hs.25478  | glycerol-3-phosphate dehydrogenase 1 (so | 3.10 |
| 75 | 449850 | AW206292  | Hs.199751 | ESTs                                     | 3.08 |
|    | 427450 | AB014526  | Hs.178121 | KIAA0626 gene product                    | 3.08 |
|    | 454788 | AW820691  |           | gb:RC5-ST0300-300100-012-H06 ST0300 Homo | 3.06 |
|    | 444895 | A1674383  | Hs.301192 | ESTs                                     | 3.06 |
|    | 457782 | N54493    |           | gb:yy40g05.s1 Soares fetal liver spleen  | 3.05 |
| 80 | 429023 | NM_000312 | Hs.2351   | protein C (inactivator of coagulation fa | 3.05 |
|    | 427041 | A1693661  | Hs.97557  | ESTs                                     | 3.01 |
|    | 434788 | AF154121  | Hs.102867 | sodium-dependent high-affinity dicarboxy | 3.01 |
|    | 419003 | T78640    | Hs.268595 | ESTs                                     | 3.01 |

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TABLE 37B:

Pkey: Unique Eos probeset identifier number  
 CAT number: Gene cluster number  
 Accession: Genbank accession numbers

| Pkey   | CAT number | Accession   |
|--------|------------|---|
| 411356 | 1240273_1  | H45377 H21137 AW838640  |
| 413752 | 1386338_1  | BE161807 BE161584 BE161700 BE161748   |
| 431161 | 328713_1   | AA493591 AA829120 AA533792  |
| 431322 | 331543_1   | AW970622 AA503009 AA502998 AA502989 AA502805 T92188   |
| 438535 | 45946_1    | L09078 L03145 L09094 L09098 L03165 L09102   |
| 442476 | 543547_1   | AF069475 AF069477 AF069476  |
| 453685 | 977734_1   | AL110309 AW088119 H22881  |
| 454554 | 1223842_1  | AW847505 AW811792 BE061442 BE061433 AW847506 AW806999 AW806996 BE061436 BE061430 BE142460 BE146499 AW806994 AW809156<br>AW806991 AW814082 AW806992 BE061669 AW807002 BE146659 AW806995 AW807000 AW845743 AW845747 AW847504 BE142458 BE061431<br>BE061435 AW847507 BE146650 BE142470 AW814096 AW807012 BE061438 AW807011 AW806993 BE142465 BE142459 BE142462 AW854330<br>AW854331 BE061434 BE061731 BE142464 AW847501 AW807001 BE142463 AW811800 BE061437 AW811802 BE061440 AW806997 AW806998<br>BE061745 BE061753 |
| 454788 | 1234694_1  | AW820691  |
| 455887 | 1380836_1  | BE154173 BE154098 BE154096  |
| 456576 | 201378_1   | AA287443 AA419385 BE084078 AI478347   |
| 457782 | 405265_1   | N54493 AA679039 N76605  |
| 407198 |            | H91679  |

TABLE 37C:

Pkey: Unique Eos probeset identifier number  
 Ref: reference gi ID  
 Strand: strand identification  
 NT\_position: chromosomal nucleotide position

| Pkey   | Ref     | Strand | NT_position             |
|--------|---------|--------|-------------------------|
| 402072 | 8117363 | Plus   | 71983-72128             |
| 403046 | 3540153 | Minus  | 55707-55859,56369-56511 |
| 403204 | 7622392 | Plus   | 16214-16439             |
| 403381 | 9438267 | Minus  | 26009-26178             |
| 403442 | 7210003 | Plus   | 174560-175270           |
| 403625 | 8569879 | Plus   | 6551-7111               |
| 404319 | 9211467 | Plus   | 54436-54608             |
| 404559 | 8748893 | Minus  | 73499-73651,89575-89739 |
| 405373 | 2076718 | Plus   | 21294-21575             |
| 405701 | 4263751 | Plus   | 93243-93364             |

TABLE 38A: ABOUT 860 GENES UP-REGULATED IN KIDNEY CANCER COMPARED TO NORMAL ADULT TISSUES

Table 38A lists about 860 genes up-regulated in kidney cancer compared to normal adult tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" kidney cancer to "average" normal adult tissues was greater than or equal to 3.0. The "average" kidney cancer level was set to the 90th percentile amongst various kidney cancers. The "average" normal adult tissue level was set to the 70th percentile amongst various non-malignant tissues. In order to remove gene-specific background levels of non-specific hybridization, the 15th percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 R1: Ratio of tumor to normal adult tissues

| Pkey   | ExAccn    | UnigenelD | Unigene Title                            | R1    |
|--------|-----------|-----------|--|-------|
| 435013 | H91923    | Hs.110024 |  | 15.71 |
| 447768 | X86400    | Hs.19520  | Hs.19520:FXFD domain-containing ion tran | 14.07 |
| 445178 | AI792241  | Hs.129614 | Hs.129614:kidney-specific membrane prote | 12.56 |
| 432542 | AW083920  | Hs.16098  | Hs.16098:claudin 2                       | 12.41 |
| 443595 | AF169312  | Hs.9613   | NM_016109:Homo sapiens angiopoietin-like | 11.77 |
| 413719 | BE439580  | Hs.75498  | NM_004591:Homo sapiens small inducible c | 10.39 |
| 436878 | BE465204  | Hs.47448  | Hs.47448:ESTs                            | 10.18 |
| 440304 | BE159984  | Hs.125395 | Hs.125395:ESTs                           | 9.95  |
| 407065 | Y10141    |           |  | 9.58  |
| 413049 | NM_002151 | Hs.823    | NM_002151:Homo sapiens hepsin (transmemb | 9.51  |
| 425983 | AK000226  | Hs.165619 | Hs.165619:mucin and cadherin-like        | 8.88  |
| 423161 | AL049227  | Hs.124776 | Hs.124776:Homo sapiens mR; cD DKFZp564N1 | 8.77  |
| 430569 | AF241254  | Hs.178098 | Hs.178098:angiotensin I converting enzym | 8.45  |
| 416768 | AA363733  | Hs.1032   | NM_002909:Homo sapiens regenerating isle | 7.94  |
| 422357 | AF016272  | Hs.115418 | NM_004062:Homo sapiens cadherin 16, KSP- | 7.78  |
| 420737 | L08096    | Hs.99899  | NM_001252:Homo sapiens tumor necrosis fa | 7.78  |
| 409745 | AA077391  |           | AA077391:7B14E12 Chromosome 7 Fetal Brai | 7.74  |
| 413936 | AF113676  | Hs.297681 | NM_000295:Homo sapiens serine (or cystei | 7.32  |
| 426682 | AV660038  | Hs.2056   | Hs.2056:UDP glycosyltransferase 1 family | 7.20  |
| 406851 | AA609784  | Hs.352392 | Hs.352392:major histocompatibility compl | 7.03  |
| 419508 | AW997938  | Hs.90786  | Hs.90786:ATP-binding cassette, sub-famil | 6.57  |
| 428953 | AA306610  | Hs.348183 | NM_003823:Homo sapiens tumor necrosis fa | 6.36  |
| 436895 | AF037335  | Hs.5338   | NM_001218:Homo sapiens carbonic anhydras | 6.31  |
| 431842 | NM_005764 | Hs.271473 | NM_005764:Homo sapiens epithelial protei | 6.20  |
| 430014 | H59354    | Hs.374303 | Hs.374303:hypothetical protein MGC20576  | 6.20  |
| 423803 | NM_005709 | Hs.132945 | NM_005709:Homo sapiens PDZ-73 protein (P | 6.19  |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 434779 | AF153815  | Hs.50151  | Hs.50151:potassium inwardly-rectifying c   | 6.11 |
|    | 435767 | H73505    | Hs.117874 | Hs.117874:ESTs                             | 6.08 |
|    | 422664 | AA315933  | Hs.120879 | Hs.120879:Homo sapiens, clone MGC:32871    | 6.02 |
| 5  | 425280 | U31519    | Hs.1872   | Hs.1872:phosphoenolpyruvate carboxylase    | 5.81 |
|    | 426559 | AB001914  | Hs.170414 | NM_002570:Homo sapiens paired basic amin   | 5.73 |
|    | 451564 | AU076698  | Hs.132760 | NM_001467:Homo sapiens glucose-6-phospha   | 5.69 |
|    | 418526 | BE019020  | Hs.85838  | NM_004207:Homo sapiens solute carrier fa   | 5.68 |
|    | 444151 | AW972917  | Hs.128749 | Hs.128749:alpha-methylacyl-CoA racemase    | 5.66 |
|    | 426471 | M22440    | Hs.170009 | NM_003236:Homo sapiens transforming grow   | 5.48 |
| 10 | 432579 | AF043244  | Hs.278439 | NM_003946:Homo sapiens nucleolar protein   | 5.45 |
|    | 448733 | NM_005629 | Hs.187958 | NM_005629:Homo sapiens solute carrier fa   | 5.42 |
|    | 446650 | AB016625  | Hs.15813  | NM_003060:Homo sapiens solute carrier fa   | 5.36 |
|    | 417089 | H52280    | Hs.18612  | Hs.18612:Homo sapiens cD: FLJ21909 fis,    | 5.35 |
|    | 437848 | AI906419  | Hs.284380 | Hs.284380:gamma-glutamyltransferase 1      | 5.32 |
| 15 | 423081 | AF262992  | Hs.123159 | Hs.123159:sperm associated antigen 4       | 5.30 |
|    | 421893 | NM_001078 | Hs.109225 | NM_001078:Homo sapiens vascular cell adh   | 5.23 |
|    | 435886 | BE265839  | Hs.12126  | Hs.12126:hepatocellular carcinoma-associ   | 5.20 |
|    | 410276 | AI554545  | Hs.359201 | Hs.359201:ESTs                             | 5.20 |
|    | 429451 | BE409861  | Hs.202833 | NM_002133:Homo sapiens heme oxygese (dec   | 5.14 |
| 20 | 446404 | AA019961  | Hs.26216  | Hs.26216:Homo sapiens cD: FLJ22811 fis,    | 5.13 |
|    | 423445 | NM_014324 | Hs.128749 | NM_014324:Homo sapiens alpha-methylacyl-   | 5.09 |
|    | 449444 | AW818436  | Hs.351306 | NM_004696:Homo sapiens solute carrier fa   | 5.05 |
|    | 438106 | BE245551  | Hs.6079   | NM_014863:Homo sapiens B cell RAG associ   | 5.02 |
|    | 400419 | AF084545  |           | AF084545:Homo sapiens versican Vint isof   | 5.01 |
| 25 | 453920 | AI133148  | Hs.36602  | NM_000204:Homo sapiens I factor (complem   | 4.99 |
|    | 447881 | BE620886  | Hs.355279 | Hs.355279:Homo sapiens cD FLJ23711 fis,    | 4.97 |
|    | 422253 | W81526    | Hs.113882 | NM_000815:Homo sapiens gamma-aminobutyri   | 4.93 |
|    | 439024 | R96696    | Hs.35598  | Hs.35598:ESTs                              | 4.88 |
|    | 414799 | AI752416  | Hs.77326  | NM_000598:Homo sapiens insulin-like grow   | 4.80 |
| 30 | 426530 | U24578    | Hs.278625 | NM_000592:Homo sapiens complement compon   | 4.77 |
|    | 410055 | AJ250839  | Hs.58241  | Hs.58241:gene for sennel/threonine prote   | 4.72 |
|    | 404240 |           |           |  | 4.71 |
|    | 414617 | AI339520  | Hs.288817 | Hs.288817:hypothetical protein FLJ22761    | 4.68 |
| 35 | 448249 | AW855331  | Hs.337124 | Hs.337124:ESTs                             | 4.67 |
|    | 447818 | W79940    | Hs.21906  | Hs.21906:Homo sapiens clone 24570 mR seq   | 4.66 |
|    | 449057 | AB037784  | Hs.22941  | Hs.22941:KIAA1363 protein                  | 4.66 |
|    | 422424 | AI186431  | Hs.296638 | NM_004864:Homo sapiens prostate differen   | 4.62 |
|    | 417336 | R70429    | Hs.81988  | NM_001343:Homo sapiens disabled homolog    | 4.62 |
| 40 | 425873 | NM_013390 | Hs.160417 | NM_013390:Homo sapiens transmembrane pro   | 4.58 |
|    | 444700 | NM_003645 | Hs.11729  | NM_003645:Homo sapiens fatty-acid-Coenzy   | 4.58 |
|    | 414998 | NM_002543 | Hs.77729  | NM_002543:Homo sapiens oxidised low dens   | 4.56 |
|    | 414763 | U97276    | Hs.77266  | NM_002826:Homo sapiens quiescin Q6 (QSCN   | 4.48 |
|    | 443358 | H65417    | Hs.17757  | Hs.17757:pleckstrin homology domain-cont   | 4.45 |
|    | 440091 | AI767388  | Hs.37890  | Hs.37890:Homo sapiens, clone IMAGE:48275   | 4.43 |
| 45 | 447131 | NM_004585 | Hs.17466  | NM_004585:Homo sapiens retinoic acid rec   | 4.43 |
|    | 406973 | M34996    | Hs.198253 | Hs.198253:major histocompatibility compl   | 4.42 |
|    | 427740 | BE242604  | Hs.180616 | NM_005505:Homo sapiens CD36 antigen (col   | 4.40 |
|    | 436258 | AW867491  | Hs.107125 | Hs.107125:plasmalemma vesicle associated   | 4.38 |
| 50 | 452884 | C05964    | Hs.31841  | Hs.31841:ESTs                              | 4.37 |
|    | 444006 | BE395085  | Hs.10086  | NM_016639:Homo sapiens type I transmembr   | 4.36 |
|    | 422627 | BE336857  | Hs.118787 | NM_000358:Homo sapiens transforming grow   | 4.35 |
|    | 418054 | NM_002318 | Hs.83354  | NM_002318:Homo sapiens lysyl oxidase-lik   | 4.34 |
|    | 419011 | H56244    | Hs.89552  | NM_000846:Homo sapiens glutathione S-tra   | 4.34 |
|    | 404277 |           |           |  | 4.33 |
| 55 | 435563 | AF210317  | Hs.95497  | Hs.95497:solute carrier family 2 (facili   | 4.30 |
|    | 431779 | AW971178  | Hs.268571 | NM_001645:Homo sapiens apolipoprotein C-   | 4.29 |
|    | 406645 | W57466    | Hs.814    | Hs.814:major histocompatibility complex,   | 4.28 |
|    | 421485 | AA243499  | Hs.104800 | Hs.104800:hypothetical protein FLJ10134    | 4.26 |
| 60 | 426812 | AF105365  | Hs.172613 | NM_006598:Homo sapiens solute carrier fa   | 4.25 |
|    | 407910 | AA650274  | Hs.41296  | NM_013281:Homo sapiens fibronectin leuci   | 4.22 |
|    | 438030 | X98427    | Hs.122634 | Hs.122634:ESTs                             | 4.22 |
|    | 430661 | AC005551  | Hs.130714 | Hs.130714:ESTs, Moderately similar to AF   | 4.21 |
|    | 444381 | BE387335  | Hs.283713 | Hs.283713:hypothetical protein BC014245    | 4.20 |
|    | 438203 | BE540090  | Hs.7345   | Hs.7345:MAD1 mitotic arrest deficient-li   | 4.16 |
| 65 | 411358 | R47479    | Hs.94761  | Hs.94761:KIAA1691 protein                  | 4.15 |
|    | 418323 | NM_002118 | Hs.1162   | NM_002118:Homo sapiens major histocompat   | 4.12 |
|    | 449853 | AF006823  | Hs.24040  | NM_002246:Homo sapiens potassium channel   | 4.11 |
|    | 415198 | AW009480  | Hs.943    | NM_004221:Homo sapiens lural killer cell   | 4.11 |
| 70 | 418751 | BE389014  | Hs.372548 | Hs.372548:phosphoinositide-3-kinase, regul | 4.09 |
|    | 414166 | AW888941  | Hs.75789  | NM_006096:Homo sapiens N-myc downstream    | 4.07 |
|    | 424125 | M31669    | Hs.1735   | Hs.1735:inhibin, beta B (activin AB beta   | 4.00 |
|    | 416926 | H03109    | Hs.263395 | Hs.263395:sema domain, transmembrane dom   | 3.92 |
|    | 419175 | AW270037  | Hs.362996 | Hs.362996:KIAA0779 protein                 | 3.92 |
| 75 | 424218 | AF031824  | Hs.143212 | NM_003650:Homo sapiens cystatin F (leuko   | 3.91 |
|    | 412870 | N22788    | Hs.82407  | Hs.82407:chemokine (C-X-C motif) ligand    | 3.88 |
|    | 452203 | X57522    | Hs.352018 | NM_000593:Homo sapiens transporter 1, AT   | 3.87 |
|    | 446872 | X97058    | Hs.16362  | NM_004154:Homo sapiens pyrimidinergic re   | 3.87 |
|    | 449961 | AW265634  | Hs.133100 | Hs.133100:ESTs                             | 3.87 |
| 80 | 424517 | AI539443  | Hs.137447 | Hs.137447:Homo sapiens cD FLJ12169 fis,    | 3.86 |
|    | 425262 | D87119    | Hs.155418 | Hs.155418:GS3955 protein                   | 3.83 |
|    | 443639 | BE269042  | Hs.9661   | NM_002801:Homo sapiens proteasome (proso   | 3.82 |
|    | 448133 | AA723157  | Hs.73769  | NM_000802:Homo sapiens folate receptor 1   | 3.81 |
|    | 418030 | BE207573  | Hs.83321  | Hs.83321:neuromedin B                      | 3.81 |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 412939 | AW411491  | Hs.75069  | NM_005412:Homo sapiens serine hydroxymet | 3.80 |
|    | 409162 | H25530    | Hs.50868  | NM_002555:Homo sapiens solute carrier fa | 3.79 |
|    | 427715 | BE245274  | Hs.180428 | Hs.180428:KIAA1181 protein               | 3.78 |
| 5  | 412006 | AW451618  | Hs.290216 | Hs.290216:ESTs                           | 3.77 |
|    | 430413 | AW842182  | Hs.241392 | NM_002985:Homo sapiens small inducible c | 3.76 |
|    | 422282 | AF019225  | Hs.114309 | Hs.114309:apolipoprotein L 1             | 3.76 |
|    | 420747 | BE294407  | Hs.99910  | Hs.99910:phosphofructokise, platelet     | 3.76 |
|    | 414875 | H42679    | Hs.77522  | NM_006120:Homo sapiens major histocompat | 3.75 |
| 10 | 418793 | AW382987  | Hs.88474  | Hs.88474:prostaglandin-endoperoxide synt | 3.74 |
|    | 446291 | BE397753  | Hs.14623  | NM_006332:Homo sapiens interferon, gamma | 3.71 |
|    | 417289 | D86962    | Hs.81875  | Hs.81875:growth factor receptor-bound pr | 3.69 |
|    | 422672 | X12784    | Hs.119129 | NM_001845:Homo sapiens collagen, type IV | 3.68 |
|    | 448569 | BE382657  | Hs.21486  | NM_007315:Homo sapiens sigl transducer a | 3.68 |
| 15 | 437270 | R18087    | Hs.323769 | Hs.323769:cisplatin resistance related p | 3.67 |
|    | 408452 | AA054683  | Hs.192455 | Hs.192455:ESTs, Moderately similar to hy | 3.67 |
|    | 443986 | AI381750  | Hs.283437 | Hs.283437:HTGN29 protein                 | 3.66 |
|    | 418869 | AW516565  |           | AW516565:xq01d05.x1 Soares_NHCeC_cervica | 3.65 |
|    | 425998 | AU076629  | Hs.165950 | NM_002011:Homo sapiens fibroblast growth | 3.62 |
| 20 | 428699 | AW578252  | Hs.190161 | NM_014020:Homo sapiens LR8 protein (LR8) | 3.62 |
|    | 418299 | AA279530  | Hs.83968  | NM_000211:Homo sapiens integrin, beta 2  | 3.61 |
|    | 432593 | AW301003  | Hs.51483  | Hs.51483:Homo sapiens, Similar to RIKEN  | 3.59 |
|    | 415765 | NM_005424 | Hs.78824  | NM_005424:Homo sapiens tyrosine kise wit | 3.58 |
|    | 445985 | BE621800  | Hs.29444  | Hs.29444:putative small membrane protein | 3.57 |
| 25 | 424893 | AW295112  | Hs.153648 | Hs.153648:protein tyrosine phosphatase,  | 3.57 |
|    | 426046 | AA833655  | Hs.206868 | Hs.206868:Homo sapiens cD FLJ14056 fis,  | 3.57 |
|    | 424415 | NM_001975 | Hs.146580 | NM_001975:Homo sapiens enolase 2, (gamma | 3.57 |
|    | 412612 | NM_000047 | Hs.74131  | NM_000047:Homo sapiens arylsulfatase E ( | 3.56 |
|    | 443834 | AI741510  | Hs.173548 | Hs.173548:ESTs                           | 3.54 |
| 30 | 431630 | NM_002204 | Hs.265829 | NM_002204:Homo sapiens integrin, alpha 3 | 3.53 |
|    | 418371 | M13560    | Hs.84298  | Hs.84298:CD74 antigen (invariant polypep | 3.52 |
|    | 444838 | AV651680  | Hs.208558 | Hs.208558:ESTs                           | 3.52 |
|    | 449378 | AW664026  | Hs.59892  | Hs.59892:ESTs, Weakly similar to alpha 5 | 3.52 |
|    | 411393 | AW797437  | Hs.69771  | NM_001710:Homo sapiens B-factor, properd | 3.50 |
| 35 | 414311 | AI693547  | Hs.71746  | Hs.71746:aminopeptidase-like 1           | 3.50 |
|    | 415149 | X12451    | Hs.78056  | NM_001912:Homo sapiens cathepsin L (CTSL | 3.50 |
|    | 424321 | W74048    | Hs.1765   | Hs.1765:lymphocyte-specific protein lyro | 3.49 |
|    | 414825 | X06370    | Hs.77432  | NM_005228:Homo sapiens epidermal growth  | 3.48 |
|    | 408194 | AA601038  | Hs.191797 | Hs.191797:ESTs                           | 3.48 |
| 40 | 410600 | AW575742  | Hs.351676 | Hs.351676:ESTs, Weakly similar to T02670 | 3.47 |
|    | 416899 | BE262645  | Hs.80420  | NM_002996:Homo sapiens small inducible c | 3.47 |
|    | 436856 | AI469355  | Hs.127310 | Hs.127310:hypothetical protein BC014917  | 3.47 |
|    | 419660 | BE280337  | Hs.194693 | NM_003982:Homo sapiens solute carrier fa | 3.47 |
|    | 413566 | AW604451  | Hs.285814 | Hs.285814:growth factor receptor-bound p | 3.47 |
| 45 | 412104 | AW205197  | Hs.240951 | Hs.240951:ked cuticle homolog 2 (Drosoph | 3.46 |
|    | 444488 | AW192879  | Hs.355660 | Hs.355660:peptide-histidine transporter  | 3.46 |
|    | 449475 | AI348027  | Hs.108557 | Hs.108557:hypothetical protein PP1057    | 3.46 |
|    | 412276 | BE262621  | Hs.73798  | NM_002415:Homo sapiens macrophage migrat | 3.45 |
|    | 449338 | H73444    | Hs.394    | NM_001124:Homo sapiens adrenomedullin (A | 3.44 |
| 50 | 430304 | AL122071  | Hs.238927 | Hs.238927:Homo sapiens mR; cD DKFZp434H1 | 3.43 |
|    | 415388 | AF018081  | Hs.78409  | (locuslink)NM_030582:Homo sapiens collag | 3.43 |
|    | 432210 | AI567421  | Hs.273330 | Hs.273330:agrin                          | 3.43 |
|    | 418177 | N44967    | Hs.351554 | Hs.351554:Homo sapiens cD FLJ32092 fis,  | 3.42 |
|    | 414888 | AL039185  | Hs.77558  | Hs.77558:thyroid hormone receptor intera | 3.42 |
| 55 | 452445 | AB002438  | Hs.29596  | Hs.29596:Homo sapiens mR from chromosome | 3.41 |
|    | 414803 | X03100    | Hs.914    | Hs.914:major histocompatibility complex, | 3.41 |
|    | 419201 | M22324    | Hs.1239   | NM_001150:Homo sapiens alanyl (membrane) | 3.41 |
|    | 445139 | AB037848  | Hs.12365  | Hs.12365:syptotlagmin XIII               | 3.41 |
|    | 435021 | AA922192  | Hs.73962  | Hs.73962:EphA7                           | 3.41 |
| 60 | 417259 | AW903838  | Hs.81800  | Hs.81800:chondroitin sulfate proteoglyca | 3.40 |
|    | 439737 | AI751438  | Hs.41271  | Hs.41271:Homo sapiens mR full length ins | 3.39 |
|    | 410636 | AA088177  | Hs.172870 | Hs.172870:KIAA1913 protein               | 3.39 |
|    | 431590 | AB037789  | Hs.263395 | Hs.263395:sema domain, transmembrane dom | 3.38 |
|    | 415000 | AW025529  | Hs.239812 | Hs.239812:serologically defined breast c | 3.36 |
| 65 | 416700 | AW498958  | Hs.343475 | NM_001909:Homo sapiens cathepsin D (lyso | 3.36 |
|    | 440516 | S42303    | Hs.161    | NM_001792:Homo sapiens cadherin 2, type  | 3.35 |
|    | 423720 | AL044191  | Hs.23388  | Hs.23388:hypothetical protein DKFZp434F0 | 3.32 |
|    | 421902 | BE392717  |           | BE392717:601307571F1 NIH_MGC_44 Homo sap | 3.32 |
|    | 409220 | BE243323  | Hs.51233  | Hs.51233:tumor necrosis factor receptor  | 3.32 |
| 70 | 421502 | AF111856  | Hs.105039 | NM_006424:Homo sapiens solute carrier fa | 3.32 |
|    | 416729 | U46165    | Hs.1027   | NM_004165:Homo sapiens Ras-related assoc | 3.30 |
|    | 430302 | AL137502  | Hs.238679 | Hs.238679:Rag D protein                  | 3.30 |
|    | 445084 | H38914    | Hs.250848 | Hs.250848:Homo sapiens cD FLJ14761 fis,  | 3.29 |
|    | 406825 | AI982529  | Hs.84298  | Hs.84298:CD74 antigen (invariant polypep | 3.29 |
| 75 | 446272 | BE268912  | Hs.14601  | NM_005335:Homo sapiens hematopoietic cel | 3.28 |
|    | 437145 | AF007216  | Hs.5462   | NM_003759:Homo sapiens solute carrier fa | 3.27 |
|    | 444071 | AI627808  | Hs.110524 | Hs.110524:ESTs                           | 3.27 |
|    | 414662 | AL036058  | Hs.76807  | Hs.76807:major histocompatibility comple | 3.27 |
|    | 436576 | AI458213  | Hs.77542  | Hs.77542:ESTs, Weakly similar to S26650  | 3.26 |
| 80 | 424675 | NM_005512 | Hs.151641 | NM_005512:Homo sapiens glycoprotein A re | 3.25 |
|    | 437897 | AA770561  | Hs.146170 | Hs.146170:hypothetical protein FLJ22969  | 3.25 |
|    | 449703 | H61001    | Hs.171802 | Hs.171802:Homo sapiens, clone IMAGE:3956 | 3.25 |
|    | 414788 | X78342    | Hs.77313  | NM_003674:Homo sapiens cyclin-dependent  | 3.25 |
|    | 414249 | AI797994  | Hs.279929 | Hs.279929:gp25L2 protein                 | 3.24 |

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|----|--------|-----------|-----------|---|------|
|    | 430396 | D49742    | Hs.241363 | NM_004132:Homo sapiens hyaluron binding   | 3.23 |
|    | 424456 | AA341017  | Hs.25549  | Hs.25549:hypothetical protein FLJ20898    | 3.23 |
|    | 452303 | R27257    | Hs.57734  | Hs.57734:G protein-coupled receptor kise  | 3.22 |
|    | 425390 | AI092634  | Hs.156114 | NM_004648:Homo sapiens protein tyrosine   | 3.21 |
| 5  | 416033 | NM_012201 | Hs.78979  | NM_012201:Homo sapiens golgi apparatus p  | 3.19 |
|    | 450931 | N25156    | Hs.25648  | Hs.25648:tumor necrosis factor receptor   | 3.19 |
|    | 428065 | AI634046  | Hs.157313 | Hs.157313:ESTs                            | 3.18 |
|    | 422616 | BE300330  | Hs.118725 | NM_012248:Homo sapiens selenophosphate s  | 3.18 |
|    | 439318 | AW837046  | Hs.6527   | Hs.6527:G protein-coupled receptor 56     | 3.17 |
| 10 | 427640 | AF058293  | Hs.180015 | NM_001355:Homo sapiens D-dopachrome taut  | 3.17 |
|    | 409936 | AK001691  | Hs.57655  | Hs.57655:dudulin 2                        | 3.16 |
|    | 436001 | AW903849  | Hs.173840 | Hs.173840:similar to endothelial cell-se  | 3.16 |
|    | 451154 | AA015879  | Hs.33536  | Hs.33536:ESTs                             | 3.16 |
|    | 420256 | U84722    | Hs.76206  | NM_001795:Homo sapiens cadherin 5, type   | 3.16 |
| 15 | 407584 | W25945    | Hs.8173   | Hs.8173:hypothetical protein FLJ10803     | 3.15 |
|    | 428593 | AW207440  | Hs.185973 | NM_003676:Homo sapiens degenerative sper  | 3.15 |
|    | 410026 | AI912061  | Hs.55016  | Hs.55016:EPS8-related protein 2           | 3.15 |
|    | 445333 | BE537641  | Hs.44278  | Hs.44278:RAB17, member RAS oncogene fami  | 3.14 |
|    | 448143 | AF039704  | Hs.20478  | NM_000391:Homo sapiens ceroid-lipofuscin  | 3.14 |
| 20 | 423007 | AA320134  | Hs.196029 | Hs.196029:Homo sapiens mR for KIAA1657 p  | 3.14 |
|    | 416511 | NM_006762 | Hs.79356  | NM_006762:Homo sapiens Lysosomal-associa  | 3.14 |
|    | 439237 | AW408158  | Hs.318893 | Hs.318893:ESTs, Weakly similar to Z195_H  | 3.13 |
|    | 446899 | NM_005397 | Hs.16426  | NM_005397:Homo sapiens podocalyxin-like   | 3.13 |
|    | 413916 | N49813    | Hs.75615  | NM_000483:Homo sapiens apolipoprotein C-  | 3.13 |
| 25 | 434398 | AA121098  | Hs.3838   | NM_006622:Homo sapiens serum-inducible k  | 3.12 |
|    | 441283 | AA927670  | Hs.131704 | Hs.131704:ESTs                            | 3.12 |
|    | 418945 | BE246762  | Hs.89499  | NM_000698:Homo sapiens arachidate 5-lipo  | 3.12 |
|    | 418458 | AA332941  | Hs.85226  | NM_000235:Homo sapiens lipase A, lysosom  | 3.12 |
|    | 408989 | AW361666  | Hs.49500  | Hs.49500:KIAA0746 protein                 | 3.11 |
| 30 | 436906 | H95990    | Hs.181244 | Hs.181244:major histocompatibility compl  | 3.11 |
|    | 411089 | AA456454  | Hs.355702 | Hs.355702:ESTs, Weakly similar to AC0048  | 3.11 |
|    | 432990 | AL036071  | Hs.279899 | NM_003820:Homo sapiens tumor necrosis fa  | 3.11 |
|    | 425009 | X58288    | Hs.154151 | NM_002845:Homo sapiens protein tyrosine   | 3.10 |
|    | 443601 | AI078554  | Hs.42658  | Hs.42658:Homo sapiens cD FLJ30167 fis, c  | 3.10 |
| 35 | 430603 | AA148164  | Hs.247280 | Hs.247280:chromosome 20 open reading fra  | 3.10 |
|    | 413672 | BE156536  | Hs.353632 | Hs.353632:ESTs, Moderately similar to hy  | 3.09 |
|    | 407786 | AA687538  | Hs.38972  | NM_005727:Homo sapiens tetraspan 1 (TSPA  | 3.09 |
|    | 414586 | AA306160  | Hs.16488  | NM_002298:Homo sapiens lymphocyte cytosol | 3.08 |
|    | 423712 | W46802    | Hs.81988  | Hs.81988:disabled homolog 2, mitogen-res  | 3.08 |
| 40 | 438552 | AJ245820  | Hs.6314   | NM_012410:Homo sapiens type I transmembr  | 3.06 |
|    | 448364 | T08958    | Hs.297214 | Hs.297214:HSPC141 protein                 | 3.06 |
|    | 426437 | BE076537  | Hs.169895 | NM_004223:Homo sapiens ubiquitin-conjuga  | 3.06 |
|    | 437679 | NM_014214 | Hs.5753   | NM_014214:Homo sapiens inositol(myo)-1(   | 3.06 |
|    | 422262 | AL022315  | Hs.113987 | NM_006498:Homo sapiens lectin, galactosi  | 3.06 |
| 45 | 410480 | R97457    | Hs.63984  | NM_001257:Homo sapiens cadherin 13, H-ca  | 3.05 |
|    | 435818 | AA700553  | Hs.368614 | Hs.368614:ESTs                            | 3.05 |
|    | 418883 | BE387036  | Hs.1211   | NM_001611:Homo sapiens acid phosphatase   | 3.05 |
|    | 453613 | F06838    | Hs.374476 | Hs.374476:ESTs                            | 3.05 |
|    | 408051 | AI623351  | Hs.172148 | Hs.172148:ESTs                            | 3.05 |
| 50 | 432278 | AL137506  | Hs.274256 | Hs.274256:hypothetical protein FLJ23563   | 3.04 |
|    | 407949 | W21874    | Hs.247057 | Hs.247057:ESTs, Weakly similar to 210926  | 3.04 |
|    | 418090 | U57059    | Hs.83429  | NM_003810:Homo sapiens tumor necrosis fa  | 3.04 |
|    | 433165 | AA578904  | Hs.292437 | Hs.292437:ESTs                            | 3.03 |
|    | 425809 | AA370362  | Hs.57958  | Hs.57958:EGF-TM7-latrophilin-related pro  | 3.03 |
| 55 | 443884 | N20617    | Hs.194397 | Hs.194397:ESTs, Moderately similar to 22  | 3.03 |
|    | 447831 | AI433293  | Hs.164115 | Hs.164115:ESTs                            | 3.02 |
|    | 413278 | BE563085  | Hs.833    | NM_005101:Homo sapiens interferon-stimul  | 3.01 |
|    | 418870 | AF147204  | Hs.89414  | Hs.89414:chemokine (C-X-C motif), recept  | 3.00 |
| 60 | 456376 | AA663904  | Hs.89862  | Hs.89862:TNFRSF1A-associated via death d  | 3.00 |
|    | 439738 | BE246502  | Hs.9598   | Hs.9598:sema domain, immunoglobulin doma  | 3.00 |
|    | 444416 | AW288085  | Hs.11156  | NM_016494:Homo sapiens hypothetical prot  | 3.00 |
|    | 406656 | M16714    | Hs.89643  | Hs.89643:transketolase (Wernicke-Korsako  | 3.00 |
|    | 406826 | AW516005  | Hs.84298  | Hs.84298:CD74 antigen (invariant polypep  | 2.99 |
|    | 418707 | U97502    | Hs.87497  | Hs.87497:butyrophilin, subfamily 3, memb  | 2.99 |
| 65 | 421742 | AW970004  | Hs.107528 | NM_016108:Homo sapiens androgen induced   | 2.99 |
|    | 406824 | AW515961  | Hs.84298  | Hs.84298:CD74 antigen (invariant polypep  | 2.99 |
|    | 435605 | AF151815  | Hs.4973   | NM_015680:Homo sapiens hypothetical prot  | 2.98 |
|    | 410491 | AA465131  | Hs.64001  | Hs.64001:Homo sapiens clone 25218 mR seq  | 2.98 |
|    | 427648 | AI376722  | Hs.180062 | NM_004159:Homo sapiens proteasome (proso  | 2.98 |
| 70 | 411125 | AA151647  | Hs.68877  | NM_000101:Homo sapiens cytochrome b-245,  | 2.98 |
|    | 435550 | AI224456  | Hs.324507 | Hs.324507:hypothetical protein FLJ20986   | 2.98 |
|    | 429373 | NM_014694 | Hs.200594 | NM_014694:Homo sapiens KIAA0605 gene pro  | 2.98 |
|    | 445701 | AF055581  | Hs.13131  | NM_005475:Homo sapiens lymphocyte adapt   | 2.97 |
|    | 414649 | AI672727  | Hs.76753  | NM_000118:Homo sapiens endoglin (Oster-R  | 2.97 |
| 75 | 444207 | AI565004  | Hs.374415 | Hs.374415:ESTs                            | 2.97 |
|    | 423225 | AA852604  | Hs.125359 | NM_006288:Homo sapiens Thy-1 cell surfac  | 2.97 |
|    | 407792 | AI077715  | Hs.39384  | NM_014344:Homo sapiens four jointed box   | 2.97 |
|    | 445707 | AI248720  | Hs.114390 | Hs.114390:ESTs                            | 2.96 |
|    | 452888 | AW955454  | Hs.30542  | NM_004093:Homo sapiens ephrin-B2 (EFNB2)  | 2.96 |
| 80 | 418478 | U38945    | Hs.1174   | Hs.1174:cyclin-dependent kinase inhibitor | 2.95 |
|    | 411441 | AL042355  | Hs.70202  | Hs.70202:WD repeat domain 10              | 2.95 |
|    | 443426 | AF098158  | Hs.9329   | Hs.9329:chromosome 20 open reading frame  | 2.94 |
|    | 450876 | AF189062  | Hs.285976 | Hs.285976:LAG1 longevity assurance homol  | 2.94 |

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|----|--------|-----------|-----------|--|------|
|    | 426359 | AA376409  | Hs.10862  | Hs.10862:Homo sapiens cD: FLJ23313 fis,  | 2.94 |
|    | 425421 | L11669    | Hs.157145 | NM_001120:Homo sapiens tetracycline tran | 2.93 |
|    | 449879 | H03573    | Hs.287830 | Hs.287830:Homo sapiens mR; cD DKFZp434E1 | 2.93 |
| 5  | 454075 | R43826    | Hs.16313  | Hs.16313:Kruppel-like zinc finger protei | 2.93 |
|    | 421595 | AB014520  | Hs.301685 | Hs.301685:KIAA0620 protein               | 2.93 |
|    | 457949 | W69171    | Hs.334814 | Hs.334814:hypothetical protein FLJ14868  | 2.92 |
|    | 443987 | AW163123  | Hs.10071  | NM_016551:Homo sapiens seven transmembra | 2.92 |
|    | 430259 | BE550182  | Hs.375142 | Hs.375142:RaiGEF-like protein 3, mouse h | 2.92 |
| 10 | 415906 | AI751357  | Hs.288741 | Hs.288741:Homo sapiens cD: FLJ22256 fis, | 2.91 |
|    | 429762 | AI346255  | Hs.216354 | NM_006913:Homo sapiens ring finger prote | 2.91 |
|    | 451527 | AF022813  | Hs.26518  | NM_003271:Homo sapiens transmembrane 4 s | 2.91 |
|    | 425356 | BE244879  | Hs.155939 | NM_005541:Homo sapiens inositol polyphos | 2.91 |
|    | 427080 | AW068287  | Hs.301175 | NM_002872:Homo sapiens ras-related C3 bo | 2.91 |
| 15 | 426432 | AF001601  | Hs.169857 | NM_000305:Homo sapiens paraoxase 2 (PON2 | 2.90 |
|    | 431476 | BE612705  | Hs.256697 | Hs.256697:histidine triad nucleotide bin | 2.89 |
|    | 406659 | AA663985  | Hs.277477 | Hs.277477:major histocompatibility compl | 2.89 |
|    | 451144 | AW956103  | Hs.61712  | Hs.61712:Homo sapiens cD FLJ31548 fis, c | 2.89 |
|    | 456362 | AW973003  | Hs.179909 | Hs.179909:nuclear receptor coactivator 6 | 2.88 |
| 20 | 426440 | BE382756  | Hs.169902 | NM_006516:Homo sapiens solute carrier fa | 2.88 |
|    | 456974 | M12529    | Hs.169401 | NM_000041:Homo sapiens apolipoprotein E  | 2.88 |
|    | 418174 | L20688    | Hs.83656  | Hs.83656:Rho GDP dissociation inhibitor  | 2.88 |
|    | 446055 | AI815981  | Hs.12909  | Hs.12909:mucolin 1                       | 2.88 |
|    | 423184 | NM_004428 | Hs.1624   | NM_004428:Homo sapiens ephrin-A1 (EF1),  | 2.87 |
| 25 | 427700 | AA262294  | Hs.180383 | NM_001946:Homo sapiens dual specificity  | 2.87 |
|    | 410668 | BE379794  | Hs.159651 | NM_016629:Homo sapiens hypothetical prot | 2.87 |
|    | 444143 | AW747996  | Hs.160999 | Hs.160999:ESTs, Weakly similar to I7885  | 2.87 |
|    | 407151 | H25836    | Hs.301527 | Hs.301527:ESTs, Moderately similar to un | 2.86 |
|    | 449349 | AI825386  | Hs.352579 | Hs.352579:Homo sapiens, chromosome 20 op | 2.86 |
| 30 | 436997 | AA741151  | Hs.137323 | Hs.137323:ESTs                           | 2.86 |
|    | 446143 | BE245342  | Hs.306079 | NM_013336:Homo sapiens protein transport | 2.86 |
|    | 417355 | D13168    | Hs.82002  | Hs.82002:endothelin receptor type B      | 2.86 |
|    | 431685 | AW296135  | Hs.267659 | NM_006113:Homo sapiens vav 3 oncogene (V | 2.86 |
|    | 408877 | AA479033  | Hs.130315 | Hs.130315:ESTs                           | 2.85 |
| 35 | 429615 | AF258627  | Hs.211562 | NM_005502:Homo sapiens ATP-binding casse | 2.85 |
|    | 412014 | AI620650  | Hs.43761  | Hs.43761:gap junction protein, alpha 7,  | 2.84 |
|    | 436749 | AA584890  | Hs.5302   | NM_006149:Homo sapiens lectin, galactosi | 2.84 |
|    | 419625 | U91616    | Hs.182885 | NM_004556:Homo sapiens nuclear factor of | 2.84 |
|    | 439941 | AI392640  | Hs.18272  | Hs.18272:solute carrier family 38, membe | 2.84 |
| 40 | 436496 | AA281959  | Hs.5210   | NM_004877:Homo sapiens glia maturation f | 2.84 |
|    | 422100 | AI096988  | Hs.111554 | NM_005737:Homo sapiens ADP-ribosylation  | 2.83 |
|    | 439730 | AF035292  | Hs.6654   | Hs.6654:KIAA0657 protein                 | 2.83 |
|    | 447217 | BE465764  | Hs.17778  | NM_003872:Homo sapiens neuropilin 2 (NRP | 2.83 |
|    | 428343 | AL043021  | Hs.12705  | Hs.12705:similar to HYPOTHETICAL 43.1 KD | 2.82 |
| 45 | 440524 | R71264    | Hs.16798  | Hs.16798:Homo sapiens mR; cD DKFZp564O24 | 2.82 |
|    | 415523 | AL042003  | Hs.296847 | NM_003119:Homo sapiens spastic paraplegi | 2.81 |
|    | 439668 | AI091277  | Hs.302634 | Hs.302634:frizzled homolog 8 (Drosophila | 2.81 |
|    | 414570 | Y00285    | Hs.76473  | NM_000876:Homo sapiens insulin-like grow | 2.80 |
|    | 426535 | AU077012  | Hs.288582 | NM_006287:Homo sapiens tissue factor pat | 2.80 |
| 50 | 409649 | AA159216  | Hs.55505  | Hs.55505:hypothetical protein FLJ20442   | 2.80 |
|    | 406655 | M21533    | Hs.277477 | Hs.277477:major histocompatibility compl | 2.79 |
|    | 415323 | BE269352  | Hs.949    | NM_000433:Homo sapiens neutrophil cyto   | 2.79 |
|    | 443195 | BE148235  | Hs.193063 | Hs.193063:Homo sapiens cD FLJ14201 fis,  | 2.78 |
|    | 451356 | AA748418  | Hs.164577 | Hs.164577:ESTs                           | 2.78 |
| 55 | 450708 | AA376654  | Hs.350065 | Hs.350065:Homo sapiens cD FLJ30634 fis,  | 2.78 |
|    | 433681 | AI004377  | Hs.200360 | Hs.200360:Homo sapiens cD FLJ13027 fis,  | 2.77 |
|    | 442599 | AF078037  | Hs.324051 | NM_006663:Homo sapiens RelA-associated i | 2.76 |
|    | 414509 | AW161311  | Hs.76294  | NM_001780:Homo sapiens CD63 antigen (mel | 2.76 |
|    | 431394 | AK000692  | Hs.252351 | Hs.252351:HERV-H LTR-associating 2       | 2.76 |
| 60 | 417331 | AW411297  | Hs.81972  | Hs.81972:SHC (Src homology 2 domain cont | 2.76 |
|    | 415995 | NM_004573 | Hs.355888 | NM_004573:Homo sapiens phospholipase C,  | 2.75 |
|    | 414911 | NM_000107 | Hs.77602  | NM_000107:Homo sapiens damage-specific D | 2.75 |
|    | 425976 | C75094    | Hs.334514 | Hs.334514:chromosome 6 open reading fram | 2.75 |
|    | 407893 | BE408359  | Hs.43621  | Hs.43621:hypothetical protein MBC3205    | 2.75 |
| 65 | 407903 | AI287341  | Hs.154029 | Hs.154029:bHLH factor Hes4               | 2.75 |
|    | 416062 | AA724811  | Hs.334791 | Hs.334791:similar to neurol tetraspanin  | 2.75 |
|    | 428494 | AA233439  | Hs.184634 | Hs.184634:hypothetical protein FLJ20005  | 2.75 |
|    | 421506 | BE302796  | Hs.105097 | NM_003258:Homo sapiens thymidine kise 1, | 2.74 |
|    | 427581 | NM_014788 | Hs.179703 | NM_014788:Homo sapiens tripartite motif, | 2.74 |
| 70 | 424527 | AW138558  | Hs.334873 | Hs.334873:carboxypeptidase M             | 2.74 |
|    | 439578 | AW263124  | Hs.350547 | Hs.350547:nuclear receptor co-repressor/ | 2.74 |
|    | 425188 | AK002052  | Hs.155071 | Hs.155071:chromosome 20 open reading fra | 2.74 |
|    | 428013 | AF151020  | Hs.181444 | NM_016456:Homo sapiens hypothetical prot | 2.73 |
|    | 439333 | AW384710  | Hs.132986 | Hs.132986:Homo sapiens cD FLJ31588 fis,  | 2.73 |
| 75 | 450935 | BE514743  | Hs.355753 | NM_005851:Homo sapiens tumor suppressor  | 2.73 |
|    | 421532 | AW138207  | Hs.146170 | Hs.146170:hypothetical protein FLJ22969  | 2.73 |
|    | 440502 | AI824113  | Hs.78281  | Hs.78281:regulator of G-protein sigling  | 2.73 |
|    | 444981 | AW855398  | Hs.12210  | Hs.12210:tumor endothelial marker 6      | 2.72 |
|    | 439219 | N33883    | Hs.41322  | Hs.41322:ESTs                            | 2.72 |
| 80 | 416847 | L43821    | Hs.80261  | NM_006403:Homo sapiens enhancer of filam | 2.72 |
|    | 433179 | AW362945  | Hs.162459 | Hs.162459:ESTs                           | 2.72 |
|    | 424528 | AW073971  | Hs.238954 | Hs.238954:ESTs, Weakly similar to putati | 2.71 |
|    | 411213 | AA676939  | Hs.69285  | NM_003873:Homo sapiens neuropilin 1 (NRP | 2.70 |
|    | 433012 | NM_004045 | Hs.279910 | NM_004045:Homo sapiens ATX1 antioxidant  | 2.70 |

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|    |        |           |           |   |      |
|----|--------|-----------|-----------|---|------|
|    | 425345 | AU077297  | Hs.155894 | NM_002827:Homo sapiens protein tyrosine   | 2.69 |
|    | 428923 | BE047698  | Hs.188785 | ESTs                                      | 2.69 |
|    | 427923 | AW274357  | Hs.301406 | Hs.301406:hypothetical protein PP3501     | 2.69 |
| 5  | 446644 | NM_003272 | Hs.15791  | NM_003272:Homo sapiens transmembrane 7 s  | 2.69 |
|    | 421743 | T35958    | Hs.107614 | Hs.107614:DKFZP564I1171 protein           | 2.68 |
|    | 416207 | NM_014745 | Hs.79077  | NM_014745:Homo sapiens KIAA0233 gene pro  | 2.68 |
|    | 420372 | AW960049  | Hs.293660 | Hs.293660:gene overexpressed in astrocyt  | 2.68 |
|    | 420542 | NM_000505 | Hs.1321   | NM_000505:Homo sapiens coagulation facto  | 2.67 |
| 10 | 425069 | AA687465  | Hs.298184 | Hs.298184:potassium voltage-gated channe  | 2.67 |
|    | 418558 | AW082266  | Hs.86131  | NM_003824:Homo sapiens Fas (TNFRSF6)-ass  | 2.67 |
|    | 426251 | M24283    | Hs.168383 | NM_000201:Homo sapiens intercellular adh  | 2.66 |
|    | 406701 | AA780613  | Hs.62954  | Hs.62954:feritin, heavy polypeptide 1     | 2.66 |
|    | 431681 | AK000378  | Hs.267566 | Hs.267566:hypothetical protein FLJ20371   | 2.66 |
|    | 412833 | AW960547  | Hs.298262 | Hs.298262:ribosomal protein S19           | 2.66 |
| 15 | 433101 | AW572317  | Hs.12082  | Hs.12082:TIGA1                            | 2.66 |
|    | 414774 | X02419    | Hs.77274  | NM_002658:Homo sapiens plasminogen activ  | 2.66 |
|    | 427868 | AI360119  | Hs.181013 | NM_002629:Homo sapiens phosphoglycerate   | 2.66 |
|    | 413929 | BE501689  | Hs.75617  | Hs.75617:collagen, type IV, alpha 2       | 2.66 |
|    | 424762 | AL119442  | Hs.183684 | Hs.183684:eukaryotic translation initiat  | 2.66 |
| 20 | 422048 | NM_012445 | Hs.288126 | NM_012445:Homo sapiens spondin 2, extrac  | 2.65 |
|    | 431350 | AI192528  | Hs.164537 | ESTs                                      | 2.65 |
|    | 450184 | W31096    | Hs.237617 | Hs.237617:dipeptidylpeptidase 9           | 2.65 |
|    | 419285 | D31887    | Hs.89868  | Hs.89868:KIAA0062 protein                 | 2.65 |
| 25 | 414217 | AI309298  | Hs.279898 | Hs.279898:Homo sapiens cD: FLJ23165 fis,  | 2.64 |
|    | 451253 | H48299    | Hs.26126  | NM_006984:Homo sapiens claudin 10 (CLDN1  | 2.64 |
|    | 435905 | AW997484  | Hs.5003   | Hs.5003:SLIT-ROBO Rho GTPase-activating   | 2.64 |
|    | 432581 | AU076465  | Hs.278441 | NM_014634:Homo sapiens KIAA0015 gene pro  | 2.63 |
|    | 415782 | AA169345  | Hs.123177 | Hs.123177:hypothetical protein BC011406   | 2.63 |
| 30 | 430223 | NM_002514 | Hs.235935 | NM_002514:Homo sapiens nephroblastoma ov  | 2.63 |
|    | 417526 | AA568906  | Hs.82240  | NM_004177:Homo sapiens syntaxin 3A (STX3  | 2.63 |
|    | 409556 | AW103364  | Hs.727    | NM_002192:Homo sapiens inhibin, beta A (  | 2.63 |
|    | 449843 | R85337    | Hs.24030  | NM_001860:Homo sapiens solute carrier fa  | 2.62 |
|    | 417389 | BE260964  | Hs.82045  | NM_002391:Homo sapiens midkine (neurite   | 2.62 |
| 35 | 446312 | BE087853  | Hs.171802 | Hs.171802:Homo sapiens, clone IMAGE:3956  | 2.62 |
|    | 435099 | AC004770  | Hs.4756   | Hs.4756:flap structure-specific endonuc   | 2.62 |
|    | 417920 | S47833    | Hs.82927  | NM_004037:Homo sapiens adenosine monopho  | 2.62 |
|    | 435702 | AI033647  | Hs.121001 | Hs.121001:Homo sapiens, clone MGC:4552 I  | 2.62 |
|    | 422959 | AV647015  | Hs.349256 | Hs.349256:paired immunoglobulin-like rec  | 2.62 |
| 40 | 419938 | AU076772  | Hs.1279   | NM_001733:Homo sapiens complement compon  | 2.62 |
|    | 450954 | AI904740  | Hs.25691  | NM_005856:Homo sapiens receptor (calcitri | 2.61 |
|    | 421753 | BE314828  | Hs.107911 | Hs.107911:ATP-binding cassette, sub-fami  | 2.61 |
|    | 443577 | AI078033  | Hs.177170 | Hs.177170:ESTs, Weakly similar to ALU8_H  | 2.61 |
|    | 453886 | R66282    | Hs.20247  | ESTs                                      | 2.61 |
| 45 | 421883 | X55079    | Hs.1437   | NM_000152:Homo sapiens glucosidase, alph  | 2.60 |
|    | 440457 | BE387593  | Hs.21321  | Hs.21321:granule cell differentiation pr  | 2.60 |
|    | 410295 | AA741357  | Hs.356624 | ESTs                                      | 2.59 |
|    | 420679 | X57152    | Hs.99853  | NM_001436:Homo sapiens fibrinogen (FBL)   | 2.59 |
|    | 451558 | NM_001089 | Hs.26630  | NM_001089:Homo sapiens ATP-binding casse  | 2.59 |
| 50 | 444672 | Z95636    | Hs.11669  | Hs.11669:laminin, alpha 5                 | 2.59 |
|    | 408669 | AI493591  | Hs.78146  | Hs.78146:platelet/endothelial cell adhes  | 2.59 |
|    | 426194 | T50872    | Hs.2001   | Hs.2001:thromboxane A synthase 1 (plate   | 2.59 |
|    | 421814 | L12350    | Hs.108623 | NM_003247:Homo sapiens thrombospondin 2   | 2.59 |
|    | 456371 | S76825    | Hs.89695  | Hs.89695:insulin receptor                 | 2.59 |
| 55 | 429098 | AF030249  | Hs.196176 | NM_001398:Homo sapiens enoyl Coenzyme A   | 2.59 |
|    | 414443 | AU077268  | Hs.76144  | NM_002609:Homo sapiens platelet-derived   | 2.59 |
|    | 428484 | AF104032  | Hs.184601 | NM_003486:Homo sapiens solute carrier fa  | 2.59 |
|    | 453309 | AI791809  | Hs.32949  | NM_005218:Homo sapiens defensin, beta 1   | 2.59 |
|    | 412867 | AU076861  | Hs.74637  | NM_003217:Homo sapiens testis enhanced g  | 2.58 |
| 60 | 432827 | Z68128    | Hs.3109   | Hs.3109:Rho GTPase activating protein 4   | 2.58 |
|    | 412669 | AW890841  | Hs.96908  | NM_006034:Homo sapiens p53-induced prote  | 2.58 |
|    | 412115 | AK001763  | Hs.73239  | Hs.73239:hypothetical protein FLJ10901    | 2.58 |
|    | 452866 | R26969    | Hs.268016 | Hs.268016:Homo sapiens cD: FLJ21243 fis,  | 2.58 |
|    | 435129 | AI381659  | Hs.267086 | ESTs                                      | 2.57 |
| 65 | 424482 | BE268621  | Hs.149155 | NM_003374:Homo sapiens voltage-dependent  | 2.57 |
|    | 410494 | M36564    | Hs.64016  | NM_000313:Homo sapiens protein S (alpha)  | 2.56 |
|    | 433895 | AI287912  | Hs.3628   | NM_004834:Homo sapiens mitogen-activated  | 2.56 |
|    | 442566 | R37337    | Hs.12111  | ESTs                                      | 2.56 |
|    | 417640 | D30857    | Hs.82353  | NM_006404:Homo sapiens protein C recepto  | 2.56 |
| 70 | 442622 | NM_000435 | Hs.8546   | NM_000435:Homo sapiens Notch homolog 3 (  | 2.56 |
|    | 430346 | AK000331  | Hs.297641 | Hs.297641:retinoblastoma-associated fact  | 2.55 |
|    | 419344 | U94905    | Hs.277445 | Hs.277445:diacylglycerol kase, zeta (104  | 2.55 |
|    | 426500 | NM_014638 | Hs.170156 | NM_014638:Homo sapiens KIAA0450 gene pro  | 2.55 |
|    | 408048 | NM_007203 | Hs.42322  | NM_007203:Homo sapiens A kase (PRKA) anc  | 2.55 |
| 75 | 450700 | AW732799  | Hs.25348  | NM_005860:Homo sapiens follistatin-like   | 2.54 |
|    | 417018 | M16038    | Hs.80887  | NM_002350:Homo sapiens v-yes-1 Yamaguchi  | 2.54 |
|    | 419378 | R24922    | Hs.90078  | Hs.90078:nucleotide-sugar transporter si  | 2.54 |
|    | 422451 | AA310753  | Hs.42491  | Hs.42491:ESTs, Moderately similar to hyp  | 2.53 |
|    | 435906 | AI686379  | Hs.110796 | Hs.110796:SAR1 protein                    | 2.53 |
| 80 | 400231 |           |           |   | 2.53 |
|    | 417849 | AW291587  | Hs.82733  | NM_007361:Homo sapiens nidogen 2 (NID2),  | 2.53 |
|    | 427380 | NM_005534 | Hs.177559 | NM_005534:Homo sapiens interferon gamma   | 2.52 |
|    | 428385 | AF112213  | Hs.184062 | Hs.184062:chromosome 20 open reading fra  | 2.52 |
|    | 438000 | AI825880  | Hs.5985   | Hs.5985:non-kise Cdc42 effector protein   | 2.52 |

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|    |        |           |           |   |      |
|----|--------|-----------|-----------|---|------|
|    | 448719 | AA033627  | Hs.21858  | Hs.21858:serine (or cysteine) protease i  | 2.52 |
|    | 422396 | W21872    | Hs.7907   | Hs.7907:L-fucose kase                     | 2.52 |
|    | 420787 | AA564248  | Hs.351292 | Hs.351292:Homo sapiens cD FLJ32605 fis,   | 2.51 |
| 5  | 430590 | AW383947  | Hs.246381 | NM_001251:Homo sapiens CD68 antigen (CD6  | 2.51 |
|    | 447026 | BE313144  | Hs.324844 | Hs.324844:hypothetical protein IMAGE3455  | 2.51 |
|    | 439223 | AW238299  | Hs.250618 | Hs.250618:UL16 binding protein 2          | 2.50 |
|    | 435151 | AA348482  | Hs.4788   | Hs.4788:nicastatin                        | 2.50 |
|    | 448202 | AB002292  | Hs.20695  | NM_014629:Homo sapiens Rho guanine nucle  | 2.50 |
|    | 449943 | AF104266  | Hs.24212  | Hs.24212:latrophilin                      | 2.50 |
| 10 | 425743 | BE396495  | Hs.159428 | Hs.159428:BCL2-associated X protein       | 2.50 |
|    | 444681 | AJ243937  | Hs.288316 | Hs.288316:chromosome 6 open reading fram  | 2.50 |
|    | 421643 | BE281170  | Hs.106357 | NM_007126:Homo sapiens valosin-containin  | 2.50 |
|    | 426865 | D63476    | Hs.172813 | NM_003899:Homo sapiens Rho guanine nucle  | 2.50 |
|    | 432306 | Y18207    | Hs.303090 | NM_005398:Homo sapiens protein phosphata  | 2.49 |
| 15 | 421846 | AA017707  | Hs.1432   | NM_002743:Homo sapiens protein kase C su  | 2.49 |
|    | 421905 | AI660247  | Hs.32699  | Hs.32699:Homo sapiens, Similar to RIKEN   | 2.49 |
|    | 419493 | AF001212  | Hs.90744  | NM_002815:Homo sapiens proteasome (proso  | 2.49 |
|    | 422530 | AW972300  | Hs.118110 | NM_004335:Homo sapiens bone marrow strom  | 2.48 |
|    | 442821 | BE391929  | Hs.8752   | NM_014255:Homo sapiens transmembrane pro  | 2.48 |
| 20 | 416919 | T97839    | Hs.80464  | NM_006402:Homo sapiens hepatitis B virus  | 2.48 |
|    | 443105 | X96753    | Hs.9004   | NM_001897:Homo sapiens chondroitin sulfa  | 2.48 |
|    | 430040 | AW503115  | Hs.227823 | NM_014287:Homo sapiens pM5 protein (PMS)  | 2.48 |
|    | 428028 | U52112    | Hs.182018 | NM_001569:Homo sapiens interleukin-1 rec  | 2.47 |
| 25 | 424307 | AW293399  | Hs.356377 | Hs.356377:Homo sapiens, clone IMAGE.3633  | 2.46 |
|    | 434511 | R28982    | Hs.18106  | Hs.18106:ESTs, Weakly similar to T06291   | 2.46 |
|    | 454390 | AB020713  | Hs.56966  | Hs.56966:KIAA0906 protein                 | 2.46 |
|    | 417785 | X59812    | Hs.82568  | NM_000784:Homo sapiens cytochrome P450,   | 2.46 |
|    | 424673 | AA345051  | Hs.294092 | Hs.294092:Homo sapiens mR full length in  | 2.46 |
|    | 422003 | AA361760  | Hs.296326 | Hs.296326:ESTs, Weakly similar to A33533  | 2.46 |
| 30 | 432126 | AA865239  | Hs.37196  | Hs.37196:putative G protein coupled rece  | 2.46 |
|    | 445937 | AI452943  | Hs.321231 | NM_003779:Homo sapiens UDP-GalbetaGloc    | 2.46 |
|    | 409354 | N68188    | Hs.159472 | Hs.159472:Homo sapiens cD: FLJ22224 fis,  | 2.46 |
|    | 401179 |           |           |   | 2.46 |
| 35 | 418151 | AA864238  | Hs.83583  | NM_005731:Homo sapiens actin related pro  | 2.45 |
|    | 422648 | D86983    | Hs.118893 | Hs.118893:Melanoma associated gene        | 2.45 |
|    | 427759 | BE245578  | Hs.2200   | NM_005041:Homo sapiens perforin 1 (prefo  | 2.45 |
|    | 431222 | X56777    | Hs.273790 | NM_007155:Homo sapiens zo pellucida glyco | 2.45 |
|    | 411529 | AA430348  | Hs.317596 | Hs.317596:Homo sapiens cD FLJ12927 fis,   | 2.45 |
| 40 | 426825 | AL133415  | Hs.297753 | NM_003380:Homo sapiens vimentin (VIM), m  | 2.45 |
|    | 422242 | AJ251760  | Hs.273385 | NM_016592:Homo sapiens GS complex locus   | 2.45 |
|    | 408105 | AW152207  | Hs.270977 | Hs.270977:ESTs                            | 2.44 |
|    | 426410 | BE298446  | Hs.305890 | Hs.305890:BCL2-like 1                     | 2.44 |
|    | 421064 | AI245432  | Hs.101382 | NM_006291:Homo sapiens tumor necrosis fa  | 2.44 |
| 45 | 428157 | AI738719  | Hs.198427 | NM_000189:Homo sapiens hexokise 2 (HK2),  | 2.44 |
|    | 424398 | BE397787  | Hs.146393 | NM_014685:Homo sapiens homocysteine-indu  | 2.44 |
|    | 424825 | AF207069  | Hs.153357 | NM_001084:Homo sapiens procollagen-lysin  | 2.44 |
|    | 426031 | AA295251  | Hs.166066 | Hs.166066:cisplatin resistance associate  | 2.43 |
|    | 409817 | BE295464  | Hs.56607  | Hs.56607:Williams-Beuren syndrome chromo  | 2.43 |
| 50 | 429359 | W00482    | Hs.2399   | NM_004995:Homo sapiens matrix metallopro  | 2.43 |
|    | 426761 | AI015709  | Hs.172089 | Hs.172089:pro-oncosis receptor inducing   | 2.43 |
|    | 429332 | AF030403  | Hs.199263 | NM_013233:Homo sapiens senné threonine    | 2.43 |
|    | 425923 | NM_005026 | Hs.162808 | NM_005026:Homo sapiens phosphoinositide-  | 2.43 |
|    | 432211 | BE274530  | Hs.273333 | Hs.273333:hypothetical protein FLJ10986   | 2.43 |
| 55 | 433339 | AF019226  | Hs.8036   | Hs.8036:RAB3D, member RAS oncogene famil  | 2.42 |
|    | 420539 | AA282735  | Hs.44004  | Hs.44004:AD031 protein                    | 2.42 |
|    | 413243 | AA769266  | Hs.193657 | Hs.193657:ESTs                            | 2.42 |
|    | 435029 | AF167705  | Hs.19280  | Hs.19280:cysteine-rich motor neuron 1     | 2.42 |
|    | 422374 | AW732869  | Hs.1519   | Hs.1519:protein kase, cAMP-dependent, re  | 2.42 |
| 60 | 444501 | AW247624  | Hs.11342  | NM_004148:Homo sapiens ninjurin 1 (NINJ1  | 2.42 |
|    | 414919 | AW087337  | Hs.194461 | Hs.194461:ESTs                            | 2.42 |
|    | 419355 | AA428520  | Hs.90061  | NM_006667:Homo sapiens progesterone rece  | 2.42 |
|    | 436042 | AF284422  | Hs.119178 | Hs.119178:cation-chloride cotransporter-  | 2.42 |
|    | 418245 | AA088767  | Hs.83883  | Hs.83883:transmembrane, prostate androge  | 2.42 |
| 65 | 444215 | AB033075  | Hs.10669  | Hs.10669:development and differentiation  | 2.41 |
|    | 408683 | R58665    | Hs.46847  | NM_016614:Homo sapiens TRAF and TNF rece  | 2.41 |
|    | 423701 | AA329856  | Hs.143022 | Hs.143022:ESTs                            | 2.41 |
|    | 441783 | BE313412  | Hs.7961   | Hs.7961:Homo sapiens clone 25012 mR sequ  | 2.41 |
|    | 428072 | BE258602  | Hs.182366 | NM_016292:Homo sapiens heat shock protei  | 2.41 |
| 70 | 434599 | AB002313  | Hs.3989   | Hs.3989:plexin B2                         | 2.40 |
|    | 442351 | W52642    | Hs.8261   | Hs.8261:SPRY domain-containing SOCS box   | 2.40 |
|    | 407894 | AJ278313  | Hs.41143  | Hs.41143:phospholipase C, beta 1 (phosph  | 2.40 |
|    | 453449 | W16752    | Hs.32981  | Hs.32981:sema domain, immunoglobulin dom  | 2.40 |
|    | 408688 | AI634522  | Hs.152925 | Hs.152925:KIAA1268 protein                | 2.40 |
|    | 422448 | AW372922  | Hs.116774 | Hs.116774:integrin, alpha 1               | 2.39 |
| 75 | 416269 | AA177138  | Hs.161671 | Hs.161671:ESTs                            | 2.39 |
|    | 452679 | Z42387    | Hs.83883  | Hs.83883:transmembrane, prostate androge  | 2.38 |
|    | 432981 | NM_002733 | Hs.3136   | NM_002733:Homo sapiens protein kase, AMP  | 2.38 |
|    | 419846 | NM_015977 | Hs.285681 | Hs.285681:Williams Beuren syndrome chrom  | 2.38 |
|    | 422110 | AI376736  | Hs.111779 | Hs.111779:secreted protein, acidic, cyst  | 2.38 |
| 80 | 413092 | AA126856  | Hs.118665 | Hs.118665:ESTs                            | 2.38 |
|    | 433969 | AW207279  | Hs.271786 | Hs.271786:ESTs, Weakly similar to PC4395  | 2.37 |
|    | 451267 | AI033894  | Hs.117865 | Hs.117865:solute carrier family 17 (anion | 2.37 |
|    | 447526 | AL048753  | Hs.303649 | NM_002982:Homo sapiens small inducible c  | 2.37 |



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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
| 5  | 441623 | AA315805  | Hs.348710 | Hs.348710:Homo sapiens, clone IMAGE:4242 | 2.37 |
|    | 420255 | NM_007289 | Hs.1298   | NM_007289:Homo sapiens membrane metallo- | 2.37 |
|    | 409274 | NM_003930 | Hs.52644  | NM_003930:Homo sapiens src family associ | 2.36 |
|    | 422801 | AF125672  | Hs.287994 | Hs.287994:nuclear receptor co-repressor  | 2.36 |
|    | 407887 | AA579668  | Hs.41072  | Hs.41072:serine (or cysteine) protease i | 2.36 |
| 10 | 408212 | AA297567  | Hs.43728  | NM_015696:Homo sapiens weakly similar to | 2.36 |
|    | 430478 | NM_014349 | Hs.241535 | NM_014349:Homo sapiens apolipoprotein L, | 2.36 |
|    | 405102 |           |           |  | 2.35 |
|    | 423583 | AL122055  | Hs.129836 | Hs.129836:KIAA1028 protein               | 2.35 |
|    | 426125 | X87241    | Hs.166994 | NM_005245:Homo sapiens FAT tumor suppres | 2.35 |
| 15 | 425204 | NM_002436 | Hs.1861   | NM_002436:Homo sapiens membrane protein, | 2.35 |
|    | 420676 | AI434780  | Hs.4248   | Hs.4248:Homo sapiens PP3781 mR, complete | 2.35 |
|    | 421079 | AW404994  | Hs.101695 | Hs.101695:NCK adaptor protein 2          | 2.35 |
|    | 410039 | AF207989  | Hs.58014  | Hs.58014:G protein-coupled receptor, fam | 2.34 |
|    | 412958 | BE391579  | Hs.75087  | NM_006712:Homo sapiens FAST kise (FASTK) | 2.34 |
| 20 | 430363 | M28713    | Hs.274464 | NM_000398:Homo sapiens diaphorase (DH) ( | 2.34 |
|    | 425397 | J04088    | Hs.155346 | NM_001067:Homo sapiens topoisomerase (D) | 2.34 |
|    | 451035 | AU076785  | Hs.430    | NM_002670:Homo sapiens plastin 1 (I iso) | 2.34 |
|    | 449027 | AJ271216  | Hs.22880  | Hs.22880:dipeptidylpeptidase III         | 2.34 |
|    | 429457 | BE243065  | Hs.202955 | Hs.202955:hypothetical protein FLJ20507  | 2.34 |
| 25 | 417709 | D87434    | Hs.82426  | NM_014734:Homo sapiens KIAA0247 gene pro | 2.34 |
|    | 412805 | AW954569  | Hs.278675 | Hs.278675:bromodomain-containing 4       | 2.34 |
|    | 427647 | W19744    | Hs.180059 | Hs.180059:Homo sapiens cD FLJ31360 fis,  | 2.34 |
|    | 430702 | U56979    | Hs.278588 | NM_000186:Homo sapiens H factor 1 (compl | 2.33 |
|    | 456804 | AI421645  | Hs.139851 | NM_001233:Homo sapiens cavedin 2 (CAV2)  | 2.33 |
| 30 | 453648 | W21493    | Hs.28329  | Hs.28329:protein phosphatase 1, regulato | 2.33 |
|    | 450812 | AB002360  | Hs.25515  | Hs.25515:MCF.2 cell line derived transfo | 2.33 |
|    | 402575 |           |           |  | 2.33 |
|    | 424670 | W61215    | Hs.116651 | NM_005797:Homo sapiens epithelial V-like | 2.32 |
|    | 452960 | AK001335  | Hs.31137  | NM_006504:Homo sapiens protein tyrosine  | 2.32 |
| 35 | 442968 | AK000606  | Hs.8868   | NM_004871:Homo sapiens golgi SP receptor | 2.32 |
|    | 410639 | BE269047  | Hs.65234  | Hs.65234:DEAD/H (Asp-Glu-Ala-Asp/His) bo | 2.32 |
|    | 415169 | W42913    | Hs.78089  | NM_004231:Homo sapiens ATPase, H+ transp | 2.32 |
|    | 450160 | BE048099  | Hs.183738 | Hs.183738:FERM, RhoGEF (ARHGEF) and plec | 2.32 |
|    | 407223 | H96850    |           | H96850:yw03b12.s1 Soares melanocyte 2NbH | 2.32 |
| 40 | 426780 | BE242284  | Hs.172199 | NM_001114:Homo sapiens adenylate cyclase | 2.32 |
|    | 434987 | AW975114  | Hs.371677 | Hs.371677:ESTs                           | 2.32 |
|    | 416354 | NM_000633 | Hs.79241  | NM_000633:Homo sapiens B-cell CLL/lympho | 2.31 |
|    | 453107 | NM_016113 | Hs.279746 | NM_016113:Homo sapiens transient recepto | 2.31 |
|    | 422963 | M79141    | Hs.13234  | Hs.13234:ESTs, Weakly similar to hypothe | 2.31 |
| 45 | 433618 | AA602539  | Hs.345494 | Hs.345494:ESTs, Moderately similar to ZN | 2.31 |
|    | 438584 | AA811347  |           | AA811347:ob81h06.s1 NCI_CGAP_GCB1 Homo s | 2.31 |
|    | 446126 | AW085909  | Hs.356618 | Hs.356618:ESTs, Weakly similar to PC4259 | 2.31 |
|    | 408716 | AI567839  | Hs.151714 | Hs.151714:peroxisomal proliferator-activ | 2.30 |
|    | 433230 | AW136134  | Hs.220277 | Hs.220277:ESTs, Weakly similar to expres | 2.30 |
| 50 | 410168 | AW834050  | Hs.351432 | Hs.351432:tensin                         | 2.30 |
|    | 446342 | BE298665  | Hs.14846  | Hs.14846:Homo sapiens mR: cD DKFZp564D01 | 2.30 |
|    | 418452 | BE379749  | Hs.85201  | NM_005127:Homo sapiens C-type (calcium d | 2.30 |
|    | 453175 | NM_006834 | Hs.32217  | NM_006834:Homo sapiens RAB32, member RAS | 2.29 |
|    | 409012 | AL117435  | Hs.49725  | Hs.49725:DKFZP434I216 protein            | 2.29 |
| 55 | 452848 | AI417193  | Hs.288912 | Hs.288912:BBP-like protein 2             | 2.29 |
|    | 418838 | AW385224  | Hs.35198  | Hs.35198:ectonucleotide pyrophosphatase/ | 2.29 |
|    | 422562 | AI962060  | Hs.118397 | NM_001129:Homo sapiens AE binding protei | 2.28 |
|    | 432828 | AB042326  | Hs.287402 | Hs.287402:chondroitin 4-sulfotransferase | 2.28 |
|    | 412948 | BE243313  | Hs.334851 | NM_006148:Homo sapiens LIM and SH3 prote | 2.28 |
| 60 | 425068 | AF029778  | Hs.166154 | NM_002226:Homo sapiens jagged 2 (JAG2),  | 2.28 |
|    | 456919 | NM_003900 | Hs.182248 | NM_003900:Homo sapiens sequestosome 1 (S | 2.28 |
|    | 452806 | AW014549  | Hs.58373  | Hs.58373:ESTs                            | 2.28 |
|    | 453983 | H94997    | Hs.16450  | Hs.16450:ESTs                            | 2.28 |
|    | 407736 | N41744    | Hs.349326 | Hs.349326:Homo sapiens cD FLJ30677 fis,  | 2.28 |
| 65 | 413211 | AW967107  | Hs.109274 | Hs.109274:hypothetical protein MGC4365   | 2.28 |
|    | 422051 | AW327546  | Hs.111024 | Hs.111024:solute carrier family 25 (mito | 2.27 |
|    | 438438 | AA257992  | Hs.50651  | Hs.50651:Janus kise 1 (a protein tyrosin | 2.27 |
|    | 436278 | BE396290  | Hs.5097   | NM_004710:Homo sapiens syptogyrin 2 (SYN | 2.27 |
|    | 454080 | AI199711  | Hs.576    | NM_000147:Homo sapiens fucosidase, alpha | 2.27 |
| 70 | 426542 | AF190746  | Hs.170310 | NM_017424:Homo sapiens cat eye syndrome  | 2.27 |
|    | 417115 | AW952792  | Hs.334612 | NM_003094:Homo sapiens small nuclear rib | 2.27 |
|    | 402901 |           |           |  | 2.26 |
|    | 412898 | AI129903  | Hs.74669  | NM_006634:Homo sapiens vesicle-associate | 2.26 |
|    | 413020 | R98736    |           | R98736:yr31h09.r1 Soares fetal liver spl | 2.26 |
| 75 | 413939 | AL047051  | Hs.199961 | Hs.199961:ESTs, Weakly similar to hypoth | 2.26 |
|    | 408681 | AW953853  | Hs.281462 | Hs.281462:hypothetical protein FLJ14251  | 2.25 |
|    | 412330 | NM_005100 | Hs.788    | NM_005100:Homo sapiens A kise (PRKA) anc | 2.25 |
|    | 442083 | R50192    | Hs.165062 | Hs.165062:ESTs                           | 2.25 |
|    | 418271 | NM_000919 | Hs.83920  | NM_000919:Homo sapiens peptidylglycine a | 2.25 |
| 80 | 433376 | AI249361  | Hs.74122  | NM_001225:Homo sapiens caspase 4, apopto | 2.25 |
|    | 438562 | AI566826  | Hs.25890  | Hs.25890:ESTs, Weakly similar to transdu | 2.25 |
|    | 443883 | AA114212  | Hs.9930   | NM_001235:Homo sapiens serine (or cystei | 2.25 |
|    | 416976 | BE243985  | Hs.80680  | Hs.80680:major vault protein             | 2.24 |
|    | 416914 | AA344481  | Hs.80426  | Hs.80426:brain and reproductive organ-ex | 2.24 |
|    | 400288 | X06256    | Hs.149609 | NM_002205:Homo sapiens integrin, alpha 5 | 2.24 |
|    | 407904 | W44735    | Hs.107260 | Hs.107260:putative UDP-Galac:polypeptide | 2.24 |
|    | 429690 | AW956329  | Hs.23721  | Hs.23721:ESTs                            | 2.24 |

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|    |        |           |           |   |      |
|----|--------|-----------|-----------|---|------|
|    | 443813 | AA876372  | Hs.93961  | Hs.93961:Homo sapiens mR; cD DKFZp667D09  | 2.24 |
|    | 427458 | BE208364  | Hs.29283  | Hs.29283:ESTs, Weakly similar to LKHU pr  | 2.24 |
|    | 454294 | AB000734  | Hs.50640  | NM_003745:Homo sapiens JAK binding prote  | 2.24 |
| 5  | 407192 | AA609200  | Hs.366318 | Hs.366318:ESTs                            | 2.23 |
|    | 425751 | T19239    | Hs.1940   | NM_001885:Homo sapiens crystallin, alpha  | 2.23 |
|    | 456437 | AI924228  | Hs.115185 | Hs.115185:ESTs                            | 2.23 |
|    | 413019 | BE281604  | Hs.75140  | NM_002337:Homo sapiens low density lipop  | 2.23 |
|    | 418662 | BE550964  | Hs.89399  | Hs.89399:ATP synthase, H- transporting,   | 2.23 |
| 10 | 435284 | AA879470  | Hs.96849  | Hs.96849:Homo sapiens cD FLJ11492 fis, c  | 2.23 |
|    | 429630 | M85289    | Hs.211573 | NM_005529:Homo sapiens heparan sulfate p  | 2.23 |
|    | 427609 | AK000436  | Hs.179791 | Hs.179791:RAB20, member RAS oncogene fam  | 2.23 |
|    | 421917 | AB028943  | Hs.109445 | Hs.109445:hypermethylated in cancer 2     | 2.23 |
|    | 446616 | R65964    | Hs.334873 | Hs.334873:carboxypeptidase M              | 2.23 |
|    | 407232 | X04526    |           | X04526:Human liver mR for beta-subunit s  | 2.23 |
| 15 | 423798 | AF047033  | Hs.132904 | Hs.132904:solute carrier family 4, sodiu  | 2.23 |
|    | 446755 | AW451473  | Hs.16134  | NM_005990:Homo sapiens serine/threonine   | 2.22 |
|    | 452865 | AI924046  | Hs.119567 | Hs.119567:ESTs, Weakly similar to ALU1_H  | 2.22 |
|    | 431393 | AW971493  | Hs.134269 | Hs.134269:ESTs, Weakly similar to 200439  | 2.22 |
| 20 | 431890 | X17033    | Hs.271986 | NM_002203:Homo sapiens integrin, alpha 2  | 2.22 |
|    | 428782 | X12830    | Hs.193400 | NM_000565:Homo sapiens interleukin 6 rec  | 2.22 |
|    | 446006 | NM_004403 | Hs.13530  | NM_004403:Homo sapiens deafness, autosom  | 2.22 |
|    | 436418 | AJ245874  | Hs.4245   | Hs.4245:chromosome 11 hypothetical prote  | 2.22 |
|    | 423869 | BE409301  | Hs.134012 | NM_006688:Homo sapiens C1q-related facto  | 2.21 |
| 25 | 437730 | AW071087  | Hs.239176 | Hs.239176:insulin-like growth factor 1 r  | 2.21 |
|    | 444020 | R92962    | Hs.35052  | Hs.35052:ESTs                             | 2.21 |
|    | 413882 | AA132973  | Hs.184492 | Hs.184492:Homo sapiens mR; cD DKFZp667B0  | 2.21 |
|    | 412654 | AI093480  | Hs.374319 | Hs.374319:ESTs                            | 2.21 |
|    | 448988 | Y09763    | Hs.22785  | NM_004961:Homo sapiens gamma-aminobutyri  | 2.21 |
| 30 | 426841 | AI052358  | Hs.131741 | Hs.131741:ESTs                            | 2.21 |
|    | 408196 | AL034548  | Hs.43627  | NM_006943:Homo sapiens SRY (sex determin  | 2.21 |
|    | 451711 | AK000461  | Hs.26890  | Hs.26890:cat eye syndrome chromosome reg  | 2.20 |
|    | 414325 | AA251929  | Hs.355341 | Hs.355341:Homo sapiens, clone IMAGE:3536  | 2.20 |
|    | 424512 | X53002    | Hs.149846 | NM_002213:Homo sapiens integrin, beta 5   | 2.20 |
| 35 | 448883 | BE614989  | Hs.7503   | Hs.7503:hypothetical protein FLJ14153     | 2.20 |
|    | 411296 | BE207307  | Hs.10114  | Hs.10114:growth suppressor 1              | 2.20 |
|    | 452268 | NM_003512 | Hs.28777  | NM_003512:Homo sapiens H2A histone famil  | 2.20 |
|    | 416810 | AF035606  | Hs.80019  | NM_013232:Homo sapiens programmed cell d  | 2.20 |
|    | 441415 | H21497    | Hs.7471   | Hs.7471:BBP-like protein 1                | 2.20 |
| 40 | 444212 | AW503976  | Hs.10649  | NM_004848:Homo sapiens basement membrane  | 2.19 |
|    | 428044 | AA093322  | Hs.301404 | NM_006743:Homo sapiens R binding motif p  | 2.19 |
|    | 430017 | AA263172  | Hs.35     | NM_002832:Homo sapiens protein tyrosine   | 2.19 |
|    | 424490 | AJ278016  | Hs.55565  | Hs.55565:ankyrin repeat domain 3          | 2.19 |
|    | 431193 | AW749505  | Hs.296770 | Hs.296770:KIAA1719 protein                | 2.19 |
| 45 | 453686 | AL110326  | Hs.304679 | Hs.304679:ESTs, Weakly similar to Z195_H  | 2.19 |
|    | 448262 | AW880830  | Hs.186273 | Hs.186273:ESTs                            | 2.19 |
|    | 416065 | BE267931  | Hs.78996  | NM_002592:Homo sapiens proliferating cel  | 2.19 |
|    | 442045 | C05768    | Hs.8078   | Hs.8078:Homo sapiens clone FBD3 Cri-du-c  | 2.19 |
|    | 423804 | AW403448  | Hs.1706   | NM_006084:Homo sapiens interferon-stimul  | 2.19 |
|    | 428024 | Z29067    | Hs.2236   | Hs.2236:NIMA (never in mitosis gene a)-r  | 2.19 |
| 50 | 424503 | NM_002205 | Hs.149509 | NM_002205:Homo sapiens integrin, alpha 5  | 2.19 |
|    | 437696 | Z83844    | Hs.5790   | Hs.5790:hypothetical protein dJ37E16.5    | 2.18 |
|    | 405204 |           |           |   | 2.18 |
|    | 426158 | NM_001982 | Hs.199067 | NM_001982:Homo sapiens v-erb-b2 erythro   | 2.18 |
| 55 | 417418 | NM_002468 | Hs.82116  | NM_002468:Homo sapiens myeloid different  | 2.18 |
|    | 412773 | H15785    | Hs.74573  | NM_012268:Homo sapiens similar to vaccin  | 2.18 |
|    | 409402 | AF208234  | Hs.695    | NM_000100:Homo sapiens cystatin B (stefi  | 2.18 |
|    | 443791 | N64458    | Hs.143345 | Hs.143345:ESTs                            | 2.18 |
|    | 435049 | AL122067  | Hs.4746   | Hs.4746:hypothetical protein FLJ21324     | 2.18 |
| 60 | 418389 | AA830613  | Hs.293849 | Hs.293849:ESTs                            | 2.18 |
|    | 450712 | AI732130  | Hs.270496 | Hs.270496:ESTs, Weakly similar to ALUB_H  | 2.18 |
|    | 422007 | AI739435  | Hs.39168  | Hs.39168:ESTs, Weakly similar to T17340   | 2.18 |
|    | 453676 | AW853745  | Hs.286035 | Hs.286035:hypothetical protein FLJ22686   | 2.18 |
|    | 415718 | F30631    | Hs.200237 | Hs.200237:ESTs                            | 2.18 |
|    | 452688 | AA721140  | Hs.49930  | Hs.49930:ESTs, Weakly similar to B34087   | 2.18 |
| 65 | 415988 | BE407713  | Hs.78943  | NM_000386:Homo sapiens bleomycin hydrola  | 2.18 |
|    | 409453 | AI885516  | Hs.95612  | Hs.95612:ESTs                             | 2.17 |
|    | 417512 | X76534    | Hs.82226  | NM_002510:Homo sapiens glycoprotein (tra  | 2.17 |
|    | 427202 | BE272922  | Hs.173936 | NM_000628:Homo sapiens interleukin 10 re  | 2.17 |
|    | 440983 | M20681    | Hs.7594   | NM_006931:Homo sapiens solute carrier fa  | 2.17 |
| 70 | 416084 | L16991    | Hs.79006  | NM_012145:Homo sapiens deoxythymidylate   | 2.17 |
|    | 429642 | X68264    | Hs.211579 | NM_006500:Homo sapiens melanoma adhesio   | 2.17 |
|    | 427213 | AW007211  | Hs.348389 | Hs.348389:hypothetical protein FLJ12876   | 2.17 |
|    | 437763 | AA469369  | Hs.5831   | NM_003254:Homo sapiens tissue inhibitor   | 2.17 |
| 75 | 454000 | AA040620  | Hs.5672   | Hs.5672:golgi membrane protein SB140      | 2.17 |
|    | 424247 | X14008    | Hs.234734 | NM_000239:Homo sapiens lysozyme (rel amy  | 2.16 |
|    | 403857 |           |           |   | 2.16 |
|    | 406648 | AA563730  | Hs.277477 | Hs.277477:major histocompatibility compl  | 2.16 |
|    | 400265 |           |           |   | 2.16 |
| 80 | 442379 | NM_004613 | Hs.8265   | NM_004613:Homo sapiens transglutaminase 2 | 2.16 |
|    | 441892 | AB028981  | Hs.8021   | Hs.8021:KIAA1058 protein                  | 2.16 |
|    | 417446 | AL118671  | Hs.82163  | NM_000898:Homo sapiens monoamine oxidase  | 2.16 |
|    | 418386 | AA361739  | Hs.84549  | NM_002494:Homo sapiens DH dehydrogese (u  | 2.16 |
|    | 414053 | BE391635  | Hs.75725  | NM_003564:Homo sapiens transgelin 2 (TAG  | 2.16 |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 440906 | AW161556  | Hs.240170 | Hs.240170:hypothetical protein MGC2731   | 2.16 |
|    | 447660 | AW160386  | Hs.163667 | Hs.163667:ESTs, Weakly similar to CA1H_H | 2.16 |
|    | 408279 | AF216965  | Hs.44095  | Hs.44095:cyclin M3                       | 2.16 |
|    | 426152 | BE299190  | Hs.167246 | Hs.167246:P450 (cytochrome) oxidoreducta | 2.16 |
| 5  | 437952 | D63209    | Hs.5944   | NM_014585:Homo sapiens solute carrier fa | 2.16 |
|    | 415661 | AF057307  | Hs.78575  | Hs.78575:prosaposin (variant Gaucher dis | 2.15 |
|    | 425302 | U79115    | Hs.155566 | NM_003805:Homo sapiens CASP2 and RIPK1 d | 2.15 |
|    | 425996 | W67330    | Hs.374451 | Hs.374451:ESTs                           | 2.15 |
|    | 413745 | AW247252  | Hs.75514  | NM_000270:Homo sapiens nucleoside phosph | 2.15 |
| 10 | 422070 | AF149785  | Hs.111126 | Hs.111126:pituitary tumor-transforming 1 | 2.15 |
|    | 448424 | AW009892  | Hs.31924  | Hs.31924:ESTs                            | 2.15 |
|    | 430035 | NM_003463 | Hs.227777 | NM_003463:Homo sapiens protein tyrosine  | 2.15 |
|    | 438407 | AI457122  | Hs.129673 | Hs.129673:eukaryotic translation initial | 2.15 |
| 15 | 435551 | AF212365  | Hs.5470   | Hs.5470:interleukin 17B receptor         | 2.15 |
|    | 437741 | BE561610  | Hs.5809   | Hs.5809:putative transmembrane protein;  | 2.15 |
|    | 441192 | AAS26626  | Hs.7736   | NM_016504:Homo sapiens mitochondrial rib | 2.15 |
|    | 435750 | AB029012  | Hs.4990   | Hs.4990:KIAA1089 protein                 | 2.15 |
|    | 411165 | NM_000169 | Hs.69089  | NM_000169:Homo sapiens galactosidase, al | 2.14 |
|    | 425252 | AW391162  | Hs.349306 | Hs.349306:hypothetical protein FLJ31951  | 2.14 |
| 20 | 427600 | AW630918  | Hs.179774 | NM_002818:Homo sapiens proteasome (proso | 2.14 |
|    | 426818 | AA554827  | Hs.292996 | Hs.292996:postmeiotic segregation increa | 2.14 |
|    | 442110 | AF113008  | Hs.8102   | NM_001023:Homo sapiens ribosomal protein | 2.14 |
|    | 407797 | AK000524  | Hs.39850  | Hs.39850:uridine kise-like 1             | 2.14 |
| 25 | 443044 | N28522    | Hs.8935   | NM_014298:Homo sapiens quinolite phospho | 2.14 |
|    | 437103 | AW139408  | Hs.152940 | Hs.152940:ESTs                           | 2.14 |
|    | 442069 | AW664144  | Hs.297007 | Hs.297007:Homo sapiens cD FLJ32174 fis,  | 2.14 |
|    | 424954 | NM_000546 | Hs.1846   | NM_000546:Homo sapiens tumor protein p53 | 2.14 |
|    | 458097 | AW341135  | Hs.58104  | Hs.58104:Homo sapiens, clone IMAGE:47309 | 2.14 |
|    | 411925 | AW014588  | Hs.72925  | NM_003475:Homo sapiens chromosome 11 ope | 2.14 |
| 30 | 449644 | AW960707  | Hs.148324 | Hs.148324:ESTs                           | 2.14 |
|    | 422675 | BE018517  | Hs.119140 | NM_001970:Homo sapiens eukaryotic transl | 2.14 |
|    | 428586 | M36712    | Hs.22299  | Hs.22299:CD8 antigen, beta polypeptide 1 | 2.14 |
|    | 429379 | NM_014840 | Hs.200598 | NM_014840:Homo sapiens KIAA0537 gene pro | 2.13 |
| 35 | 410290 | AA402307  | Hs.322844 | Hs.322844:hypothetical protein DKFZp564A | 2.13 |
|    | 443895 | AW979048  | Hs.292566 | Hs.292566:YEA4 protein                   | 2.13 |
|    | 428145 | BE243327  | Hs.182626 | NM_012264:Homo sapiens chromosome 22 ope | 2.13 |
|    | 453518 | AW503205  | Hs.27268  | Hs.27268:Homo sapiens cD: FLJ21933 fis,  | 2.13 |
|    | 456534 | X91195    | Hs.100623 | Hs.100623:protein phosphatase 1, regulat | 2.13 |
| 40 | 419972 | AL041465  | Hs.182982 | Hs.182982:golgin-57                      | 2.13 |
|    | 424950 | AA602917  | Hs.156974 | Hs.156974:ESTs                           | 2.13 |
|    | 427557 | NM_002659 | Hs.179657 | NM_002659:Homo sapiens plasminogen activ | 2.13 |
|    | 431449 | M55994    | Hs.256278 | NM_001066:Homo sapiens tumor necrosis fa | 2.13 |
|    | 418758 | AW959311  | Hs.172012 | Hs.172012:hypothetical protein DKFZp434J | 2.13 |
| 45 | 434202 | BE382411  | Hs.3764   | NM_000858:Homo sapiens guanylate kise 1  | 2.13 |
|    | 433233 | AB040927  | Hs.301804 | Hs.301804:KIAA1494 protein               | 2.12 |
|    | 452700 | AI859390  | Hs.288940 | Hs.288940:transmembrane protein 8 (five  | 2.12 |
|    | 438033 | T26483    | Hs.6059   | NM_016938:Homo sapiens EGF-containing fi | 2.12 |
|    | 400847 |           |           |  | 2.12 |
| 50 | 447547 | NM_007229 | Hs.18842  | NM_007229:Homo sapiens protein kise C an | 2.12 |
|    | 417052 | NM_000712 | Hs.81029  | NM_000712:Homo sapiens biliverdin reduct | 2.12 |
|    | 413284 | AU077055  | Hs.289107 | NM_001166:Homo sapiens baculoviral IAP r | 2.11 |
|    | 434558 | AW264102  | Hs.39168  | Hs.39168:ESTs, Weakly similar to T17340  | 2.11 |
|    | 404030 |           |           |  | 2.11 |
| 55 | 410801 | BE275469  | Hs.66493  | Hs.66493:Down syndrome critical region g | 2.11 |
|    | 418613 | AA744529  | Hs.86575  | Hs.86575:mitogen-activated protein kise  | 2.11 |
|    | 447087 | AW403870  | Hs.301872 | Hs.301872:hypothetical protein MGC4840   | 2.11 |
|    | 433026 | AW160616  | Hs.279921 | NM_016127:Homo sapiens hypothetical prot | 2.11 |
|    | 426433 | L38969    | Hs.169875 | NM_007112:Homo sapiens thrombospondin 3  | 2.11 |
| 60 | 442439 | U09759    | Hs.246857 | NM_002752:Homo sapiens mitogen-activated | 2.11 |
|    | 437379 | AL359575  | Hs.23765  | Hs.23765:membrane metallo-endopeptidase- | 2.11 |
|    | 400208 |           |           |  | 2.11 |
|    | 455705 | AW161061  | Hs.356580 | Hs.356580:ESTs, Weakly similar to zinc f | 2.11 |
|    | 417599 | AA204688  | Hs.62954  | Hs.62954:ferritin, heavy polypeptide 1   | 2.10 |
| 65 | 416728 | AB024597  | Hs.79658  | NM_001894:Homo sapiens casein kise 1, ep | 2.10 |
|    | 439920 | H05430    | Hs.288433 | Hs.288433:neurotrimin                    | 2.10 |
|    | 422309 | U79745    | Hs.114924 | NM_004694:Homo sapiens solute carrier fa | 2.10 |
|    | 436114 | AA778232  | Hs.19515  | Hs.19515:ESTs, Highly similar to NRG3_HU | 2.10 |
|    | 405517 |           |           |  | 2.10 |
| 70 | 421872 | AA359753  | Hs.22824  | Hs.22824:MYB binding protein (P160) 1a   | 2.10 |
|    | 437712 | X04588    | Hs.85844  | Hs.85844:neurotrophic tyrosine kise, rec | 2.10 |
|    | 431214 | AA294921  | Hs.348024 | NM_002881:Homo sapiens v-rat simian leuk | 2.10 |
|    | 412856 | BE386745  | Hs.74631  | NM_001728:Homo sapiens basigin (BSG), mR | 2.10 |
|    | 442064 | AI422867  | Hs.88594  | Hs.88594:Homo sapiens, clone IMAGE:43329 | 2.10 |
| 75 | 434845 | BE267057  | Hs.325321 | Hs.325321:WD repeat domain 18            | 2.10 |
|    | 426728 | NM_007118 | Hs.367689 | NM_007118:Homo sapiens triple functioi d | 2.10 |
|    | 419596 | BE379320  | Hs.91448  | NM_007026:Homo sapiens dual specificity  | 2.09 |
|    | 448913 | AA194422  | Hs.22564  | NM_004999:Homo sapiens myosin VI (MYO6), | 2.09 |
|    | 414721 | X90392    | Hs.77091  | NM_006730:Homo sapiens deoxyribonuclease | 2.09 |
| 80 | 424658 | NM_002406 | Hs.151513 | NM_002406:Homo sapiens mannosyl (alpha-1 | 2.09 |
|    | 432805 | X94630    | Hs.3107   | Hs.3107:CD97 antigen                     | 2.09 |
|    | 447032 | AK000310  | Hs.17138  | Hs.17138:hypothetical protein FLJ20303   | 2.09 |
|    | 447484 | AA464839  | Hs.292566 | Hs.292566:YEA4 protein                   | 2.09 |
|    | 440188 | AK001812  | Hs.7036   | Hs.7036:N-acetylglucosamine kise         | 2.09 |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 445584 | AF217518  | Hs.8360   | Hs.8360:PTD012 protein                   | 2.09 |
|    | 402559 |           |           |  | 2.09 |
|    | 418043 | AW377752  | Hs.83341  | Hs.83341:AXL receptor tyrosine kise      | 2.09 |
|    | 448883 | AW196663  | Hs.200242 | Hs.200242:caspase recruitment domain fam | 2.09 |
| 5  | 436910 | AA926944  | Hs.261587 | Hs.261587:GCN2 eIF2alpha kise            | 2.09 |
|    | 422573 | AW297985  | Hs.295726 | Hs.295726:integrin, alpha V (vitronectin | 2.08 |
|    | 416448 | L13210    | Hs.79339  | NM_005567:Homo sapiens lectin, galactosi | 2.08 |
|    | 428727 | AF078847  | Hs.191356 | NM_001515:Homo sapiens general transcrip | 2.08 |
|    | 410301 | AW502935  | Hs.740    | Hs.740:PTK2 protein tyrosine kise 2      | 2.08 |
| 10 | 449538 | AI559444  | Hs.104679 | Hs.104679:Homo sapiens, clone MGC:18216  | 2.08 |
|    | 421205 | AL137540  | Hs.102541 | Hs.102541:netrin 4                       | 2.08 |
|    | 411779 | AA292811  | Hs.72050  | NM_003551:Homo sapiens non-metastatic ce | 2.08 |
|    | 427704 | AW971063  | Hs.292882 | Hs.292882:ESTs                           | 2.07 |
|    | 413518 | BE149455  | Hs.75415  | NM_004048:Homo sapiens beta-2-microglobu | 2.07 |
| 15 | 447345 | BE247767  | Hs.18166  | Hs.18166:KIAA0870 protein                | 2.07 |
|    | 407143 | C14076    | Hs.332329 | Hs.332329:EST                            | 2.07 |
|    | 448431 | BE613061  | Hs.337772 | Hs.337772:hypothetical protein BC009331  | 2.07 |
|    | 412760 | AW379030  | Hs.41324  | Hs.41324:ESTs                            | 2.07 |
|    | 446859 | AI494299  | Hs.16297  | NM_005694:Homo sapiens COX17 homolog, cy | 2.07 |
| 20 | 403966 |           |           |  | 2.07 |
|    | 409115 | AI223335  | Hs.50651  | NM_002227:Homo sapiens Janus kise 1 (a p | 2.07 |
|    | 436823 | AW749865  | Hs.117077 | Hs.117077:zinc finger protein 264        | 2.07 |
|    | 414045 | NM_002951 | Hs.75722  | NM_002951:Homo sapiens ribophorin II (RP | 2.06 |
|    | 413980 | NM_002437 | Hs.75659  | NM_002437:Homo sapiens Mpv17 transgene,  | 2.06 |
| 25 | 439414 | NM_001183 | Hs.6551   | NM_001183:Homo sapiens ATPase, H+ transp | 2.06 |
|    | 426059 | BE292842  | Hs.166120 | NM_001572:Homo sapiens interferon regula | 2.06 |
|    | 429849 | U33053    | Hs.2499   | NM_002741:Homo sapiens protein kise C-li | 2.06 |
|    | 402424 |           |           |  | 2.06 |
|    | 406626 | X04526    | Hs.215595 | Hs.215595:guanine nucleotide binding pro | 2.06 |
| 30 | 458911 | AA373131  | Hs.24322  | Hs.24322:ATPase, H+ transporting, lysoso | 2.05 |
|    | 426086 | T94907    | Hs.188572 | Hs.188572:ESTs                           | 2.05 |
|    | 419726 | U50330    | Hs.1274   | NM_006129:Homo sapiens bone morphogeneti | 2.05 |
|    | 452344 | AI264357  | Hs.55405  | Hs.55405:hypothetical protein MGC16212   | 2.05 |
|    | 442498 | U54617    | Hs.8364   | NM_002612:Homo sapiens pyruvate dehydrog | 2.05 |
| 35 | 422114 | AW194851  | Hs.111801 | NM_015908:Homo sapiens arsete resistance | 2.05 |
|    | 413420 | AW410235  | Hs.75348  | NM_006263:Homo sapiens proteasome (proso | 2.05 |
|    | 409430 | R21945    | Hs.346735 | Hs.346735:Homo sapiens, clone IMAGE:3881 | 2.05 |
|    | 409932 | AI376750  | Hs.57600  | Hs.57600:adaptor-related protein complex | 2.05 |
|    | 434848 | BE256304  | Hs.32148  | Hs.32148:AD-015 protein                  | 2.04 |
| 40 | 453852 | AW961818  | Hs.374424 | Hs.374424:ESTs                           | 2.04 |
|    | 427637 | AK000816  | Hs.179986 | NM_005803:Homo sapiens flotillin 1 (FLOT | 2.04 |
|    | 400264 |           |           |  | 2.04 |
|    | 430016 | NM_004736 | Hs.227656 | NM_004736:Homo sapiens xenotropic and po | 2.04 |
|    | 410134 | U68140    | Hs.58927  | Hs.58927:nuclear VCP-like                | 2.04 |
| 45 | 440975 | AW499914  | Hs.7579   | Hs.7579:importin 9                       | 2.04 |
|    | 432280 | BE440142  | Hs.2943   | NM_003135:Homo sapiens sigl recognition  | 2.04 |
|    | 409504 | AA304961  | Hs.699    | NM_000942:Homo sapiens peptidylprolyl is | 2.04 |
|    | 412146 | M92444    | Hs.73722  | NM_001641:Homo sapiens APEX nuclease (mu | 2.04 |
| 50 | 434203 | BE262677  | Hs.283558 | Hs.283558:hypothetical protein PRO1855   | 2.04 |
|    | 422754 | AA316476  | Hs.171811 | Hs.171811:adenylate kise 2               | 2.04 |
|    | 406729 | AA069711  |           | AA069711:zm52b11.s1 Stratagene fibroblas | 2.04 |
|    | 413086 | AA126841  | Hs.183834 | Hs.183834:ESTs                           | 2.03 |
|    | 424340 | AA339036  | Hs.7033   | Hs.7033:ESTs                             | 2.03 |
| 55 | 450440 | AB024334  | Hs.25001  | NM_012479:Homo sapiens tyrosine 3-monoox | 2.03 |
|    | 424662 | NM_002870 | Hs.151536 | NM_002870:Homo sapiens RAB13, member RAS | 2.03 |
|    | 415740 | N80486    | Hs.39911  | Hs.39911:Homo sapiens mR for FLJ00089 pr | 2.03 |
|    | 412749 | AA378417  | Hs.74564  | NM_003145:Homo sapiens sigl sequence rec | 2.03 |
|    | 408393 | AW015318  | Hs.23165  | Hs.23165:ESTs                            | 2.03 |
| 60 | 421295 | AW081061  | Hs.103180 | Hs.103180:DC2 protein                    | 2.03 |
|    | 445417 | AK001058  | Hs.12680  | Hs.12680:Homo sapiens cD FLJ10196 fis, c | 2.03 |
|    | 414883 | AA926960  | Hs.348669 | NM_001826:Homo sapiens CDC28 protein kis | 2.03 |
|    | 447298 | BE617527  | Hs.239818 | Hs.239818:phosphoinositide-3-kise, catal | 2.02 |
|    | 459580 | AA022888  | Hs.176065 | Hs.176065:ESTs                           | 2.02 |
| 65 | 422785 | AI824114  | Hs.289088 | Hs.289088:heat shock 90kD protein 1, alp | 2.02 |
|    | 452696 | AI826645  | Hs.211534 | Hs.211534:Homo sapiens cD FLJ31665 fis,  | 2.02 |
|    | 452056 | AW955065  | Hs.101150 | Hs.101150:KIAA1949 protein               | 2.02 |
|    | 450690 | AA296696  | Hs.333418 | NM_014164:Homo sapiens FXVD domain-conta | 2.02 |
|    | 423527 | AI206965  | Hs.105861 | Hs.105861:engulfment and cell motility 3 | 2.01 |
| 70 | 429545 | AI824164  | Hs.356130 | Hs.356130:ESTs                           | 2.01 |
|    | 439180 | AI393742  | Hs.199067 | Hs.199067:v-erb-b2 erythroblastic leukem | 2.01 |
|    | 437193 | BE259190  | Hs.289721 | Hs.289721:growth arrest-specific 5       | 2.01 |
|    | 436014 | AF281134  | Hs.283741 | Hs.283741:axosome component Rrp46        | 2.01 |
|    | 453329 | T97205    | Hs.193400 | Hs.193400:interleukin 6 receptor         | 2.01 |
|    | 407347 | AA829847  |           | T23514:seq3329 1-NIB Homo sapiens cD clo | 2.01 |
| 75 | 435370 | AI964074  | Hs.225838 | Hs.225838:ESTs                           | 2.01 |
|    | 430657 | AA482910  | Hs.370602 | Hs.370602:ESTs, Weakly similar to hypoth | 2.01 |
|    | 427157 | U51166    | Hs.173824 | NM_003211:Homo sapiens thymine-D glycosy | 2.01 |
|    | 424833 | NM_003894 | Hs.153405 | NM_003894:Homo sapiens period homolog 2  | 2.01 |
|    | 440086 | NM_005402 | Hs.6906   | NM_005402:Homo sapiens v-ral simian leuk | 2.01 |
| 80 | 438543 | AA810141  | Hs.192182 | Hs.192182:ESTs                           | 2.01 |
|    | 417426 | NM_002291 | Hs.82124  | NM_002291:Homo sapiens laminin, beta 1 ( | 2.01 |
|    | 412790 | NM_014767 | Hs.74583  | NM_014767:Homo sapiens KIAA0275 gene pro | 2.01 |
|    | 445892 | AV655500  | Hs.93961  | Hs.93961:Homo sapiens mR; cD DKFZp667D09 | 2.01 |

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TABLE 38B:

Pkey: Unique Eos probeset identifier number  
 CAT number: Gene cluster number  
 Accession: Genbank accession numbers

| Pkey   | CAT Number | Accession  |
|--------|------------|--|
| 409745 | MH1944_5   | BI030997 AA921874 AW188822 BI027862 AI347618 AI361453 AI088754 AW207491 AA077391 BG012775 BG997382 AA286833 AA150722 BI007625<br>BI027864 BI009100 BI006275 BI006270 BI031000 BI029864 BI006277 BI007627 BI006266 BI006991 BI006990 BI007763 BI007762 BG997377<br>AA150780 BI033518 BI027818 BG015789 BI033807 AA341445<br>N64410 AA248866 AA248779 W02010<br>AL390180 AA359908 BE177778 BE177779 AW893733 BF756318<br>AA229762 AA230035<br>AA677593 AA618150 AA557952<br>BG171436 BE079601 BE079534 AA299964 BE392717 BE883402 BE079532 BE018148 BF889427 W00396<br>BI030997 AA921874 AW188822 BI027862 AI347618 AI361453 AI088754 AW207491 AA077391 BG012775 BG997382 AA286833 AA150722 BI007625<br>BI027864 BI009100 BI006275 BI006270 BI031000 BI029864 BI006277 BI007627 BI006266 BI006991 BI006990 BI007763 BI007762 BG997377<br>AA150780 BI033518 BI027818 BG015789 BI033807 AA341445<br>AW173494 AI804346 AA669490<br>AW837178 T77002 F13038<br>T63141 AI821021 BF370092 BF370127 BF370060 T62998<br>BC006097 X03066 NM_002120 M26040 AW469119 AW469127 AI299772 AW518149 AI144456 AW628070 AI629032 AI358810 AI880433 AI440472<br>AI357070 AI865365 AW014799 AI767973 AWS18041 AA909398 AW768606<br>AF086037 H89360 H89546<br>AW936378 AW936544 AW813513<br>AW934714 AW749864 AW749902 BE162498 BE161005 BE162499 BE161006 AA190449 AW513465 BE162500 BE161007<br>AW974073 T56957 |
| 419671 | 253275_1   |  |
| 437495 | 65231_1    |  |
| 418869 | 12789_14   |  |
| 432648 | 129028_1   |  |
| 421902 | 276321_1   |  |
| 414667 | MH1944_5   |  |
| 435185 | 127115_1   |  |
| 411331 | 1076355_1  |  |
| 451876 | 2328579_1  |  |
| 400261 | 23110_1    |  |
| 439195 | 21979_1    |  |
| 454694 | 1066666_1  |  |
| 416913 | 924456_1   |  |
| 459362 | 1238130_1  |  |

TABLE 38C:

Pkey: Unique number corresponding to an Eos probeset  
 Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.  
 Strand: Indicates DNA strand from which exons were predicted.  
 Nt\_position: Indicates nucleotide positions of predicted exons.

| Pkey   | Ref     | Strand | Nt_position                         |
|--------|---------|--------|-------------------------------------|
| 403346 | 8569726 | Plus   | 92752-93015                         |
| 401621 | 8570184 | Minus  | 193-608                             |
| 403344 | 8569726 | Plus   | 70823-70990                         |
| 404240 | 5002624 | Minus  | 116132-116407,116653-116922         |
| 401964 | 3126781 | Minus  | 13510-13725,13847-14015             |
| 404277 | 1834458 | Minus  | 91665-91946                         |
| 405121 | 8102330 | Minus  | 35816-36004,36587-36684             |
| 402493 | 9797670 | Minus  | 205146-205240,205428-205542         |
| 402121 | 9188523 | Plus   | 25692-25895                         |
| 402474 | 7547175 | Minus  | 53526-53628,55755-55920,57530-57757 |
| 403887 | 7710553 | Minus  | 69533-69868                         |
| 403328 | 8469086 | Minus  | 120428-120703                       |
| 401241 | 4827300 | Minus  | 30503-30844,31056-31248             |
| 401736 | 3219338 | Plus   | 1771-1894                           |
| 405029 | 7533975 | Minus  | 37929-38224                         |
| 404171 | 9930793 | Plus   | 173667-173783,176876-177055         |
| 401797 | 6730720 | Plus   | 6973-7118                           |
| 401234 | 9929642 | Plus   | 120173-120337                       |
| 404170 | 9930793 | Plus   | 168836-169248                       |
| 406122 | 9144087 | Minus  | 30940-31386                         |

TABLE 39A: 856 GENES UP-REGULATED IN RENAL CANCER COMPARED TO NORMAL ADULT TISSUES AND TO NON-MALIGNANT RENAL TISSUES THAT ARE LIKELY TO ENCODE PROTEINS AMENABLE TO MODULATION BY SMALL MOLECULES, PEPTIDES, OR ANTIBODIES

Table 39A lists about 856 genes up-regulated in renal cancer compared to normal adult tissues and to non-malignant renal tissues that are likely to encode proteins amenable to modulation by small molecules, peptides, or antibodies. These were selected from the starting collection of 59680 probesets on the Affymetrix/Eos-Hu03 GeneChip® array as follows: the ratio of "average" renal cancer to "average" normal adult tissues was greater than or equal to 2.0, the ratio of "average" renal cancer to "average" non-malignant renal tissues was greater than or equal to 2.0, the "average" renal cancer level was set to the 90th percentile value amongst various renal specimens, the "average" normal adult tissue level was set to the 70th percentile value amongst various non-malignant tissues, the "average" non-malignant renal tissues level was set to the 50th percentile value amongst various non-malignant renal tissues, the "average" renal cancer value was greater than or equal to 50 units, and the predicted protein contained a structural domain that is indicative of having an oncogenic function or of transducing an intracellular signal, or of being modulatable by small molecules, peptides, or antibodies (e.g. pkinase, death-domain, 7tm, phosphatase, or ion\_transporter).

Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 R1: Ratio of tumor to normal adult tissues

| Pkey   | ExAccn   | UnigenelD | Unigene Title                            | R1    |
|--------|----------|-----------|--|-------|
| 435013 | H91923   | Hs.110024 |  | 15.71 |
| 447768 | X86400   | Hs.19520  | Hs.19520:FXFD domain-containing ion tran | 14.07 |
| 445178 | AI792241 | Hs.129614 | Hs.129614:kidney-specific membrane prote | 12.56 |
| 432542 | AW083920 | Hs.16098  | Hs.16098:claudin 2                       | 12.41 |
| 443595 | AF169312 | Hs.9613   | NM_016109:Homo sapiens angiopoietin-like | 11.77 |
| 413719 | BE439580 | Hs.75498  | NM_004591:Homo sapiens small inducible c | 10.39 |
| 436878 | BE465204 | Hs.47448  | Hs.47448:ESTs                            | 10.18 |
| 440304 | BE159984 | Hs.125395 | Hs.125395:ESTs                           | 9.95  |
| 407065 | Y10141   |           |  | 9.58  |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 413049 | NM_002151 | Hs.823    | NM_002151:Homo sapiens hepsin (transmemb   | 9.51 |
|    | 425983 | AK000226  | Hs.165619 | Hs.165619:mucin and cadherin-like          | 8.88 |
|    | 423161 | AL049227  | Hs.124776 | Hs.124776:Homo sapiens mR; cD DKFZp564N1   | 8.77 |
|    | 430569 | AF241254  | Hs.178098 | Hs.178098:angiotensin I converting enzym   | 8.45 |
| 5  | 416768 | AA363733  | Hs.1032   | NM_002909:Homo sapiens regenerating isle   | 7.94 |
|    | 422357 | AF016272  | Hs.115418 | NM_004062:Homo sapiens cadherin 16, KSP-   | 7.78 |
|    | 420737 | L08096    | Hs.99899  | NM_001252:Homo sapiens tumor necrosis fa   | 7.78 |
|    | 409745 | AA077391  |           | AA077391:7B14E12 Chromosome 7 Fetal Brai   | 7.74 |
|    | 413936 | AF113676  | Hs.297681 | NM_000295:Homo sapiens serine (or cystei   | 7.32 |
| 10 | 426582 | AV660038  | Hs.2056   | Hs.2056:UDP glycosyltransferase 1 family   | 7.20 |
|    | 406851 | AA609784  | Hs.352392 | Hs.352392:major histocompatibility compl   | 7.03 |
|    | 419508 | AW997938  | Hs.90786  | Hs.90786:ATP-binding cassette, sub-famil   | 6.57 |
|    | 428953 | AA306610  | Hs.348183 | NM_003823:Homo sapiens tumor necrosis fa   | 6.36 |
|    | 436895 | AF037335  | Hs.5338   | NM_001218:Homo sapiens carbonic anhydras   | 6.31 |
| 15 | 431842 | NM_005764 | Hs.271473 | NM_005764:Homo sapiens epithelial protei   | 6.20 |
|    | 430014 | H59354    | Hs.374303 | Hs.374303:hypothetical protein MGC20576    | 6.20 |
|    | 423803 | NM_005709 | Hs.132945 | NM_005709:Homo sapiens PDZ-73 protein (P   | 6.19 |
|    | 434779 | AF153815  | Hs.50151  | Hs.50151:potassium inwardly-rectifying c   | 6.11 |
|    | 435767 | H73505    | Hs.117874 | Hs.117874:ESTs                             | 6.08 |
| 20 | 422664 | AA315933  | Hs.120879 | Hs.120879:Homo sapiens, clone MGC:32871    | 6.02 |
|    | 425280 | U31519    | Hs.1872   | Hs.1872:phosphoenolpyruvate carboxylase    | 5.81 |
|    | 426559 | AB001914  | Hs.170414 | NM_002570:Homo sapiens paired basic amin   | 5.73 |
|    | 451564 | AU076698  | Hs.132760 | NM_001467:Homo sapiens glucose-6-phospha   | 5.69 |
|    | 418526 | BE019020  | Hs.85838  | NM_004207:Homo sapiens solute carrier fa   | 5.68 |
| 25 | 444151 | AW972917  | Hs.128749 | Hs.128749:alpha-methylacyl-CoA racemase    | 5.66 |
|    | 426471 | M22440    | Hs.170009 | NM_003235:Homo sapiens transforming grow   | 5.48 |
|    | 432579 | AF043244  | Hs.278439 | NM_003945:Homo sapiens nucleolar protein   | 5.45 |
|    | 448733 | NM_005629 | Hs.187958 | NM_005629:Homo sapiens solute carrier fa   | 5.42 |
|    | 446650 | AB016625  | Hs.15813  | NM_003060:Homo sapiens solute carrier fa   | 5.36 |
| 30 | 417089 | H52280    | Hs.18612  | Hs.18612:Homo sapiens cD: FLJ21909 fis,    | 5.35 |
|    | 437848 | A1906419  | Hs.284380 | Hs.284380:gamma-glutamyltransferase 1      | 5.32 |
|    | 423081 | AF262992  | Hs.123159 | Hs.123159:sperm associated antigen 4       | 5.30 |
|    | 421893 | NM_001078 | Hs.109225 | NM_001078:Homo sapiens vascular cell adh   | 5.23 |
|    | 435886 | BE265839  | Hs.12126  | Hs.12126:hepatocellular carcinoma-associ   | 5.20 |
| 35 | 410276 | A1554545  | Hs.359201 | Hs.359201:ESTs                             | 5.20 |
|    | 429451 | BE409861  | Hs.202833 | NM_002133:Homo sapiens heme oxygenase (dec | 5.14 |
|    | 446404 | AA019961  | Hs.26216  | Hs.26216:Homo sapiens cD: FLJ22811 fis,    | 5.13 |
|    | 423445 | NM_014324 | Hs.128749 | NM_014324:Homo sapiens alpha-methylacyl-   | 5.09 |
|    | 449444 | AW816436  | Hs.351306 | NM_004696:Homo sapiens solute carrier fa   | 5.05 |
| 40 | 438106 | BE245551  | Hs.6079   | NM_014863:Homo sapiens B cell RAG associ   | 5.02 |
|    | 400419 | AF084545  |           | AF084545:Homo sapiens versican Vint isof   | 5.01 |
|    | 453920 | A1133148  | Hs.36602  | NM_000204:Homo sapiens I factor (complem   | 4.99 |
|    | 447881 | BE620886  | Hs.355279 | Hs.355279:Homo sapiens cD FLJ23711 fis,    | 4.97 |
| 45 | 422253 | W81526    | Hs.113882 | NM_000815:Homo sapiens gamma-aminobutyri   | 4.93 |
|    | 439024 | R96696    | Hs.35598  | Hs.35598:ESTs                              | 4.88 |
|    | 414799 | A1752416  | Hs.77326  | NM_000598:Homo sapiens insulin-like grow   | 4.80 |
|    | 426530 | U24578    | Hs.278625 | NM_000592:Homo sapiens complement compon   | 4.77 |
|    | 410055 | AJ250839  | Hs.58241  | Hs.58241:gene for serine/threonine prote   | 4.72 |
|    | 404240 |           |           |  | 4.71 |
| 50 | 414617 | A1339520  | Hs.288817 | Hs.288817:hypothetical protein FLJ22761    | 4.68 |
|    | 448249 | AW855331  | Hs.337124 | Hs.337124:ESTs                             | 4.67 |
|    | 447818 | W79940    | Hs.21906  | Hs.21906:Homo sapiens clone 24670 mR seq   | 4.66 |
|    | 449057 | AB037784  | Hs.22941  | Hs.22941:KIAA1363 protein                  | 4.66 |
| 55 | 422424 | A1186431  | Hs.296638 | NM_004864:Homo sapiens prostate differen   | 4.62 |
|    | 417336 | R70429    | Hs.81988  | NM_001343:Homo sapiens disabled homolog    | 4.62 |
|    | 425873 | NM_013390 | Hs.160417 | NM_013390:Homo sapiens transmembrane pro   | 4.58 |
|    | 444700 | NM_003645 | Hs.11729  | NM_003645:Homo sapiens fatty-acid-Coenzy   | 4.58 |
|    | 414998 | NM_002543 | Hs.77729  | NM_002543:Homo sapiens oxidised low dens   | 4.56 |
| 60 | 414763 | U97276    | Hs.77266  | NM_002826:Homo sapiens quiescin Q6 (QSCN   | 4.48 |
|    | 443358 | H65417    | Hs.17757  | Hs.17757:pleckstrin homology domain-cont   | 4.45 |
|    | 440091 | A1767388  | Hs.37890  | Hs.37890:Homo sapiens, clone IMAGE:48275   | 4.43 |
|    | 447131 | NM_004585 | Hs.17466  | NM_004585:Homo sapiens retinoic acid rec   | 4.43 |
|    | 406973 | M34996    | Hs.198253 | Hs.198253:major histocompatibility compl   | 4.42 |
| 65 | 427740 | BE242604  | Hs.180616 | NM_005505:Homo sapiens CD36 antigen (col   | 4.40 |
|    | 436258 | AW867491  | Hs.107125 | Hs.107125:plasmalemma vesicle associated   | 4.38 |
|    | 452884 | C05964    | Hs.31841  | Hs.31841:ESTs                              | 4.37 |
|    | 444006 | BE395085  | Hs.10086  | NM_016639:Homo sapiens type I transmembr   | 4.36 |
|    | 422627 | BE336857  | Hs.118787 | NM_000358:Homo sapiens transforming grow   | 4.35 |
| 70 | 418054 | NM_002318 | Hs.83354  | NM_002318:Homo sapiens lysyl oxidase-lik   | 4.34 |
|    | 419011 | H56244    | Hs.89552  | NM_000846:Homo sapiens glutathione S-tra   | 4.34 |
|    | 404277 |           |           |  | 4.33 |
|    | 435563 | AF210317  | Hs.95497  | Hs.95497:solute carrier family 2 (facili   | 4.30 |
|    | 431779 | AW971178  | Hs.268571 | NM_001645:Homo sapiens apolipoprotein C-   | 4.29 |
| 75 | 406645 | M57466    | Hs.814    | Hs.814:major histocompatibility complex,   | 4.28 |
|    | 421485 | AA243499  | Hs.104800 | Hs.104800:hypothetical protein FLJ10134    | 4.26 |
|    | 426812 | AF105365  | Hs.172613 | NM_006598:Homo sapiens solute carrier fa   | 4.25 |
|    | 407910 | AA650274  | Hs.41296  | NM_013281:Homo sapiens fibronectin leuci   | 4.22 |
|    | 438030 | X98427    | Hs.122634 | Hs.122634:ESTs                             | 4.22 |
| 80 | 430561 | AC005551  | Hs.130714 | Hs.130714:ESTs, Moderately similar to AF   | 4.21 |
|    | 444381 | BE387335  | Hs.283713 | Hs.283713:hypothetical protein BC014245    | 4.20 |
|    | 438203 | BE540090  | Hs.7345   | Hs.7345:MAD1 mitotic arrest deficient-li   | 4.16 |
|    | 411358 | R47479    | Hs.94761  | Hs.94761:KIAA1691 protein                  | 4.15 |
|    | 418323 | NM_002118 | Hs.1162   | NM_002118:Homo sapiens major histocompat   | 4.12 |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 449853 | AF006823  | Hs.24040  | NM_002246:Homo sapiens potassium channel   | 4.11 |
|    | 415198 | AW009480  | Hs.943    | NM_004221:Homo sapiens tural killer cell   | 4.11 |
|    | 418751 | BE389014  | Hs.372548 | Hs.372548:phosphoinositide-3-kinase, regul | 4.09 |
| 5  | 414166 | AW888941  | Hs.75789  | NM_006096:Homo sapiens N-myc downstream    | 4.07 |
|    | 424125 | M31669    | Hs.1735   | Hs.1735:inhibin, beta B (activin AB beta   | 4.00 |
|    | 416926 | H03109    | Hs.263395 | Hs.263395:sema domain, transmembrane dom   | 3.92 |
|    | 419175 | AW270037  | Hs.362996 | Hs.362996:KIAA0779 protein                 | 3.92 |
|    | 424218 | AF031824  | Hs.143212 | NM_003650:Homo sapiens cystatin F (leuko   | 3.91 |
| 10 | 412870 | N22788    | Hs.82407  | Hs.82407:chemokine (C-X-C motif) ligand    | 3.88 |
|    | 452203 | X57522    | Hs.352018 | NM_000593:Homo sapiens transporter 1, AT   | 3.87 |
|    | 446872 | X97058    | Hs.16362  | NM_004154:Homo sapiens pyrimidinegic re    | 3.87 |
|    | 449961 | AW265634  | Hs.133100 | Hs.133100:ESTs                             | 3.87 |
|    | 424517 | AI539443  | Hs.137447 | Hs.137447:Homo sapiens cD FLJ12169 fis,    | 3.86 |
| 15 | 425262 | D87119    | Hs.155418 | Hs.155418:GS3955 protein                   | 3.83 |
|    | 443639 | BE269042  | Hs.9661   | NM_002801:Homo sapiens proteasome (proso   | 3.82 |
|    | 448133 | AA723157  | Hs.73769  | NM_000802:Homo sapiens folate receptor 1   | 3.81 |
|    | 418030 | BE207573  | Hs.83321  | Hs.83321:neuromedin B                      | 3.81 |
|    | 412939 | AW411491  | Hs.75069  | NM_005412:Homo sapiens serine hydroxymet   | 3.80 |
|    | 409162 | H25530    | Hs.50868  | NM_002555:Homo sapiens solute carrier fa   | 3.79 |
| 20 | 427715 | BE245274  | Hs.180428 | Hs.180428:KIAA1181 protein                 | 3.78 |
|    | 412006 | AW451618  | Hs.290216 | Hs.290216:ESTs                             | 3.77 |
|    | 430413 | AW842182  | Hs.241392 | NM_002985:Homo sapiens small inducible c   | 3.76 |
|    | 422282 | AF019225  | Hs.114309 | Hs.114309:apolipoprotein L 1               | 3.76 |
| 25 | 420747 | BE294407  | Hs.99910  | Hs.99910:phosphofructokinase, platelet     | 3.76 |
|    | 414875 | H42679    | Hs.77522  | NM_006120:Homo sapiens major histocompat   | 3.75 |
|    | 418793 | AW382987  | Hs.88474  | Hs.88474:prostaglandin-endoperoxide synt   | 3.74 |
|    | 446291 | BE397753  | Hs.14623  | NM_006332:Homo sapiens interferon, gamma   | 3.71 |
|    | 417289 | D86962    | Hs.81875  | Hs.81875: growth factor receptor-bound pr  | 3.69 |
| 30 | 422672 | X12784    | Hs.119129 | NM_001845:Homo sapiens collagen, type IV   | 3.68 |
|    | 448569 | BE382657  | Hs.21486  | NM_007315:Homo sapiens sigl transducer a   | 3.68 |
|    | 437270 | R18087    | Hs.323769 | Hs.323769: cisplatin resistance related p  | 3.67 |
|    | 408452 | AA054683  | Hs.192455 | Hs.192455:ESTs, Moderately similar to hy   | 3.67 |
|    | 443986 | AI381750  | Hs.283437 | Hs.283437:HTGN29 protein                   | 3.66 |
| 35 | 418869 | AW516565  |           | AW516565:xq01d05.x1 Soares_NHCeC_cervica   | 3.65 |
|    | 425998 | AU076629  | Hs.165950 | NM_002011:Homo sapiens fibroblast growth   | 3.62 |
|    | 428699 | AW578252  | Hs.190161 | NM_014020:Homo sapiens LR8 protein (LR8)   | 3.62 |
|    | 418299 | AA279530  | Hs.83968  | NM_000211:Homo sapiens integrin, beta 2    | 3.61 |
|    | 432593 | AW301003  | Hs.51483  | Hs.51483:Homo sapiens, Similar to RIKEN    | 3.59 |
| 40 | 415765 | NM_005424 | Hs.78824  | NM_005424:Homo sapiens tyrosine kine wit   | 3.58 |
|    | 445985 | BE621800  | Hs.29444  | Hs.29444:putative small membrane protein   | 3.57 |
|    | 424893 | AW295112  | Hs.153648 | Hs.153648:protein tyrosine phosphatase,    | 3.57 |
|    | 426046 | AA833655  | Hs.206868 | Hs.206868:Homo sapiens cD FLJ14056 fis,    | 3.57 |
|    | 424415 | NM_001975 | Hs.146590 | NM_001975:Homo sapiens enolase 2, [gamma   | 3.57 |
| 45 | 412612 | NM_000047 | Hs.74131  | NM_000047:Homo sapiens arylsulfatase E (   | 3.56 |
|    | 443834 | AI741510  | Hs.173548 | Hs.173548:ESTs                             | 3.54 |
|    | 431630 | NM_002204 | Hs.265829 | NM_002204:Homo sapiens integrin, alpha 3   | 3.53 |
|    | 418371 | M13560    | Hs.84298  | Hs.84298:CD74 antigen (invariant) polypep  | 3.52 |
|    | 444838 | AV651680  | Hs.208558 | Hs.208558:ESTs                             | 3.52 |
| 50 | 449378 | AW664026  | Hs.59892  | Hs.59892:ESTs, Weakly similar to alpha 5   | 3.52 |
|    | 411393 | AW797437  | Hs.69771  | NM_001710:Homo sapiens B-factor, properd   | 3.50 |
|    | 414311 | AI693547  | Hs.71746  | Hs.71746:aminopeptidase-like 1             | 3.50 |
|    | 415149 | X12451    | Hs.78056  | NM_001912:Homo sapiens cathepsin L (CTSL   | 3.50 |
|    | 424321 | W74048    | Hs.1765   | Hs.1765:lymphocyte-specific protein tyro   | 3.49 |
| 55 | 414825 | X06370    | Hs.77432  | NM_005228:Homo sapiens epidermal growth    | 3.48 |
|    | 408194 | AA601038  | Hs.191797 | Hs.191797:ESTs                             | 3.48 |
|    | 410600 | AW575742  | Hs.351676 | Hs.351676:ESTs, Weakly similar to T02670   | 3.47 |
|    | 416899 | BE262645  | Hs.80420  | NM_002996:Homo sapiens small inducible c   | 3.47 |
|    | 436856 | AI469355  | Hs.127310 | Hs.127310:hypothetical protein BC014917    | 3.47 |
| 60 | 419660 | BE280337  | Hs.194693 | NM_003982:Homo sapiens solute carrier fa   | 3.47 |
|    | 413566 | AW604451  | Hs.285814 | Hs.285814: growth factor receptor-bound p  | 3.47 |
|    | 412104 | AW205197  | Hs.240951 | Hs.240951:ked cuticle homolog 2 (Drosoph   | 3.46 |
|    | 444488 | AW192879  | Hs.355660 | Hs.355660:peptide-histidine transporter    | 3.46 |
|    | 449475 | AI348027  | Hs.108557 | Hs.108557:hypothetical protein PP1057      | 3.46 |
| 65 | 412276 | BE262621  | Hs.73798  | NM_002415:Homo sapiens macrophage migrat   | 3.45 |
|    | 449338 | H73444    | Hs.394    | NM_001124:Homo sapiens adrenomedullin (A   | 3.44 |
|    | 430304 | AL122071  | Hs.238927 | Hs.238927:Homo sapiens mR: cD DKFZp434H1   | 3.43 |
|    | 415388 | AF018081  | Hs.78409  | (tocuslink)NM_030582:Homo sapiens collag   | 3.43 |
|    | 432210 | AI567421  | Hs.273330 | Hs.273330:agrin                            | 3.43 |
| 70 | 418177 | N44967    | Hs.351554 | Hs.351554:Homo sapiens cD FLJ32092 fis,    | 3.42 |
|    | 414888 | AL039185  | Hs.77558  | Hs.77558:thyroid hormone receptor intera   | 3.42 |
|    | 452445 | AB002438  | Hs.29596  | Hs.29596:Homo sapiens mR from chromosome   | 3.41 |
|    | 414803 | X03100    | Hs.914    | Hs.914:major histocompatibility complex,   | 3.41 |
|    | 419201 | M22324    | Hs.1239   | NM_001150:Homo sapiens alanyl (membrane)   | 3.41 |
| 75 | 445139 | AB037848  | Hs.12365  | Hs.12365:syplotagmin XIII                  | 3.41 |
|    | 435021 | AA922192  | Hs.73962  | Hs.73962:EphA7                             | 3.41 |
|    | 417259 | AW903838  | Hs.81800  | Hs.81800:chondroitin sulfate proteoglyca   | 3.40 |
|    | 439737 | AI751438  | Hs.41271  | Hs.41271:Homo sapiens mR full length ins   | 3.39 |
|    | 410636 | AA088177  | Hs.172870 | Hs.172870:KIAA1913 protein                 | 3.39 |
| 80 | 431590 | AB037789  | Hs.263395 | Hs.263395:sema domain, transmembrane dom   | 3.38 |
|    | 415000 | AW025529  | Hs.239812 | Hs.239812:serologically defined breast c   | 3.36 |
|    | 416700 | AW498958  | Hs.343475 | NM_001909:Homo sapiens cathepsin D (lyso   | 3.36 |
|    | 440516 | S42303    | Hs.161    | NM_001792:Homo sapiens cadherin 2, type    | 3.35 |
|    | 423720 | AL044191  | Hs.23388  | Hs.23388:hypothetical protein DKFZp434F0   | 3.32 |

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|    |        |           |           |   |      |
|----|--------|-----------|-----------|---|------|
|    | 421902 | BE392717  |           | BE392717:601307571F1 NIH_MGC_44 Homo sap  | 3.32 |
|    | 409220 | BE243323  | Hs.51233  | Hs.51233:tumor necrosis factor receptor   | 3.32 |
|    | 421502 | AF111856  | Hs.105039 | NM_006424:Homo sapiens solute carrier fa  | 3.32 |
|    | 416729 | U46165    | Hs.1027   | NM_004165:Homo sapiens Ras-related assoc  | 3.30 |
| 5  | 430302 | AL137502  | Hs.238679 | Hs.238679:Rag D protein                   | 3.30 |
|    | 445084 | H38914    | Hs.250848 | Hs.250848:Homo sapiens cD FLJ14761 fis,   | 3.29 |
|    | 406825 | AI982529  | Hs.84298  | Hs.84298:CD74 antigen (invariant polypep  | 3.29 |
|    | 446272 | BE268912  | Hs.14601  | NM_005335:Homo sapiens hematopoietic cel  | 3.28 |
|    | 437145 | AF007216  | Hs.5462   | NM_003759:Homo sapiens solute carrier fa  | 3.27 |
| 10 | 444071 | AI627808  | Hs.110524 | Hs.110524:ESTs                            | 3.27 |
|    | 414662 | AL036058  | Hs.76807  | Hs.76807:major histocompatibility comple  | 3.27 |
|    | 436576 | AI458213  | Hs.77542  | Hs.77542:ESTs, Weakly similar to S26650   | 3.26 |
|    | 424675 | NM_005512 | Hs.151641 | NM_005512:Homo sapiens glycoprotein A re  | 3.25 |
|    | 437897 | AA770561  | Hs.146170 | Hs.146170:hypothetical protein FLJ22969   | 3.25 |
| 15 | 449703 | H61001    | Hs.171802 | Hs.171802:Homo sapiens, clone IMAGE:3956  | 3.25 |
|    | 414788 | X78342    | Hs.77313  | NM_003674:Homo sapiens cyclin-dependent   | 3.25 |
|    | 414249 | AI797994  | Hs.279929 | Hs.279929:gp25L2 protein                  | 3.24 |
|    | 430396 | D49742    | Hs.241363 | NM_004132:Homo sapiens hyaluron binding   | 3.23 |
|    | 424456 | AA341017  | Hs.25549  | Hs.25549:hypothetical protein FLJ20898    | 3.23 |
| 20 | 452303 | R27257    | Hs.57734  | Hs.57734:G protein-coupled receptor kise  | 3.22 |
|    | 425390 | AI092634  | Hs.156114 | NM_004648:Homo sapiens protein tyrosine   | 3.21 |
|    | 416033 | NM_012201 | Hs.78979  | NM_012201:Homo sapiens golgi apparatus p  | 3.19 |
|    | 450931 | N25156    | Hs.25648  | Hs.25648:tumor necrosis factor receptor   | 3.19 |
|    | 428065 | AI634046  | Hs.157313 | Hs.157313:ESTs                            | 3.18 |
| 25 | 422616 | BE300330  | Hs.118725 | NM_012248:Homo sapiens selenophosphate s  | 3.18 |
|    | 439318 | AW837046  | Hs.6527   | Hs.6527:G protein-coupled receptor 56     | 3.17 |
|    | 427640 | AF058293  | Hs.180015 | NM_001355:Homo sapiens D-dopachrome taut  | 3.17 |
|    | 409936 | AK001691  | Hs.57655  | Hs.57655:dudulin 2                        | 3.16 |
|    | 436001 | AW903849  | Hs.173840 | Hs.173840:similar to endothelial cell-se  | 3.16 |
| 30 | 451154 | AA015879  | Hs.33536  | Hs.33536:ESTs                             | 3.16 |
|    | 420256 | U84722    | Hs.76206  | NM_001795:Homo sapiens cadherin 5, type   | 3.16 |
|    | 407584 | W25945    | Hs.8173   | Hs.8173:hypothetical protein FLJ10803     | 3.15 |
|    | 428593 | AW207440  | Hs.185973 | NM_003676:Homo sapiens degenerative sper  | 3.15 |
|    | 410026 | AI912061  | Hs.55016  | Hs.55016:EPS8-related protein 2           | 3.15 |
| 35 | 445333 | BE537641  | Hs.44278  | Hs.44278:RAB17, member: RAS oncogene fami | 3.14 |
|    | 448143 | AF039704  | Hs.20478  | NM_000391:Homo sapiens ceroid-lipofuscin  | 3.14 |
|    | 423007 | AA320134  | Hs.196029 | Hs.196029:Homo sapiens mR for KIAA1657 p  | 3.14 |
|    | 416511 | NM_006762 | Hs.79356  | NM_006762:Homo sapiens Lysosomal-associa  | 3.14 |
|    | 439237 | AW408158  | Hs.318893 | Hs.318893:ESTs, Weakly similar to Z195_H  | 3.13 |
| 40 | 446899 | NM_005397 | Hs.16426  | NM_005397:Homo sapiens podocalyxin-like   | 3.13 |
|    | 413916 | N49813    | Hs.75615  | NM_000483:Homo sapiens apolipoprotein C-  | 3.13 |
|    | 434398 | AA121098  | Hs.3838   | NM_006622:Homo sapiens serum-inducible k  | 3.12 |
|    | 441283 | AA927670  | Hs.131704 | Hs.131704:ESTs                            | 3.12 |
|    | 418945 | BE246762  | Hs.89499  | NM_000598:Homo sapiens arachidole 5-lipo  | 3.12 |
| 45 | 418458 | AA332941  | Hs.85226  | NM_000235:Homo sapiens lipase A, lysosom  | 3.12 |
|    | 408989 | AW361666  | Hs.49500  | Hs.49500:KIAA0746 protein                 | 3.11 |
|    | 436906 | H95990    | Hs.181244 | Hs.181244:major histocompatibility compl  | 3.11 |
|    | 411089 | AA456454  | Hs.355702 | Hs.355702:ESTs, Weakly similar to AC0048  | 3.11 |
|    | 432990 | AL036071  | Hs.279899 | NM_003820:Homo sapiens tumor necrosis fa  | 3.11 |
| 50 | 425009 | X58288    | Hs.154151 | NM_002845:Homo sapiens protein tyrosine   | 3.10 |
|    | 443601 | AI078554  | Hs.42658  | Hs.42658:Homo sapiens cD FLJ30167 fis, c  | 3.10 |
|    | 430603 | AA148164  | Hs.247280 | Hs.247280:chromosome 20 open reading fra  | 3.10 |
|    | 413672 | BE156536  | Hs.353632 | Hs.353632:ESTs, Moderately similar to H   | 3.09 |
|    | 407786 | AA687538  | Hs.38972  | NM_005727:Homo sapiens tetraspan 1 (TSPA  | 3.09 |
| 55 | 414586 | AA306160  | Hs.16488  | NM_002298:Homo sapiens lymphocyte cyto    | 3.08 |
|    | 423712 | W46802    | Hs.81988  | Hs.81988:disabled homolog 2, mitogen-res  | 3.08 |
|    | 438552 | AJ245820  | Hs.6314   | NM_012410:Homo sapiens type I transmembr  | 3.06 |
|    | 448364 | T08958    | Hs.297214 | Hs.297214:HSPC141 protein                 | 3.06 |
|    | 426437 | BE076537  | Hs.169895 | NM_004223:Homo sapiens ubiquitin-conjuga  | 3.06 |
| 60 | 437679 | NM_014214 | Hs.5753   | NM_014214:Homo sapiens inositol(myo)-1(o  | 3.06 |
|    | 422262 | AL022315  | Hs.113987 | NM_006498:Homo sapiens lectin, galactosi  | 3.06 |
|    | 410490 | R97457    | Hs.63984  | NM_001257:Homo sapiens cadherin 13, H-ca  | 3.05 |
|    | 435918 | AA700553  | Hs.368614 | Hs.368614:ESTs                            | 3.05 |
|    | 418883 | BE387036  | Hs.1211   | NM_001611:Homo sapiens acid phosphatase   | 3.05 |
| 65 | 453613 | F06838    | Hs.374476 | Hs.374476:ESTs                            | 3.05 |
|    | 408051 | AI623351  | Hs.172148 | Hs.172148:ESTs                            | 3.05 |
|    | 432278 | AL137506  | Hs.274256 | Hs.274256:hypothetical protein FLJ23563   | 3.04 |
|    | 407949 | W21874    | Hs.247057 | Hs.247057:ESTs, Weakly similar to 210926  | 3.04 |
|    | 418090 | U57059    | Hs.83429  | NM_003810:Homo sapiens tumor necrosis fa  | 3.04 |
| 70 | 433165 | AA578904  | Hs.292437 | Hs.292437:ESTs                            | 3.03 |
|    | 425809 | AA370362  | Hs.57958  | Hs.57958:EGF-TM7-latrophilin-related pro  | 3.03 |
|    | 443884 | N20617    | Hs.194397 | Hs.194397:ESTs, Moderately similar to 22  | 3.03 |
|    | 447831 | AI433293  | Hs.164115 | Hs.164115:ESTs                            | 3.02 |
|    | 413278 | BE563085  | Hs.833    | NM_005101:Homo sapiens interferon-stimul  | 3.01 |
| 75 | 418870 | AF147204  | Hs.89414  | Hs.89414:chemokine (C-X-C motif), recept  | 3.00 |
|    | 456376 | AA663904  | Hs.89862  | Hs.89862:TNFRSF1A-associated via death d  | 3.00 |
|    | 439738 | BE246502  | Hs.9598   | Hs.9598:sema domain, immunoglobulin doma  | 3.00 |
|    | 444416 | AW288085  | Hs.11156  | NM_016494:Homo sapiens hypothetical prot  | 3.00 |
|    | 406656 | M16714    | Hs.89643  | Hs.89643:transketolase (Wemicke-Korsako   | 3.00 |
| 80 | 406826 | AW516005  | Hs.84298  | Hs.84298:CD74 antigen (invariant polypep  | 2.99 |
|    | 418707 | U97502    | Hs.87497  | Hs.87497:butyrophilin, subfamily 3, memb  | 2.99 |
|    | 421742 | AW970004  | Hs.107528 | NM_016108:Homo sapiens androgen induced   | 2.99 |
|    | 406824 | AW515961  | Hs.84298  | Hs.84298:CD74 antigen (invariant polypep  | 2.99 |



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|    |        |           |           |   |      |
|----|--------|-----------|-----------|---|------|
|    | 435605 | AF151815  | Hs.4973   | NM_015680:Homo sapiens hypothetical prot  | 2.98 |
|    | 410491 | AA465131  | Hs.64001  | Hs.64001:Homo sapiens clone 25218 mR seq  | 2.98 |
|    | 427648 | AI376722  | Hs.180062 | NM_004159:Homo sapiens proteasome (proso  | 2.98 |
|    | 411125 | AA151647  | Hs.58877  | NM_000101:Homo sapiens cytochrome b-245,  | 2.98 |
| 5  | 435550 | AI224456  | Hs.324507 | Hs.324507:hypothetical protein FLJ20986   | 2.98 |
|    | 429373 | NM_014694 | Hs.200594 | NM_014694:Homo sapiens KIAA0605 gene pro  | 2.98 |
|    | 445701 | AF055581  | Hs.13131  | NM_005475:Homo sapiens lymphocyte adapto  | 2.97 |
|    | 414649 | AI672727  | Hs.76753  | NM_000118:Homo sapiens endoglin (Oster-R  | 2.97 |
|    | 444207 | AI565004  | Hs.374415 | Hs.374415:ESTs                            | 2.97 |
| 10 | 423225 | AA852604  | Hs.125359 | NM_006288:Homo sapiens Thy-1 cell surfac  | 2.97 |
|    | 407792 | AI077715  | Hs.39384  | NM_014344:Homo sapiens four jointed box   | 2.97 |
|    | 445707 | AI248720  | Hs.114390 | Hs.114390:ESTs                            | 2.96 |
|    | 452888 | AW955454  | Hs.30942  | NM_004093:Homo sapiens ephrin-B2 (EFNB2)  | 2.96 |
|    | 418478 | U38945    | Hs.1174   | Hs.1174:cyclin-dependent kase inhibitor   | 2.95 |
| 15 | 411441 | AL042355  | Hs.70202  | Hs.70202:WD repeat domain 10              | 2.95 |
|    | 443426 | AF098158  | Hs.9329   | Hs.9329:chromosome 20 open reading frame  | 2.94 |
|    | 450876 | AF189062  | Hs.285976 | Hs.285976:LAG1 longevity assurance homol  | 2.94 |
|    | 426359 | AA376409  | Hs.10862  | Hs.10862:Homo sapiens cD: FLJ23313 fis,   | 2.94 |
|    | 425421 | L11669    | Hs.157145 | NM_001120:Homo sapiens tetracycline tran  | 2.93 |
| 20 | 449879 | H03573    | Hs.287830 | Hs.287830:Homo sapiens mR; cD DKFZp434E1  | 2.93 |
|    | 454075 | R43826    | Hs.16313  | Hs.16313:Kruppel-like zinc finger protei  | 2.93 |
|    | 421595 | AB014520  | Hs.301685 | Hs.301685:KIAA0620 protein                | 2.93 |
|    | 457949 | W69171    | Hs.334814 | Hs.334814:hypothetical protein FLJ14868   | 2.92 |
|    | 443987 | AW163123  | Hs.10071  | NM_016551:Homo sapiens seven transmembra  | 2.92 |
| 25 | 430259 | BE550182  | Hs.375142 | Hs.375142:RalGEF-like protein 3, mouse h  | 2.92 |
|    | 415906 | AI751357  | Hs.288741 | Hs.288741:Homo sapiens cD: FLJ22256 fis,  | 2.91 |
|    | 429762 | AI346255  | Hs.216354 | NM_006913:Homo sapiens ring finger prote  | 2.91 |
|    | 451527 | AF022813  | Hs.26518  | NM_003271:Homo sapiens transmembrane 4 s  | 2.91 |
|    | 425356 | BE244879  | Hs.155939 | NM_005541:Homo sapiens inositol polyphos  | 2.91 |
| 30 | 427080 | AW068287  | Hs.301175 | NM_002872:Homo sapiens ras-related C3 bo  | 2.91 |
|    | 426432 | AF001601  | Hs.169857 | NM_000305:Homo sapiens paraoxase 2 (PON2  | 2.90 |
|    | 431476 | BE612705  | Hs.256697 | Hs.256697:histidine triad nucleotide bin  | 2.89 |
|    | 406659 | AA663985  | Hs.277477 | Hs.277477:major histocompatibility compl  | 2.89 |
|    | 451144 | AW956103  | Hs.61712  | Hs.61712:Homo sapiens cD FLJ31548 fis, c  | 2.89 |
| 35 | 456362 | AW973003  | Hs.179909 | Hs.179909:nuclear receptor coactivator 6  | 2.88 |
|    | 426440 | BE382756  | Hs.169902 | NM_006516:Homo sapiens solute carrier fa  | 2.88 |
|    | 456974 | M12529    | Hs.169401 | NM_000041:Homo sapiens apolipoprotein E   | 2.88 |
|    | 418174 | L20688    | Hs.83656  | Hs.83656:Rho GDP dissociation inhibitor   | 2.88 |
|    | 446055 | AI815981  | Hs.12909  | Hs.12909:mucolin 1                        | 2.88 |
| 40 | 423184 | NM_004428 | Hs.1624   | NM_004428:Homo sapiens ephrin-A1 (EF1),   | 2.87 |
|    | 427700 | AA262294  | Hs.180383 | NM_001946:Homo sapiens dual specificity   | 2.87 |
|    | 410668 | BE379794  | Hs.159651 | NM_016629:Homo sapiens hypothetical prot  | 2.87 |
|    | 444143 | AW747996  | Hs.160999 | Hs.160999:ESTs, Weakly similar to I78885  | 2.87 |
|    | 407151 | H25836    | Hs.301527 | Hs.301527:ESTs, Moderately similar to un  | 2.86 |
| 45 | 449349 | AI825386  | Hs.352579 | Hs.352579:Homo sapiens, chromosome 20 op  | 2.86 |
|    | 436997 | AA741151  | Hs.137323 | Hs.137323:ESTs                            | 2.86 |
|    | 446143 | BE245342  | Hs.305079 | NM_013336:Homo sapiens protein transport  | 2.86 |
|    | 417355 | D13168    | Hs.82002  | Hs.82002:endothelin receptor type B       | 2.86 |
|    | 431685 | AW296135  | Hs.267659 | NM_006113:Homo sapiens vav 3 oncogene (V  | 2.86 |
| 50 | 408877 | AA479033  | Hs.130315 | Hs.130315:ESTs                            | 2.85 |
|    | 429615 | AF258627  | Hs.211562 | NM_005502:Homo sapiens ATP-binding casse  | 2.85 |
|    | 412014 | AI620650  | Hs.43761  | Hs.43761:gap junction protein, alpha 7,   | 2.84 |
|    | 436749 | AA584890  | Hs.5302   | NM_006149:Homo sapiens lectin, galactosi  | 2.84 |
|    | 419625 | U91616    | Hs.182885 | NM_004556:Homo sapiens nuclear factor of  | 2.84 |
| 55 | 439941 | AI392640  | Hs.18272  | Hs.18272:solute carrier family 38, membe  | 2.84 |
|    | 436496 | AA281959  | Hs.5210   | NM_004877:Homo sapiens glia maturation f  | 2.84 |
|    | 422100 | AI096988  | Hs.111554 | NM_005737:Homo sapiens ADP-ribosylation   | 2.83 |
|    | 439730 | AF035292  | Hs.6654   | Hs.6654:KIAA0657 protein                  | 2.83 |
|    | 447217 | BE465754  | Hs.17778  | NM_003872:Homo sapiens neuropilin 2 (NRP  | 2.83 |
| 60 | 428343 | AL043021  | Hs.12705  | Hs.12705:similar to HYPOTHETICAL 43.1 KD  | 2.82 |
|    | 440524 | R71264    | Hs.16798  | Hs.16798:Homo sapiens mR; cD DKFZp564O24  | 2.82 |
|    | 415523 | AL042003  | Hs.296847 | NM_003119:Homo sapiens spastic paraplegi  | 2.81 |
|    | 439668 | AI091277  | Hs.302634 | Hs.302634:frizzled homolog 8 (Drosophila  | 2.81 |
|    | 414570 | Y00285    | Hs.76473  | NM_000876:Homo sapiens insulin-like grow  | 2.80 |
| 65 | 426535 | AU077012  | Hs.288582 | NM_006287:Homo sapiens tissue factor pat  | 2.80 |
|    | 409649 | AA159216  | Hs.55505  | Hs.55505:hypothetical protein FLJ20442    | 2.80 |
|    | 406655 | M21533    | Hs.277477 | Hs.277477:major histocompatibility compl  | 2.79 |
|    | 415323 | BE269352  | Hs.949    | NM_000433:Homo sapiens neutrophil cytosol | 2.79 |
|    | 443195 | BE148235  | Hs.193063 | Hs.193063:Homo sapiens cD FLJ14201 fis,   | 2.78 |
| 70 | 451356 | AA748418  | Hs.164577 | Hs.164577:ESTs                            | 2.78 |
|    | 450708 | AA376654  | Hs.350065 | Hs.350065:Homo sapiens cD FLJ30634 fis,   | 2.78 |
|    | 433681 | AI004377  | Hs.200360 | Hs.200360:Homo sapiens cD FLJ13027 fis,   | 2.77 |
|    | 442599 | AF078037  | Hs.324051 | NM_006663:Homo sapiens RelA-associated i  | 2.76 |
| 75 | 414509 | AW161311  | Hs.76294  | NM_001780:Homo sapiens CD63 antigen (mel  | 2.76 |
|    | 431394 | AK000692  | Hs.252351 | Hs.252351:HERV-H LTR-associating 2        | 2.76 |
|    | 417331 | AW411297  | Hs.81972  | Hs.81972:SHC (Src homology 2 domain cont  | 2.76 |
|    | 415995 | NM_004573 | Hs.355888 | NM_004573:Homo sapiens phospholipase C,   | 2.75 |
|    | 414911 | NM_000107 | Hs.77602  | NM_000107:Homo sapiens damage-specific D  | 2.75 |
|    | 425976 | C75094    | Hs.334514 | Hs.334514:chromosome 6 open reading fram  | 2.75 |
| 80 | 407893 | BE408359  | Hs.43621  | Hs.43621:hypothetical protein MBC3205     | 2.75 |
|    | 407903 | AI287341  | Hs.154029 | Hs.154029:bHLH factor Hes4                | 2.75 |
|    | 416062 | AA724811  | Hs.334791 | Hs.334791:similar to neurul tetraspanin   | 2.75 |
|    | 428494 | AA233439  | Hs.184634 | Hs.184634:hypothetical protein FLJ20005   | 2.75 |

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|    |        |               |           |  |      |
|----|--------|---------------|-----------|--|------|
|    | 421506 | BE302796      | Hs.105097 | NM_003258:Homo sapiens thymidine kise 1, | 2.74 |
|    | 427581 | NM_014788     | Hs.179703 | NM_014788:Homo sapiens tripartite motif- | 2.74 |
|    | 424527 | AW138558      | Hs.334873 | Hs.334873:carboxypeptidase M             | 2.74 |
| 5  | 439578 | AW263124      | Hs.350547 | Hs.350547:nuclear receptor co-repressor/ | 2.74 |
|    | 425188 | AK002052      | Hs.155071 | Hs.155071:chromosome 20 open reading fra | 2.74 |
|    | 428013 | AF151020      | Hs.181444 | NM_016456:Homo sapiens hypothetical prot | 2.73 |
|    | 439333 | AW384710      | Hs.132986 | Hs.132986:Homo sapiens cD FLJ31588 fis,  | 2.73 |
|    | 450935 | BE514743      | Hs.355753 | NM_005851:Homo sapiens tumor suppressor  | 2.73 |
| 10 | 421532 | AW138207      | Hs.146170 | Hs.146170:hypothetical protein FLJ22969  | 2.73 |
|    | 440502 | AI824113      | Hs.78281  | Hs.78281:regulator of G-protein siglling | 2.73 |
|    | 444981 | AW855398      | Hs.12210  | Hs.12210:tumor endothelial marker 6      | 2.72 |
|    | 439219 | N33883        | Hs.41322  | Hs.41322:ESTs                            | 2.72 |
|    | 416847 | L43821        | Hs.80261  | NM_006403:Homo sapiens enhancer of filam | 2.72 |
| 15 | 433179 | AW362945      | Hs.162459 | Hs.162459:ESTs                           | 2.72 |
|    | 424528 | AW073971      | Hs.238954 | Hs.238954:ESTs, Weakly similar to putal  | 2.71 |
|    | 411213 | AA676939      | Hs.69285  | NM_003873:Homo sapiens neuropilin 1 (NRP | 2.70 |
|    | 433012 | NM_004045     | Hs.279910 | NM_004045:Homo sapiens ATX1 antioxidant  | 2.70 |
|    | 425345 | AU077297      | Hs.155894 | NM_002827:Homo sapiens protein tyrosine  | 2.69 |
| 20 | 428923 | BE047698      | Hs.188785 | Hs.188785:ESTs                           | 2.69 |
|    | 427923 | AW274357      | Hs.301406 | Hs.301406:hypothetical protein PP3501    | 2.69 |
|    | 446644 | NM_003272     | Hs.15791  | NM_003272:Homo sapiens transmembrane 7 s | 2.69 |
|    | 421743 | T35958        | Hs.107614 | Hs.107614:DKFZP564I1171 protein          | 2.68 |
|    | 416207 | NM_014745     | Hs.79077  | NM_014745:Homo sapiens KIAA0233 gene pro | 2.68 |
| 25 | 420372 | AW960049      | Hs.293660 | Hs.293660:gene overexpressed in astrocyt | 2.68 |
|    | 420642 | NM_000505     | Hs.1321   | NM_000505:Homo sapiens coagulation facto | 2.67 |
|    | 425069 | AA687465      | Hs.298184 | Hs.298184:potassium voltage-gated channe | 2.67 |
|    | 418558 | AW082266      | Hs.86131  | NM_003824:Homo sapiens Fas (TNFRSF6)-ass | 2.67 |
|    | 426251 | M24283        | Hs.168383 | NM_000201:Homo sapiens intercellular adh | 2.66 |
| 30 | 406701 | AA780613      | Hs.62954  | Hs.62954:ferritin, heavy polypeptide 1   | 2.66 |
|    | 431681 | AK000378      | Hs.267566 | Hs.267566:hypothetical protein FLJ20371  | 2.66 |
|    | 412833 | AW960547      | Hs.298262 | Hs.298262:ribosomal protein S19          | 2.66 |
|    | 433101 | AW572317      | Hs.12082  | Hs.12082:TIGA1                           | 2.66 |
|    | 414774 | X02419        | Hs.77274  | NM_002558:Homo sapiens plasminogen activ | 2.66 |
| 35 | 427868 | AI360119.comp | Hs.181013 | NM_002629:Homo sapiens phosphoglycerate  | 2.66 |
|    | 413929 | BE501689      | Hs.75617  | Hs.75617:collagen, type IV, alpha 2      | 2.66 |
|    | 424762 | AL119442      | Hs.183684 | Hs.183684:eukaryotic translation initiat | 2.66 |
|    | 422048 | NM_012445     | Hs.288126 | NM_012445:Homo sapiens spondin 2, extrac | 2.65 |
|    | 431350 | AI92528       | Hs.164537 | Hs.164537:ESTs                           | 2.65 |
| 40 | 450184 | W31096        | Hs.237617 | Hs.237617:dlpeptidylpeptidase 9          | 2.65 |
|    | 419285 | D31887        | Hs.89868  | Hs.89868:KIAA0062 protein                | 2.65 |
|    | 414217 | AI309298      | Hs.279898 | Hs.279898:Homo sapiens cD: FLJ23165 fis, | 2.64 |
|    | 451253 | H48299        | Hs.26126  | NM_006984:Homo sapiens claudin 10 (CLDN1 | 2.64 |
|    | 435905 | AW997484      | Hs.5003   | Hs.5003:SLIT-ROBO Rho GTPase-activating  | 2.64 |
| 45 | 432581 | AU076465      | Hs.278441 | NM_014634:Homo sapiens KIAA0015 gene pro | 2.63 |
|    | 415782 | AA169345      | Hs.123177 | Hs.123177:hypothetical protein BC011406  | 2.63 |
|    | 430223 | NM_002514     | Hs.235935 | NM_002514:Homo sapiens nephroblastoma ov | 2.63 |
|    | 417526 | AA568906      | Hs.82240  | NM_004177:Homo sapiens syntaxin 3A (STX3 | 2.63 |
|    | 409956 | AW103364      | Hs.727    | NM_002192:Homo sapiens inhibin, beta A ( | 2.63 |
| 50 | 449843 | R85337        | Hs.24030  | NM_001860:Homo sapiens solute carrier fa | 2.62 |
|    | 417389 | BE260964      | Hs.82045  | NM_002391:Homo sapiens midkine (neurite  | 2.62 |
|    | 446312 | BE087853      | Hs.171802 | Hs.171802:Homo sapiens, clone IMAGE:3956 | 2.62 |
|    | 435099 | AC004770      | Hs.4756   | Hs.4756:flap structure-specific endonuc  | 2.62 |
|    | 417920 | S47833        | Hs.82927  | NM_004037:Homo sapiens adenosine monopho | 2.62 |
| 55 | 435702 | AI033647      | Hs.121001 | Hs.121001:Homo sapiens, clone MGC:45521  | 2.62 |
|    | 422959 | AV647015      | Hs.349256 | Hs.349256:paired immunoglobulin-like rec | 2.62 |
|    | 419938 | AU076772      | Hs.1279   | NM_001733:Homo sapiens complement compon | 2.62 |
|    | 450954 | AI904740      | Hs.25691  | NM_005856:Homo sapiens receptor (calcito | 2.61 |
|    | 421753 | BE314828      | Hs.107911 | Hs.107911:ATP-binding cassette, sub-fami | 2.61 |
| 60 | 443577 | AI078033      | Hs.177170 | Hs.177170:ESTs, Weakly similar to ALU8_H | 2.61 |
|    | 453886 | R66282        | Hs.20247  | Hs.20247:ESTs                            | 2.61 |
|    | 421883 | X55079        | Hs.1437   | NM_000152:Homo sapiens glucosidase, alph | 2.60 |
|    | 440457 | BE387593      | Hs.21321  | Hs.21321:granule cell differentiation pr | 2.60 |
|    | 410295 | AA741357      | Hs.356624 | Hs.356624:ESTs                           | 2.59 |
| 65 | 420679 | X57152        | Hs.99853  | NM_001436:Homo sapiens fibrillarin (FBL) | 2.59 |
|    | 451558 | NM_001089     | Hs.26630  | NM_001089:Homo sapiens ATP-binding casse | 2.59 |
|    | 444672 | Z95636        | Hs.11669  | Hs.11669:laminin, alpha 5                | 2.59 |
|    | 408669 | AI493591      | Hs.78146  | Hs.78146:platelet/endothelial cell adhes | 2.59 |
|    | 426194 | T50872        | Hs.2001   | Hs.2001:thromboxane A synthase 1 (plate  | 2.59 |
| 70 | 421814 | L12350        | Hs.108623 | NM_003247:Homo sapiens thrombospondin 2  | 2.59 |
|    | 456371 | S76825        | Hs.89695  | Hs.89695:insulin receptor                | 2.59 |
|    | 429098 | AF030249      | Hs.196176 | NM_001398:Homo sapiens enoyl Coenzyme A  | 2.59 |
|    | 414443 | AU077268      | Hs.76144  | NM_002609:Homo sapiens platelet-derived  | 2.59 |
|    | 428484 | AF104032      | Hs.184601 | NM_003486:Homo sapiens solute carrier fa | 2.59 |
| 75 | 453309 | AI791809      | Hs.32949  | NM_005218:Homo sapiens defensin, beta 1  | 2.59 |
|    | 412867 | AU076861      | Hs.74637  | NM_003217:Homo sapiens testis enhanced g | 2.58 |
|    | 432827 | Z68128        | Hs.3109   | Hs.3109:Rho GTPase activating protein 4  | 2.58 |
|    | 412669 | AW880841      | Hs.96908  | NM_006034:Homo sapiens p53-induced prote | 2.58 |
|    | 412115 | AK001763      | Hs.73239  | Hs.73239:hypothetical protein FLJ10901   | 2.58 |
| 80 | 452866 | R26969        | Hs.268016 | Hs.268016:Homo sapiens cD: FLJ21243 fis, | 2.58 |
|    | 435129 | AI381659      | Hs.267086 | Hs.267086:ESTs                           | 2.57 |
|    | 424482 | BE268621      | Hs.149155 | NM_003374:Homo sapiens voltage-dependent | 2.57 |
|    | 410494 | M36564        | Hs.64016  | NM_000313:Homo sapiens protein S (alpha) | 2.56 |
|    | 433895 | AI287912      | Hs.3628   | NM_004834:Homo sapiens mitogen-activated | 2.56 |

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|    |        |               |           |  |      |
|----|--------|---------------|-----------|--|------|
|    | 442566 | R37337        | Hs.12111  | Hs.12111:ESTs                            | 2.56 |
|    | 417640 | D30857        | Hs.82353  | NM_006404:Homo sapiens protein C recepto | 2.56 |
|    | 442622 | NM_000435     | Hs.8546   | NM_000435:Homo sapiens Notch homolog 3 ( | 2.56 |
| 5  | 430346 | AK000331      | Hs.297641 | Hs.297641:retinoblastoma-associated fact | 2.55 |
|    | 419344 | U94905        | Hs.277445 | Hs.277445:diacylglycerol kise, zeta (104 | 2.55 |
|    | 426500 | NM_014638     | Hs.170156 | NM_014638:Homo sapiens KIAA0450 gene pro | 2.55 |
|    | 408048 | NM_007203     | Hs.42322  | NM_007203:Homo sapiens A kise (PRKA) anc | 2.55 |
|    | 450700 | AW732799      | Hs.25348  | NM_005860:Homo sapiens follistatin-like  | 2.54 |
| 10 | 417018 | M16038        | Hs.80887  | NM_002350:Homo sapiens v-yes-1 Yamaguchi | 2.54 |
|    | 419378 | R24922        | Hs.90078  | Hs.90078:nucleotide-sugar transporter si | 2.54 |
|    | 422451 | AA310753      | Hs.42491  | Hs.42491:ESTs, Moderately similar to hyp | 2.53 |
|    | 435906 | AI686379      | Hs.110796 | Hs.110796:SAR1 protein                   | 2.53 |
|    | 400231 |               |           |  | 2.53 |
| 15 | 417849 | AW291587      | Hs.82733  | NM_007361:Homo sapiens nidogen 2 (NID2), | 2.53 |
|    | 427380 | NM_005534     | Hs.177559 | NM_005534:Homo sapiens interferon gamma  | 2.52 |
|    | 428385 | AF112213      | Hs.184062 | Hs.184062:chromosome 20 open reading fra | 2.52 |
|    | 438000 | AI825880      | Hs.5985   | Hs.5985:non-kise Cdc42 effector protein  | 2.52 |
|    | 448719 | AA033627      | Hs.21858  | Hs.21858:serine (or cysteine) protease i | 2.52 |
| 20 | 422396 | W21872        | Hs.7907   | Hs.7907:L-fucose kise                    | 2.52 |
|    | 420787 | AA564248      | Hs.351292 | Hs.351292:Homo sapiens cD FLJ32605 fis,  | 2.51 |
|    | 430590 | AW383947      | Hs.246381 | NM_001251:Homo sapiens CD68 antigen (CD6 | 2.51 |
|    | 447026 | BE313144      | Hs.324844 | Hs.324844:hypothetical protein IMAGE3455 | 2.51 |
|    | 439223 | AW238299      | Hs.250618 | Hs.250618:UL16 binding protein 2         | 2.50 |
| 25 | 435151 | AA348482      | Hs.4788   | Hs.4788:nicastrin                        | 2.50 |
|    | 448202 | AB002292      | Hs.20695  | NM_014629:Homo sapiens Rho guanine nucle | 2.50 |
|    | 449943 | AF104266      | Hs.24212  | Hs.24212:latrophilin                     | 2.50 |
|    | 425743 | BE396495      | Hs.159428 | Hs.159428:BCL2-associated X protein      | 2.50 |
|    | 444681 | AJ243937      | Hs.288316 | Hs.288316:chromosome 6 open reading fram | 2.50 |
| 30 | 421643 | BE281170      | Hs.106357 | NM_007126:Homo sapiens valosin-containin | 2.50 |
|    | 426865 | D63476        | Hs.172813 | NM_003899:Homo sapiens Rho guanine nucle | 2.50 |
|    | 432306 | Y18207        | Hs.303090 | NM_005398:Homo sapiens protein phosphata | 2.49 |
|    | 421846 | AA017707      | Hs.1432   | NM_002743:Homo sapiens protein kise C su | 2.49 |
|    | 421905 | AI660247      | Hs.32699  | Hs.32699:Homo sapiens, Similar to RIKEN  | 2.49 |
| 35 | 419493 | AF001212      | Hs.90744  | NM_002815:Homo sapiens proteasome (proso | 2.49 |
|    | 422530 | AW972300      | Hs.118110 | NM_004335:Homo sapiens bone marrow strom | 2.48 |
|    | 442821 | BE391929      | Hs.8752   | NM_014255:Homo sapiens transmembrane pro | 2.48 |
|    | 416919 | T97839        | Hs.80464  | NM_006402:Homo sapiens hepatitis B virus | 2.48 |
|    | 443105 | X96753        | Hs.9004   | NM_001897:Homo sapiens chondroitin sulfa | 2.48 |
| 40 | 430040 | AW503115      | Hs.227823 | NM_014287:Homo sapiens pM5 protein (PM5) | 2.48 |
|    | 428028 | U52112        | Hs.182018 | NM_001569:Homo sapiens interleukin-1 rec | 2.47 |
|    | 424307 | AW293399      | Hs.356377 | Hs.356377:Homo sapiens, clone IMAGE:3633 | 2.46 |
|    | 434511 | R28982        | Hs.18106  | Hs.18106:ESTs, Weakly similar to T06291  | 2.46 |
|    | 454390 | AB020713      | Hs.56966  | Hs.56966:KIAA0906 protein                | 2.46 |
| 45 | 417785 | X59812        | Hs.82568  | NM_000784:Homo sapiens cytochrome P450,  | 2.46 |
|    | 424673 | AA345051      | Hs.294092 | Hs.294092:Homo sapiens mR full length in | 2.46 |
|    | 422003 | AA361760      | Hs.296326 | Hs.296326:ESTs, Weakly similar to A33533 | 2.46 |
|    | 432126 | AA865239      | Hs.37196  | Hs.37196:putative G protein coupled rece | 2.46 |
|    | 445937 | AI452943      | Hs.321231 | NM_003779:Homo sapiens UDP-GalbetaGlcc   | 2.46 |
| 50 | 405354 | N68188        | Hs.159472 | Hs.159472:Homo sapiens cD: FLJ22224 fis, | 2.46 |
|    | 401179 |               |           |  | 2.46 |
|    | 418151 | AA864238.comp | Hs.83583  | NM_005731:Homo sapiens actin related pro | 2.45 |
|    | 422648 | D86983        | Hs.118893 | Hs.118893:Melanoma associated gene       | 2.45 |
| 55 | 427759 | BE245578      | Hs.2200   | NM_005041:Homo sapiens perforin 1 (prelo | 2.45 |
|    | 431222 | X56777        | Hs.273790 | NM_007155:Homo sapiens zo pellucida glyc | 2.45 |
|    | 411529 | AA430348      | Hs.317596 | Hs.317596:Homo sapiens cD FLJ12927 fis,  | 2.45 |
|    | 426825 | AL133415      | Hs.297753 | NM_003380:Homo sapiens vimentin (VIM), m | 2.45 |
|    | 422242 | AJ251760      | Hs.273385 | NM_016592:Homo sapiens GS complex locus  | 2.45 |
|    | 408105 | AW152207      | Hs.270977 | Hs.270977:ESTs                           | 2.44 |
| 60 | 426410 | BE298446      | Hs.305890 | Hs.305890:BCL2-like 1                    | 2.44 |
|    | 421064 | AI245432      | Hs.101382 | NM_006291:Homo sapiens tumor necrosis fa | 2.44 |
|    | 428157 | AI738719      | Hs.198427 | NM_000189:Homo sapiens hexokise 2 (HK2), | 2.44 |
|    | 424398 | BE397787      | Hs.146393 | NM_014685:Homo sapiens homocysteine-indu | 2.44 |
|    | 424825 | AF207069      | Hs.153357 | NM_001084:Homo sapiens procollagen-lysin | 2.44 |
| 65 | 426031 | AA295251      | Hs.166066 | Hs.166066:cisplatin resistance associate | 2.43 |
|    | 409817 | BE295464      | Hs.56607  | Hs.56607:Williams-Beuren syndrome chromo | 2.43 |
|    | 429359 | W00482        | Hs.2399   | NM_004995:Homo sapiens matrix metallopro | 2.43 |
|    | 426761 | AI015709      | Hs.172089 | Hs.172089:pro-oncosis receptor inducing  | 2.43 |
|    | 429332 | AF030403      | Hs.199263 | NM_013233:Homo sapiens serine threonine  | 2.43 |
| 70 | 425923 | NM_005026     | Hs.162808 | NM_005026:Homo sapiens phosphoinositide- | 2.43 |
|    | 432211 | BE274530      | Hs.273333 | Hs.273333:hypothetical protein FLJ10986  | 2.43 |
|    | 433339 | AF019226      | Hs.8036   | Hs.8036:RAB3D, member RAS oncogene famil | 2.42 |
|    | 420539 | AA282735      | Hs.44004  | Hs.44004:AD031 protein                   | 2.42 |
|    | 413243 | AA769266      | Hs.193657 | Hs.193657:ESTs                           | 2.42 |
| 75 | 435029 | AF167706      | Hs.19280  | Hs.19280:cysteine-rich motor neuron 1    | 2.42 |
|    | 422374 | AW732869      | Hs.1519   | Hs.1519:protein kise, cAMP-dependent, re | 2.42 |
|    | 444501 | AW247624      | Hs.11342  | NM_004148:Homo sapiens ninjurin 1 (NINJ1 | 2.42 |
|    | 414919 | AW087337      | Hs.194461 | Hs.194461:ESTs                           | 2.42 |
|    | 419355 | AA428520      | Hs.90061  | NM_006667:Homo sapiens progesterone rece | 2.42 |
| 80 | 436042 | AF284422      | Hs.119178 | Hs.119178:cation-chloride cotransporter- | 2.42 |
|    | 418245 | AA088767      | Hs.83883  | Hs.83883:transmembrane, prostate androge | 2.42 |
|    | 444215 | AB033075      | Hs.10669  | Hs.10669:development and differentiation | 2.41 |
|    | 408683 | R58665        | Hs.46847  | NM_016614:Homo sapiens TRAF and TNF rece | 2.41 |
|    | 423701 | AA329856      | Hs.143022 | Hs.143022:ESTs                           | 2.41 |

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|    |        |           |           |   |      |
|----|--------|-----------|-----------|---|------|
|    | 441783 | BE313412  | Hs.7961   | Hs.7961:Homo sapiens clone 25012 mR sequ  | 2.41 |
|    | 428072 | BE258602  | Hs.182366 | NM_016292:Homo sapiens heat shock protei  | 2.41 |
|    | 434599 | AB002313  | Hs.3989   | Hs.3989:plexin B2                         | 2.40 |
| 5  | 442351 | W52642    | Hs.8261   | Hs.8261:SPRY domain-containing SOCS box   | 2.40 |
|    | 407894 | AJ278313  | Hs.41143  | Hs.41143:phospholipase C, beta 1 (phosph  | 2.40 |
|    | 453449 | W16752    | Hs.32981  | Hs.32981:sema domain, immunoglobulin dom  | 2.40 |
|    | 408688 | AI634522  | Hs.152925 | Hs.152925:KIAA1268 protein                | 2.40 |
|    | 422448 | AW372922  | Hs.116774 | Hs.116774:integrin, alpha 1               | 2.39 |
|    | 416269 | AA177138  | Hs.161671 | Hs.161671:ESTs                            | 2.39 |
| 10 | 452679 | Z42387    | Hs.83883  | Hs.83883:transmembrane, prostate androge  | 2.38 |
|    | 432981 | NM_002733 | Hs.3136   | NM_002733:Homo sapiens protein kise, AMP  | 2.38 |
|    | 419846 | NM_015977 | Hs.285681 | Hs.285681:Williams Beuren syndrome chrom  | 2.38 |
|    | 422110 | AI376736  | Hs.111779 | Hs.111779:secreted protein, acidic, cyst  | 2.38 |
|    | 413092 | AA126856  | Hs.118665 | Hs.118665:ESTs                            | 2.38 |
| 15 | 433969 | AW207279  | Hs.271786 | Hs.271786:ESTs, Weakly similar to PC4395  | 2.37 |
|    | 451267 | AI033894  | Hs.117865 | Hs.117865:solute carrier family 17 (anio  | 2.37 |
|    | 447526 | AL048753  | Hs.303649 | NM_002982:Homo sapiens small inducible c  | 2.37 |
|    | 441623 | AA315805  | Hs.348710 | Hs.348710:Homo sapiens, clone IMAGE:4242  | 2.37 |
|    | 420255 | NM_007289 | Hs.1298   | NM_007289:Homo sapiens membrane metallo-  | 2.37 |
| 20 | 409274 | NM_003930 | Hs.52644  | NM_003930:Homo sapiens src family associ  | 2.36 |
|    | 422801 | AF125672  | Hs.287994 | Hs.287994:nuclear receptor co-repressor   | 2.36 |
|    | 407887 | AA579668  | Hs.41072  | Hs.41072:serine (or cysteine) protease i  | 2.36 |
|    | 408212 | AA297567  | Hs.43728  | NM_015696:Homo sapiens weakly similar to  | 2.36 |
|    | 430478 | NM_014349 | Hs.241535 | NM_014349:Homo sapiens apolipoprotein L,  | 2.36 |
| 25 | 405102 |           |           |   | 2.35 |
|    | 423583 | AL122055  | Hs.129836 | Hs.129836:KIAA1028 protein                | 2.35 |
|    | 426125 | X87241    | Hs.166994 | NM_005245:Homo sapiens FAT (tumor suppres | 2.35 |
|    | 425204 | NM_002436 | Hs.1861   | NM_002436:Homo sapiens membrane protein,  | 2.35 |
| 30 | 420676 | AI434780  | Hs.4248   | Hs.4248:Homo sapiens PP3781 mR, complete  | 2.35 |
|    | 421079 | AW404994  | Hs.101695 | Hs.101695:NCK adaptor protein 2           | 2.35 |
|    | 410039 | AF207989  | Hs.58014  | Hs.58014:G protein-coupled receptor, fam  | 2.34 |
|    | 412958 | BE391579  | Hs.75087  | NM_006712:Homo sapiens FAST kise (FASTK)  | 2.34 |
|    | 430363 | M28713    | Hs.274464 | NM_000398:Homo sapiens diaphorase (DH) (  | 2.34 |
| 35 | 425397 | J04088    | Hs.155346 | NM_001067:Homo sapiens topoisomerase (D)  | 2.34 |
|    | 451035 | AU076785  | Hs.430    | NM_002670:Homo sapiens plastin 1 (i isof  | 2.34 |
|    | 449027 | AJ271216  | Hs.22880  | Hs.22880:dipeptidylpeptidase III          | 2.34 |
|    | 429457 | BE243065  | Hs.202955 | Hs.202955:hypothetical protein FLJ20507   | 2.34 |
|    | 417709 | D87434    | Hs.82426  | NM_014734:Homo sapiens KIAA0247 gene pro  | 2.34 |
| 40 | 412805 | AW954569  | Hs.278675 | Hs.278675:bromodomain-containing 4        | 2.34 |
|    | 427647 | W19744    | Hs.180059 | Hs.180059:Homo sapiens cD FLJ31360 fis,   | 2.34 |
|    | 430702 | U56979    | Hs.278568 | NM_000186:Homo sapiens H factor 1 (compl  | 2.33 |
|    | 456804 | AI421645  | Hs.139851 | NM_001233:Homo sapiens caveolin 2 (CAV2)  | 2.33 |
|    | 453648 | W21493    | Hs.28329  | Hs.28329:protein phosphatase 1, regulato  | 2.33 |
|    | 450812 | AB002360  | Hs.25515  | Hs.25515:MCF.2 cell line derived transfo  | 2.33 |
| 45 | 402575 |           |           |   | 2.33 |
|    | 424670 | W61215    | Hs.116651 | NM_005797:Homo sapiens epithelial V-like  | 2.32 |
|    | 452960 | AK001335  | Hs.31137  | NM_006504:Homo sapiens protein tyrosine   | 2.32 |
|    | 442968 | AK000606  | Hs.8868   | NM_004871:Homo sapiens golgi SP receptor  | 2.32 |
| 50 | 410639 | BE269047  | Hs.65234  | Hs.65234:DEAD/H (Asp-Glu-Ala-Asp/His) bo  | 2.32 |
|    | 415169 | W42913    | Hs.78089  | NM_004231:Homo sapiens ATPase, H+ transp  | 2.32 |
|    | 450160 | BE048099  | Hs.183738 | Hs.183738:FERM, RhoGEF (ARHGEF) and plec  | 2.32 |
|    | 407223 | H96850    |           | H96850:yw03b12.s1 Soares melanocyte 2NbH  | 2.32 |
|    | 426780 | BE242284  | Hs.172199 | NM_001114:Homo sapiens adenylate cyclase  | 2.32 |
| 55 | 434987 | AW975114  | Hs.371677 | Hs.371677:ESTs                            | 2.32 |
|    | 416354 | NM_000633 | Hs.79241  | NM_000633:Homo sapiens B-cell CLL/lympho  | 2.31 |
|    | 453107 | NM_016113 | Hs.279746 | NM_016113:Homo sapiens transient recepto  | 2.31 |
|    | 422963 | M79141    | Hs.13234  | Hs.13234:ESTs, Weakly similar to hypothe  | 2.31 |
|    | 433618 | AA602539  | Hs.345494 | Hs.345494:ESTs, Moderately similar to ZN  | 2.31 |
| 60 | 438584 | AA811347  |           | AA811347:ob81h06.s1 NCI_CGAP_GCB1 Homo s  | 2.31 |
|    | 446126 | AW085909  | Hs.356618 | Hs.356618:ESTs, Weakly similar to PC4259  | 2.31 |
|    | 408716 | AI567839  | Hs.151714 | Hs.151714:peroxisomal proliferator-activ  | 2.30 |
|    | 433230 | AW136134  | Hs.220277 | Hs.220277:ESTs, Weakly similar to expres  | 2.30 |
|    | 410168 | AW834050  | Hs.351432 | Hs.351432:tensin                          | 2.30 |
| 65 | 446342 | BE298665  | Hs.14846  | Hs.14846:Homo sapiens mR: cD DKFZp564D01  | 2.30 |
|    | 418452 | BE379749  | Hs.85201  | NM_005127:Homo sapiens C-type (calcium d  | 2.30 |
|    | 453175 | NM_006834 | Hs.32217  | NM_006834:Homo sapiens RAB32, member RAS  | 2.29 |
|    | 409012 | AL117435  | Hs.49725  | Hs.49725:DKFZP434I216 protein             | 2.29 |
|    | 452848 | AI417193  | Hs.288912 | Hs.288912:BBP-like protein 2              | 2.29 |
| 70 | 418838 | AW385224  | Hs.35198  | Hs.35198:ectonucleotide pyrophosphatase/  | 2.29 |
|    | 422562 | AI962060  | Hs.118397 | NM_001129:Homo sapiens AE binding protei  | 2.28 |
|    | 432828 | AB042326  | Hs.287402 | Hs.287402:chondroitin 4-sulfotransferase  | 2.28 |
|    | 412948 | BE243313  | Hs.334851 | NM_006148:Homo sapiens LIM and SH3 prote  | 2.28 |
|    | 426068 | AF029778  | Hs.166154 | NM_002226:Homo sapiens jagged 2 (JAG2),   | 2.28 |
|    | 456919 | NM_003900 | Hs.182248 | NM_003900:Homo sapiens sequestosome 1 (S  | 2.28 |
| 75 | 452806 | AW014549  | Hs.58373  | Hs.58373:ESTs                             | 2.28 |
|    | 453983 | H94997    | Hs.16450  | Hs.16450:ESTs                             | 2.28 |
|    | 407736 | N41744    | Hs.349326 | Hs.349326:Homo sapiens cD FLJ30677 fis,   | 2.28 |
|    | 413211 | AW967107  | Hs.109274 | Hs.109274:hypothetical protein MGC4365    | 2.28 |
|    | 422051 | AW327546  | Hs.111024 | Hs.111024:solute carrier family 25 (mito  | 2.27 |
| 80 | 438438 | AA257992  | Hs.50651  | Hs.50651:Janus kise 1 (a protein tyrosin  | 2.27 |
|    | 436278 | BE396290  | Hs.5097   | NM_004710:Homo sapiens syptogyrin 2 (SYN  | 2.27 |
|    | 454080 | AI199711  | Hs.576    | NM_000147:Homo sapiens fucosidase, alpha  | 2.27 |
|    | 426542 | AF190746  | Hs.170310 | NM_017424:Homo sapiens cat eye syndrome   | 2.27 |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 417115 | AW952792  | Hs.334612 | NM_003094:Homo sapiens small nuclear rib | 2.27 |
|    | 402901 |           |           |  | 2.26 |
|    | 412898 | A1129903  | Hs.74669  | NM_006634:Homo sapiens vesicle-associate | 2.25 |
|    | 413020 | R98736    |           | R98736:yr31h09.r1 Soaras fetal liver spl | 2.26 |
| 5  | 413939 | AL047051  | Hs.199961 | Hs.199961:ESTs, Weakly similar to hypoth | 2.26 |
|    | 408681 | AW953853  | Hs.281462 | Hs.281462:hypothetical protein FLJ14251  | 2.25 |
|    | 412330 | NM_005100 | Hs.788    | NM_005100:Homo sapiens A kise (PRKA) anc | 2.25 |
|    | 442083 | R50192    | Hs.165062 | Hs.165062:ESTs                           | 2.25 |
|    | 418271 | NM_000919 | Hs.83920  | NM_000919:Homo sapiens peptidylglycine a | 2.25 |
| 10 | 433376 | A1249361  | Hs.74122  | NM_001225:Homo sapiens caspase 4, apopto | 2.25 |
|    | 438562 | A1566826  | Hs.25890  | Hs.25890:ESTs, Weakly similar to transdu | 2.25 |
|    | 443883 | AA114212  | Hs.9930   | NM_001235:Homo sapiens serine (or cystei | 2.25 |
|    | 416976 | BE243985  | Hs.80680  | Hs.80680:major vault protein             | 2.24 |
|    | 416914 | AA344481  | Hs.80426  | Hs.80426:brain and reproductive organ-ex | 2.24 |
| 15 | 400288 | X06256    | Hs.149609 | NM_002205:Homo sapiens integrin, alpha 5 | 2.24 |
|    | 407904 | W44735    | Hs.107260 | Hs.107260:putative UDP-Galac:polypeptide | 2.24 |
|    | 429690 | AW956329  | Hs.23721  | Hs.23721:ESTs                            | 2.24 |
|    | 443813 | AA876372  | Hs.93961  | Hs.93961:Homo sapiens mR; cD DKFZp667D09 | 2.24 |
|    | 427458 | BE208364  | Hs.29283  | Hs.29283:ESTs, Weakly similar to LKHU pr | 2.24 |
| 20 | 454294 | AB000734  | Hs.50640  | NM_003745:Homo sapiens JAK binding prote | 2.24 |
|    | 407192 | AA609200  | Hs.366318 | Hs.366318:ESTs                           | 2.23 |
|    | 425751 | T19239    | Hs.1940   | NM_001885:Homo sapiens crystallin, alpha | 2.23 |
|    | 456437 | A1924228  | Hs.115185 | Hs.115185:ESTs                           | 2.23 |
| 25 | 413019 | BE281604  | Hs.75140  | NM_002337:Homo sapiens low density lipop | 2.23 |
|    | 418862 | BE550964  | Hs.89399  | Hs.89399:ATP synthase, H+ transporting,  | 2.23 |
|    | 435284 | AA879470  | Hs.96849  | Hs.96849:Homo sapiens cD FLJ11492 fis, c | 2.23 |
|    | 429630 | M85289    | Hs.211573 | NM_005529:Homo sapiens heparan sulfate p | 2.23 |
|    | 427609 | AK000436  | Hs.179791 | Hs.179791:RAB20, member RAS oncogene fam | 2.23 |
|    | 421917 | AB028943  | Hs.109445 | Hs.109445:hypermethylated in cancer 2    | 2.23 |
| 30 | 446616 | R65964    | Hs.334873 | Hs.334873:carboxypeptidase M             | 2.23 |
|    | 407232 | X04526    |           | X04526:Human liver mR for beta-subunit s | 2.23 |
|    | 423798 | AF047033  | Hs.132904 | Hs.132904:solute carrier family 4, sodiu | 2.23 |
|    | 446755 | AW451473  | Hs.16134  | NM_005990:Homo sapiens serine/threonine  | 2.22 |
| 35 | 452865 | A1924046  | Hs.119567 | Hs.119567:ESTs, Weakly similar to ALU1_H | 2.22 |
|    | 431393 | AW971493  | Hs.134269 | Hs.134269:ESTs, Weakly similar to 200439 | 2.22 |
|    | 431890 | X17033    | Hs.271986 | NM_002203:Homo sapiens integrin, alpha 2 | 2.22 |
|    | 428782 | X12830    | Hs.193400 | NM_000565:Homo sapiens interleukin 6 rec | 2.22 |
|    | 446006 | NM_004403 | Hs.13530  | NM_004403:Homo sapiens deafness, autosom | 2.22 |
| 40 | 436418 | AJ245874  | Hs.4245   | Hs.4245:chromosome 11 hypothetical prote | 2.22 |
|    | 423869 | BE409301  | Hs.134012 | NM_006888:Homo sapiens C1q-related facto | 2.21 |
|    | 437730 | AW071087  | Hs.239176 | Hs.239176:insulin-like growth factor 1 r | 2.21 |
|    | 444020 | R92962    | Hs.35052  | Hs.35052:ESTs                            | 2.21 |
|    | 413882 | AA132973  | Hs.184492 | Hs.184492:Homo sapiens mR; cD DKFZp667B0 | 2.21 |
| 45 | 412654 | A1093480  | Hs.374319 | Hs.374319:ESTs                           | 2.21 |
|    | 448988 | Y09763    | Hs.22785  | NM_004961:Homo sapiens gamma-aminobutyri | 2.21 |
|    | 426841 | A1052358  | Hs.131741 | Hs.131741:ESTs                           | 2.21 |
|    | 408196 | AL034548  | Hs.43627  | NM_006943:Homo sapiens SRY (sex determin | 2.21 |
|    | 451711 | AK000461  | Hs.26890  | Hs.26890:cat eye syndrome chromosome reg | 2.20 |
| 50 | 414325 | AA251929  | Hs.355341 | Hs.355341:Homo sapiens, clone IMAGE:3536 | 2.20 |
|    | 424512 | X53002    | Hs.149846 | NM_002213:Homo sapiens integrin, beta 5  | 2.20 |
|    | 448883 | BE614989  | Hs.7503   | Hs.7503:hypothetical protein FLJ14153    | 2.20 |
|    | 411296 | BE207307  | Hs.10114  | Hs.10114:growth suppressor 1             | 2.20 |
|    | 452268 | NM_003512 | Hs.28777  | NM_003512:Homo sapiens H2A histone famil | 2.20 |
|    | 416810 | AF035606  | Hs.80019  | NM_013232:Homo sapiens programmed cell d | 2.20 |
| 55 | 441415 | H21497    | Hs.7471   | Hs.7471:BBP-like protein 1               | 2.20 |
|    | 444212 | AW503976  | Hs.10649  | NM_004848:Homo sapiens basement membrane | 2.19 |
|    | 428044 | AA093322  | Hs.301404 | NM_006743:Homo sapiens R binding motif p | 2.19 |
|    | 430017 | AA263172  | Hs.35     | NM_002832:Homo sapiens protein tyrosine  | 2.19 |
| 60 | 424490 | AJ278016  | Hs.55565  | Hs.55565:ankyrin repeat domain 3         | 2.19 |
|    | 431193 | AW749505  | Hs.296770 | Hs.296770:KIAA1719 protein               | 2.19 |
|    | 453686 | AL110326  | Hs.304679 | Hs.304679:ESTs, Weakly similar to Z195_H | 2.19 |
|    | 448262 | AW880830  | Hs.186273 | Hs.186273:ESTs                           | 2.19 |
|    | 416065 | BE267931  | Hs.78996  | NM_002592:Homo sapiens proliferating cel | 2.19 |
| 65 | 442045 | C05768    | Hs.8078   | Hs.8078:Homo sapiens clone FBD3 Cri-du-c | 2.19 |
|    | 423804 | AW403448  | Hs.1706   | NM_006084:Homo sapiens interferon-stimul | 2.19 |
|    | 428024 | Z29067    | Hs.2236   | Hs.2236:NIMA (never in mitosis gene a)-r | 2.19 |
|    | 424503 | NM_002205 | Hs.149609 | NM_002205:Homo sapiens integrin, alpha 5 | 2.19 |
|    | 437696 | Z83844    | Hs.5790   | Hs.5790:hypothetical protein dJ37E16.5   | 2.18 |
|    | 405204 |           |           |  | 2.18 |
| 70 | 426158 | NM_001982 | Hs.199067 | NM_001982:Homo sapiens v-erb-b2 erythro  | 2.18 |
|    | 417418 | NM_002468 | Hs.82116  | NM_002468:Homo sapiens myeloid different | 2.18 |
|    | 412773 | H15785    | Hs.74573  | NM_012268:Homo sapiens similar to vaccin | 2.18 |
|    | 409402 | AF208234  | Hs.695    | NM_000100:Homo sapiens cystatin B (stefi | 2.18 |
|    | 443791 | N64458    | Hs.143345 | Hs.143345:ESTs                           | 2.18 |
| 75 | 435049 | AL122067  | Hs.4746   | Hs.4746:hypothetical protein FLJ21324    | 2.18 |
|    | 418389 | AA830613  | Hs.293849 | Hs.293849:ESTs                           | 2.18 |
|    | 450712 | A1732130  | Hs.270496 | Hs.270496:ESTs, Weakly similar to ALUB_H | 2.18 |
|    | 422007 | A1739435  | Hs.39168  | Hs.39168:ESTs, Weakly similar to T17340  | 2.18 |
| 80 | 453676 | AW853745  | Hs.286035 | Hs.286035:hypothetical protein FLJ22686  | 2.18 |
|    | 415718 | F30631    | Hs.200237 | Hs.200237:ESTs                           | 2.18 |
|    | 452688 | AA721140  | Hs.49930  | Hs.49930:ESTs, Weakly similar to B34087  | 2.18 |
|    | 415988 | BE407713  | Hs.78943  | NM_000386:Homo sapiens bleomycin hydrola | 2.18 |
|    | 409453 | A1885516  | Hs.95612  | Hs.95612:ESTs                            | 2.17 |

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|    |        |           |           |   |      |
|----|--------|-----------|-----------|---|------|
|    | 417512 | X76534    | Hs.82225  | NM_002510:Homo sapiens glycoprotein (tra  | 2.17 |
|    | 427202 | BE272922  | Hs.173936 | NM_000628:Homo sapiens interleukin 10 re  | 2.17 |
|    | 440983 | M20681    | Hs.7594   | NM_006931:Homo sapiens solute carrier fa  | 2.17 |
|    | 416084 | L16991    | Hs.79006  | NM_012145:Homo sapiens deoxythymidylate   | 2.17 |
| 5  | 429642 | X68264    | Hs.211579 | NM_006500:Homo sapiens melanoma adhesion  | 2.17 |
|    | 427213 | AW007211  | Hs.348389 | Hs.348389:hypothetical protein FLJ12876   | 2.17 |
|    | 437763 | AA469369  | Hs.5831   | NM_003254:Homo sapiens tissue inhibitor   | 2.17 |
|    | 454000 | AA040620  | Hs.5672   | Hs.5672:golgi membrane protein SB140      | 2.17 |
| 10 | 424247 | X14008    | Hs.234734 | NM_000239:Homo sapiens lysozyme (rel amy  | 2.16 |
|    | 403857 |           |           |   | 2.16 |
|    | 406548 | AA563730  | Hs.277477 | Hs.277477:major histocompatibility compl  | 2.16 |
|    | 400265 |           |           |   | 2.16 |
|    | 442379 | NM_004613 | Hs.8265   | NM_004613:Homo sapiens transglutaminase 2 | 2.16 |
|    | 441892 | AB028981  | Hs.8021   | Hs.8021:KIAA1058 protein                  | 2.16 |
| 15 | 417446 | AL118671  | Hs.82163  | NM_000898:Homo sapiens monoamine oxidase  | 2.16 |
|    | 418386 | AA361739  | Hs.84549  | NM_002494:Homo sapiens DH dehydrogese (u  | 2.16 |
|    | 414053 | BE391635  | Hs.75725  | NM_003564:Homo sapiens transgelin 2 (TAG  | 2.16 |
|    | 440906 | AW161556  | Hs.240170 | Hs.240170:hypothetical protein MGC2731    | 2.16 |
| 20 | 447660 | AW160386  | Hs.163667 | Hs.163667:ESTs, Weakly similar to CA1H_H  | 2.16 |
|    | 408279 | AF216965  | Hs.44095  | Hs.44095:cyclin M3                        | 2.16 |
|    | 426152 | BE299190  | Hs.167246 | Hs.167246:P450 (cytochrome) oxidoreducta  | 2.16 |
|    | 437952 | D63209    | Hs.5944   | NM_014585:Homo sapiens solute carrier fa  | 2.16 |
|    | 415661 | AF057307  | Hs.78575  | Hs.78575:prosaposin (variant Gaucher dis  | 2.15 |
|    | 425302 | U79115    | Hs.155566 | NM_003805:Homo sapiens CASP2 and RIPK1 d  | 2.15 |
| 25 | 425996 | W67330    | Hs.374451 | Hs.374451:ESTs                            | 2.15 |
|    | 413745 | AW247252  | Hs.75514  | NM_000270:Homo sapiens nucleoside phosph  | 2.15 |
|    | 422070 | AF149785  | Hs.111126 | Hs.111126:pituitary tumor-transforming 1  | 2.15 |
|    | 448424 | AW009892  | Hs.31924  | Hs.31924:ESTs                             | 2.15 |
| 30 | 430035 | NM_003463 | Hs.227777 | NM_003463:Homo sapiens protein tyrosine   | 2.15 |
|    | 436407 | AI457122  | Hs.129673 | Hs.129673:eukaryotic translation initial  | 2.15 |
|    | 435551 | AF212365  | Hs.5470   | Hs.5470:interleukin 17B receptor          | 2.15 |
|    | 437741 | BE561610  | Hs.5809   | Hs.5809:putative transmembrane protein;   | 2.15 |
|    | 441192 | AA526626  | Hs.7736   | NM_016504:Homo sapiens mitochondrial rib  | 2.15 |
| 35 | 435750 | AB029012  | Hs.4990   | Hs.4990:KIAA1089 protein                  | 2.15 |
|    | 411165 | NM_000169 | Hs.69089  | NM_000169:Homo sapiens galactosidase, al  | 2.14 |
|    | 425252 | AW391162  | Hs.349306 | Hs.349306:hypothetical protein FLJ31951   | 2.14 |
|    | 427600 | AW630918  | Hs.179774 | NM_002818:Homo sapiens proteasome (proso  | 2.14 |
|    | 426818 | AA554827  | Hs.292996 | Hs.292996:postmeiotic segregation increa  | 2.14 |
| 40 | 442110 | AF113008  | Hs.8102   | NM_001023:Homo sapiens ribosomal protein  | 2.14 |
|    | 407797 | AK000524  | Hs.39850  | Hs.39850:uridine kise-like 1              | 2.14 |
|    | 443044 | N28522    | Hs.8935   | NM_014298:Homo sapiens quinolite phospho  | 2.14 |
|    | 437103 | AW139408  | Hs.152940 | Hs.152940:ESTs                            | 2.14 |
|    | 442069 | AW664144  | Hs.297007 | Hs.297007:Homo sapiens cD FLJ32174 fis    | 2.14 |
| 45 | 424954 | NM_000546 | Hs.1846   | NM_000546:Homo sapiens tumor protein p53  | 2.14 |
|    | 458097 | AW341135  | Hs.58104  | Hs.58104:Homo sapiens, clone IMAGE:47309  | 2.14 |
|    | 411925 | AW014588  | Hs.72925  | NM_003475:Homo sapiens chromosome 11 ope  | 2.14 |
|    | 449644 | AW960707  | Hs.148324 | Hs.148324:ESTs                            | 2.14 |
|    | 422675 | BE018517  | Hs.119140 | NM_001970:Homo sapiens eukaryotic transt  | 2.14 |
| 50 | 428586 | M36712    | Hs.2299   | Hs.2299:CD8 antigen, beta polypeptide 1   | 2.14 |
|    | 429379 | NM_014840 | Hs.200598 | NM_014840:Homo sapiens KIAA0537 gene pro  | 2.13 |
|    | 410290 | AA402307  | Hs.322844 | Hs.322844:hypothetical protein DKFZp564A  | 2.13 |
|    | 443895 | AW979048  | Hs.292566 | Hs.292566:YEA4 protein                    | 2.13 |
|    | 428145 | BE243327  | Hs.182626 | NM_012264:Homo sapiens chromosome 22 ope  | 2.13 |
| 55 | 453518 | AW503205  | Hs.27268  | Hs.27268:Homo sapiens cD: FLJ21933 fis,   | 2.13 |
|    | 456534 | X91195    | Hs.100623 | Hs.100623:protein phosphatase 1, regulat  | 2.13 |
|    | 419972 | AL041465  | Hs.182982 | Hs.182982:golgin-57                       | 2.13 |
|    | 424950 | AA602917  | Hs.156974 | Hs.156974:ESTs                            | 2.13 |
|    | 427557 | NM_002659 | Hs.179657 | NM_002659:Homo sapiens plasminogen activ  | 2.13 |
| 60 | 431449 | M55994    | Hs.256278 | NM_001066:Homo sapiens tumor necrosis fa  | 2.13 |
|    | 418758 | AW959311  | Hs.172012 | Hs.172012:hypothetical protein DKFZp434J  | 2.13 |
|    | 434202 | BE382411  | Hs.3764   | NM_000858:Homo sapiens guanylate kise 1   | 2.13 |
|    | 433233 | AB040927  | Hs.301804 | Hs.301804:KIAA1494 protein                | 2.12 |
|    | 452700 | AI859390  | Hs.288940 | Hs.288940:transmembrane protein 8 (five   | 2.12 |
| 65 | 438033 | T26483    | Hs.6059   | NM_016938:Homo sapiens EGF-containing fi  | 2.12 |
|    | 400847 |           |           |   | 2.12 |
|    | 447547 | NM_007229 | Hs.18842  | NM_007229:Homo sapiens protein kise C an  | 2.12 |
|    | 417052 | NM_000712 | Hs.81029  | NM_000712:Homo sapiens biliverdin reduct  | 2.12 |
|    | 432884 | AU077055  | Hs.289107 | NM_001166:Homo sapiens baculoviral IAP r  | 2.11 |
| 70 | 434558 | AW264102  | Hs.39168  | Hs.39168:ESTs, Weakly similar to T17340   | 2.11 |
|    | 404030 |           |           |   | 2.11 |
|    | 410801 | BE275469  | Hs.66493  | Hs.66493:Down syndrome critical region g  | 2.11 |
|    | 418613 | AA744529  | Hs.86575  | Hs.86575:mitogen-activated protein kise   | 2.11 |
|    | 447087 | AW403870  | Hs.301872 | Hs.301872:hypothetical protein MGC4840    | 2.11 |
| 75 | 433026 | AW160616  | Hs.279921 | NM_016127:Homo sapiens hypothetical prot  | 2.11 |
|    | 426433 | L38969    | Hs.169875 | NM_007112:Homo sapiens thrombospondin 3   | 2.11 |
|    | 442439 | U09759    | Hs.246857 | NM_002752:Homo sapiens mitogen-activated  | 2.11 |
|    | 437379 | AL359575  | Hs.23765  | Hs.23765:membrane metallo-endopeptidase-  | 2.11 |
|    | 400208 |           |           |   | 2.11 |
| 80 | 455705 | AW161061  | Hs.356580 | Hs.356580:ESTs, Weakly similar to zinc f  | 2.11 |
|    | 417599 | AA204688  | Hs.62954  | Hs.62954:ferritin, heavy polypeptide 1    | 2.10 |
|    | 416728 | AB024597  | Hs.79658  | NM_001894:Homo sapiens casein kise 1, ep  | 2.10 |
|    | 439920 | H05430    | Hs.288433 | Hs.288433:neurotrimin                     | 2.10 |
|    | 422309 | U79745    | Hs.114924 | NM_004694:Homo sapiens solute carrier fa  | 2.10 |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 436114 | AA778232  | Hs.19515  | Hs.19515:ESTs, Highly similar to NRG3_HU | 2.10 |
|    | 405517 |           |           |  | 2.10 |
|    | 421872 | AA359753  | Hs.22824  | Hs.22824:MYB binding protein (P160) 1a   | 2.10 |
|    | 437712 | X04588    | Hs.85844  | Hs.85844:neurotrophic tyrosine kise, rec | 2.10 |
| 5  | 431214 | AA294921  | Hs.348024 | NM_002881:Homo sapiens v-rat simian leuk | 2.10 |
|    | 412856 | BE386745  | Hs.74631  | NM_001728:Homo sapiens basigin (BSG), mR | 2.10 |
|    | 442064 | AI422867  | Hs.88594  | Hs.88594:Homo sapiens, clone IMAGE:43329 | 2.10 |
|    | 434845 | BE267057  | Hs.325321 | Hs.325321:WD repeat domain 18            | 2.10 |
| 10 | 426728 | NM_007118 | Hs.367689 | NM_007118:Homo sapiens triple functio d  | 2.10 |
|    | 419596 | BE379320  | Hs.91448  | NM_007026:Homo sapiens dual specificity  | 2.09 |
|    | 448913 | AA194422  | Hs.22564  | NM_004999:Homo sapiens myosin VI (MYO6), | 2.09 |
|    | 414721 | X90392    | Hs.77091  | NM_006730:Homo sapiens deoxyribonuclease | 2.09 |
|    | 424658 | NM_002406 | Hs.151513 | NM_002406:Homo sapiens mannosyl (alpha-1 | 2.09 |
| 15 | 432605 | X94630    | Hs.3107   | Hs.3107:CD97 antigen                     | 2.09 |
|    | 447032 | AK000310  | Hs.17138  | Hs.17138:hypothetical protein FLJ20303   | 2.09 |
|    | 447484 | AA464839  | Hs.292566 | Hs.292566:YEA4 protein                   | 2.09 |
|    | 440188 | AK001812  | Hs.7036   | Hs.7036:N-acetylglucosamine kise         | 2.09 |
|    | 445584 | AF217518  | Hs.8360   | Hs.8360:PTD012 protein                   | 2.09 |
| 20 | 402559 |           |           |  | 2.09 |
|    | 418043 | AW377752  | Hs.83341  | Hs.83341:AXL receptor tyrosine kise      | 2.09 |
|    | 448888 | AW196663  | Hs.200242 | Hs.200242:caspase recruitment domain fam | 2.09 |
|    | 436910 | AA926944  | Hs.261587 | Hs.261587:GCN2 eIF2alpha kise            | 2.09 |
|    | 422573 | AW297985  | Hs.295726 | Hs.295726:integrin, alpha V (vitronectin | 2.08 |
| 25 | 416448 | L13210    | Hs.79339  | NM_005567:Homo sapiens lectin, galactosi | 2.08 |
|    | 428727 | AF078847  | Hs.191356 | NM_001515:Homo sapiens general transcrip | 2.08 |
|    | 410301 | AW502935  | Hs.740    | Hs.740:PTK2 protein tyrosine kise 2      | 2.08 |
|    | 449538 | AI559444  | Hs.104679 | Hs.104679:Homo sapiens, clone MGC:18216  | 2.08 |
|    | 421205 | AL137540  | Hs.102541 | Hs.102541:netrin 4                       | 2.08 |
| 30 | 411779 | AA292811  | Hs.72050  | NM_003551:Homo sapiens non-metastatic ce | 2.08 |
|    | 427704 | AW971063  | Hs.292882 | Hs.292882:ESTs                           | 2.07 |
|    | 413518 | BE149455  | Hs.75415  | NM_004048:Homo sapiens beta-2-microglobu | 2.07 |
|    | 447345 | BE247767  | Hs.18166  | Hs.18166:KIAA0870 protein                | 2.07 |
|    | 407143 | C14076    | Hs.332329 | Hs.332329:EST                            | 2.07 |
| 35 | 448431 | BE613061  | Hs.337772 | Hs.337772:hypothetical protein BC009331  | 2.07 |
|    | 412760 | AW379030  | Hs.41324  | Hs.41324:ESTs                            | 2.07 |
|    | 446859 | AI494299  | Hs.16297  | NM_005694:Homo sapiens COX17 homolog, cy | 2.07 |
|    | 403966 |           |           |  | 2.07 |
| 40 | 409115 | AI223335  | Hs.50651  | NM_002227:Homo sapiens Janus kise 1 (a p | 2.07 |
|    | 436823 | AW749865  | Hs.117077 | Hs.117077:zinc finger protein 264        | 2.07 |
|    | 414045 | NM_002951 | Hs.75722  | NM_002951:Homo sapiens ribophorin II (RP | 2.06 |
|    | 413980 | NM_002437 | Hs.75659  | NM_002437:Homo sapiens MpV17 transgene,  | 2.06 |
|    | 439414 | NM_001183 | Hs.6551   | NM_001183:Homo sapiens ATPase, H+ transp | 2.06 |
|    | 426059 | BE292842  | Hs.166120 | NM_001572:Homo sapiens interferon regula | 2.06 |
| 45 | 429849 | U33053    | Hs.2499   | NM_002741:Homo sapiens protein kise C-li | 2.06 |
|    | 402424 |           |           |  | 2.06 |
|    | 406626 | X04526    | Hs.215595 | Hs.215595:guanine nucleotide binding pro | 2.06 |
| 50 | 458911 | AA373131  | Hs.24322  | Hs.24322:ATPase, H+ transporting, lysoso | 2.05 |
|    | 426086 | T94907    | Hs.188572 | Hs.188572:ESTs                           | 2.05 |
|    | 419726 | U50330    | Hs.1274   | NM_006129:Homo sapiens bone morphogeneti | 2.05 |
|    | 452344 | AI264357  | Hs.55405  | Hs.55405:hypothetical protein MGC16212   | 2.05 |
|    | 442498 | U54617    | Hs.8364   | NM_002612:Homo sapiens pyruvate dehydrog | 2.05 |
|    | 422114 | AW194851  | Hs.111801 | NM_015908:Homo sapiens arsete resistance | 2.05 |
|    | 413420 | AW410235  | Hs.75348  | NM_006263:Homo sapiens proteasome (proso | 2.05 |
| 55 | 409430 | R21945    | Hs.346735 | Hs.346735:Homo sapiens, clone IMAGE:3881 | 2.05 |
|    | 409932 | AI376750  | Hs.57600  | Hs.57600:adaptor-related protein complex | 2.05 |
|    | 434848 | BE256304  | Hs.32148  | Hs.32148:AD-015 protein                  | 2.04 |
|    | 453852 | AW961818  | Hs.374424 | Hs.374424:ESTs                           | 2.04 |
|    | 427637 | AK000816  | Hs.179986 | NM_005803:Homo sapiens flotillin 1 (FLOT | 2.04 |
| 60 | 400264 |           |           |  | 2.04 |
|    | 430016 | NM_004736 | Hs.227656 | NM_004736:Homo sapiens xenotropic and po | 2.04 |
|    | 410134 | U68140    | Hs.58927  | Hs.58927:nuclear VCP-like                | 2.04 |
|    | 440975 | AW499914  | Hs.7579   | Hs.7579:importin 9                       | 2.04 |
|    | 432280 | BE440142  | Hs.2943   | NM_003135:Homo sapiens sigl recognition  | 2.04 |
| 65 | 409504 | AA304961  | Hs.699    | NM_000942:Homo sapiens peptidylprolyl is | 2.04 |
|    | 412146 | M92444    | Hs.73722  | NM_001641:Homo sapiens APEX nuclease (mu | 2.04 |
|    | 434203 | BE262677  | Hs.283558 | Hs.283558:hypothetical protein PRO1855   | 2.04 |
|    | 422754 | AA316476  | Hs.171811 | Hs.171811:adenylate kise 2               | 2.04 |
|    | 406729 | AA069711  |           | AA069711:zm52b11.s1 Stratagene fibroblas | 2.04 |
| 70 | 413086 | AA126841  | Hs.183834 | Hs.183834:ESTs                           | 2.03 |
|    | 424340 | AA339036  | Hs.7033   | Hs.7033:ESTs                             | 2.03 |
|    | 450440 | AB024334  | Hs.25001  | NM_012479:Homo sapiens tyrosine 3-monoox | 2.03 |
|    | 424662 | NM_002870 | Hs.151536 | NM_002870:Homo sapiens RAB13, member RAS | 2.03 |
|    | 415740 | N80486    | Hs.39911  | Hs.39911:Homo sapiens mR for FLJ00089 pr | 2.03 |
| 75 | 412749 | AA378417  | Hs.74564  | NM_003145:Homo sapiens sigl sequence rec | 2.03 |
|    | 408393 | AW015318  | Hs.23165  | Hs.23165:ESTs                            | 2.03 |
|    | 421295 | AW081061  | Hs.103180 | Hs.103180:DC2 protein                    | 2.03 |
|    | 445417 | AK001058  | Hs.12680  | Hs.12680:Homo sapiens cD FLJ10196 fis, c | 2.03 |
| 80 | 414883 | AA926960  | Hs.348669 | NM_001826:Homo sapiens CDC28 protein kis | 2.03 |
|    | 447298 | BE617527  | Hs.239818 | Hs.239818:phosphoinositide-3-kise, catal | 2.02 |
|    | 459580 | AA022888  | Hs.176065 | Hs.176065:ESTs                           | 2.02 |
|    | 422785 | AI824114  | Hs.289088 | Hs.289088:heat shock 90kD protein 1, alp | 2.02 |
|    | 452696 | AI826645  | Hs.211534 | Hs.211534:Homo sapiens cD FLJ31665 fis,  | 2.02 |
|    | 452056 | AW955065  | Hs.101150 | Hs.101150:KIAA1949 protein               | 2.02 |

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|    |              |   |   |  |      |
|----|--------------|---|---|--|------|
| 5  | 450690       | AA296696  | Hs.333418   | NM_014164:Homo sapiens FXYD domain-conta | 2.02 |
|    | 423527       | AI206965  | Hs.105861   | Hs.105861:engulfment and cell motility 3 | 2.01 |
|    | 429545       | AI824164  | Hs.356130   | Hs.356130:ESTs                           | 2.01 |
|    | 439180       | AI393742  | Hs.199067   | Hs.199067:v-erb-b2 erythroblastic leukem | 2.01 |
|    | 437193       | BE259190  | Hs.289721   | Hs.289721:growth arrest-specific 5       | 2.01 |
|    | 436014       | AF281134  | Hs.283741   | Hs.283741:exosome component Rrp46        | 2.01 |
|    | 453329       | T97205  | Hs.193400   | Hs.193400:interleukin 6 receptor         | 2.01 |
|    | 407347       | AA829847  |   | T23514:seq3329 1-NIB Homo sapiens cD clo | 2.01 |
| 10 | 435370       | AI964074  | Hs.225838   | Hs.225838:ESTs                           | 2.01 |
|    | 430657       | AA482910  | Hs.370602   | Hs.370602:ESTs, Weakly similar to hypoth | 2.01 |
|    | 427157       | U51166  | Hs.173824   | NM_003211:Homo sapiens thymine-D glycosy | 2.01 |
|    | 424833       | NM_003894   | Hs.153405   | NM_003894:Homo sapiens period homolog 2  | 2.01 |
|    | 440086       | NM_005402   | Hs.6906   | NM_005402:Homo sapiens v-rat simian leuk | 2.01 |
| 15 | 438543       | AA810141  | Hs.192182   | Hs.192182:ESTs                           | 2.01 |
|    | 417426       | NM_002291   | Hs.82124  | NM_002291:Homo sapiens laminin, beta 1 ( | 2.01 |
|    | 412790       | NM_014767   | Hs.74583  | NM_014767:Homo sapiens KIAA0275 gene pro | 2.01 |
|    | 445892       | AV655500  | Hs.93961  | Hs.93961:Homo sapiens mR; cD DKFZp667D09 | 2.01 |
| 20 | TABLE 39B:   |   |   |  |      |
|    | Pkey:        | Unique Eos probeset identifier number   |   |  |      |
|    | CAT number:  | Gene cluster number   |   |  |      |
|    | Accession:   | Genbank accession numbers   |   |  |      |
| 25 | Pkey         | CAT Number  | Accession   |  |      |
|    | 409745       | MH1944_5  | BI030997 AA921874 AW188822 BI027862 AI347618 AI361453 AI088754 AW207491 AA077391 BG012775 BG997382 AA286833 AA150722 BI007625 BI027864 BI009100 BI006275 BI006270 BI031000 BI029864 BI005277 BI007627 BI006266 BI006991 BI006990 BI007763 BI007762 BG997377 AA150780 BI033518 BI027818 BG015789 BI033807 AA341445 AA229762 AA230035   |  |      |
| 30 | 418869       | 12789_14  | BG171436 BE079601 BE079534 AA299964 BE392717 BE883402 BE079532 BE018148 BF889427 W00396   |  |      |
|    | 421902       | 276321_1  | BC013310 AF261085 BC004109 AY007133 BC009081 BC001601 NM_002046 M33197 BC020308 J02642 M36164 BE794233 AV721080 BE255459  |  |      |
|    | 400231       | MH494_5   | BG926429 BG389312 BG477333 AI031799 BI763443 BI260432 AA989106 AV728576 BI091380 AA402499 AI200513 AI284734 AI223995 AI289749 BG283291 BM013814 AW438544 BM450203 F35435 F33262 BE890952 AA401181 BG939668 F35525 BI088182 F34674 F33506 BM471326 F34677 AW276712 AA187508 F34866 AA114245 AA522581 N23935 AI076923 AI018505 BE879774 BM465637 AI753078 BG222159 AA595947 BF970917 BI094125 AA719841 BE893087 BG775178 BE793983 BE797071 BF339134 BE409272 BE266456 BE796770 BE745967 BG755835 BE266758   |  |      |
| 35 |              |   | BE259342 BM450181 BG748174 BE299322 BM423587 BM467637 BM452667 BM479516 BM454240 BE273297 BM466364 BM450640 BM478743 BM459094 BM455306 BM472001 BM478247 BM478771 BM480379 BM459071 BM450106 BM467584 BM464548 BM465044 BM450176 BF569359 BM462924 BM455329 BM471815 BI862301 BG331736 H04903 AA374894 BE902964   |  |      |
|    | 438584       | 1241536_1   | AW977949 AA811347 D79715  |  |      |
| 40 | 413020       | 1485885_1   | BE048113 R98736 Z42904  |  |      |
|    | 400265       | 1145_1  | X58141 NM_001119 AI246786 BE645243 AI685698 AI208590 BE222576 AI191715 AI423108 BF064068 BG057819 AI208589 AI880535 AI262890 AI245261 BF939926 AI282848 AI802409 BE301053 AI884624 AI160385 AI335983 BF440017 BG231884 AI343699 AI280745 AI871338 AI123739 AI871126 AW080375 AI350160 AI300855 AI818598 AI085263 AI306653 AW571658 BF109839 AW273280 AI888380 AI571860 AI357126 AW194105 AI131474 AW316548 AW128942 AW571682 AI583962 AW300674 BF509394 AI891077 BF221538 AI651874 F25731 AW881176 AI685962 D44936 AI753874 BF593905 BE832830 AI637970 BE834103 BE464301 AI908017 AI378261 AA975416 R16732 H47612 H45402 AA668719 AA722441  |  |      |
| 45 |              |   | AA991443 T51951 AW514058 AI277763 AA421907 AI083831 H40630 NM_014190 BM469282 AI524786 AL527067 BF313768 AL042441 AL037806 BI195013 BE219292 BF055534 T95785 BE833037 AV648052 AA382588 W67987 H46049 R92289 H47699 AA380016 AL532433 BG958742 AI292151 H26003 R62487 BG766512 BE815124 AW136122 H96767 R39407 BI044500 H18771 H22071 R09985 R75803 H42172 BE770251 AL529310 F03180 R92185 H18680 R43192 AA401390 AA977941 AI091944 AA993369 AA617840 H14351 AI866242 AI915028 AA780787 AA506995 AA827496 AA634305 AA846358 AA470463 AA618163 AA601963 W74212 AA021520 AA421274 AA903521 AA411402 AA044448 AA983449 AA076114 AA633470 AA581793 AA019060 AA814222 AA693469 N99931 N67840 R26834 BF342340 AA976636 AA360268 AA976223 T95786 AA527774 AI620298 AA180888  |  |      |
| 50 |              |   | AA149218 AA565201 BI001597 BE676565 AW169797 AW190994 AA299572 AI092819 AI291438 AA459586 AA136373 R50213 BE622752 AA401414 AA180973 AA766800 W96432 BI550308 H52236 AA491029 BG420468 BG827522   |  |      |
| 55 | 400208       | 16640_1   | X78817 NM_001666 D50921 AW002308 AW575456 BF507511 AW467767 AI910663 BF905778 BG251264 AL562106 AI890538 AW769258 AI590391 AI913055 AW083235 AI078474 AI925022 AW504628 AW129725 BE466589 AW002786 AW591760 AI968816 AW006268 AW593787 BG236814 AW769893 AW407508 AW075982 AI248207 AI762509 AI812070 AI249937 AW083561 AW080697 BF663046 BG745612 BG979546 AW793245 BI014177 AL519126 BE675314 AW806520 BI870778 BF879549 BE714919 BF847786 BG684161 AV695278 BG491029 BE793244 BE830893   |  |      |
| 60 | 400264       | 1145_1  | BE798121 R09703 BI013066  |  |      |
| 65 |              |   | X58141 NM_001119 AI246786 BE645243 AI685698 AI208590 BE222576 AI191715 AI423108 BF064068 BG057819 AI208589 AI880535 AI262890 AI246261 BF939926 AI282848 AI802409 BE301053 AI884624 AI160385 AI335983 BF440017 BG231884 AI343699 AI280745 AI871338 AI123739 AI871126 AW080375 AI350160 AI300855 AI818598 AI085263 AI306653 AW571658 BF109839 AW273280 AI888380 AI571860 AI357126 AW194105 AI131474 AW316548 AW128942 AW571682 AI583962 AW300674 BF509394 AI891077 BF221538 AI651874 F25731 AW881176 AI685962 D44936 AI753874 BF593905 BE832830 AI637970 BE834103 BE464301 AI908017 AI378261 AA975416 R16732 H47612 H45402 AA668719 AA722441 AA991443 T51951 AW514058 AI277763 AA421907 AI083831 H40630 NM_014190 BM469282 AI524786 AL527067 BF313768 AL042441 AL037806 BI195013 BE219292 BF055534 T95785 BE833037 AV648052 AA382588 W67987 H46049 R92289 H47699 AA380016 AL532433 BG958742 AI292151 H26003 R62487 BG766512 BE815124 AW136122 H96767 R39407 BI044500 H18771 H22071 R09985 R75803 H42172 BE770251 AL529310 F03180 R92185 H18680 R43192 AA401390 AA977941 AI091944 AA993369 AA617840 H14351 AI866242 AI915028 AA780787 AA506995 AA827496 AA634305 AA846358 AA470463 AA618163 AA601963 W74212 AA021520 AA421274 AA903521 AA411402 AA044448 AA983449 AA076114 AA633470 AA581793 AA019060 AA814222 AA693469 N99931 N67840 R26834 BF342340 AA976636 AA360268 AA976223 T95786 AA527774 AI620298 AA180888 |  |      |
| 70 | 406729       | 0_0   | AA149218 AA565201 BI001597 BE676565 AW169797 AW190994 AA299572 AI092819 AI291438 AA459586 AA136373 R50213 BE622752 AA401414   |  |      |
|    | 407347       | 810943_1  | AA180973 AA766800 W96432 BI550308 H52236 AA491029 BG420468 BG827522   |  |      |
| 75 | TABLE 39C:   |   |   |  |      |
|    | Pkey:        | Unique number corresponding to an Eos probeset  |   |  |      |
|    | Ref:         | Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495. |   |  |      |
|    | Strand:      | Indicates DNA strand from which exons were predicted.   |   |  |      |
| 80 | Nt_position: | Indicates nucleotide positions of predicted exons.  |   |  |      |
|    | Pkey         | Ref   | Strand  | Nt_position                              |      |
|    | 404240       | 5002624   | Minus   | 116132-116407,116553-116922              |      |
|    | 404277       | 1834458   | Minus   | 91665-91946                              |      |



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|    |        |         |       |                             |
|----|--------|---------|-------|-----------------------------|
| 5  | 401179 | 9438647 | Plus  | 113477-113893               |
|    | 405102 | 8076881 | Minus | 120922-121296               |
|    | 402575 | 9884830 | Minus | 109742-109883               |
|    | 402901 | 8894222 | Minus | 175426-175667               |
|    | 405204 | 7230116 | Plus  | 126569-126754               |
| 10 | 403857 | 7708910 | Minus | 2524-3408                   |
|    | 400847 | 9188605 | Plus  | 44643-44835                 |
|    | 404030 | 7671252 | Plus  | 149362-151749               |
|    | 405517 | 9454624 | Plus  | 114757-114877               |
|    | 402559 | 9864273 | Plus  | 33539-33715                 |
|    | 403966 | 8568881 | Plus  | 158193-158277,160116-160290 |
|    | 402424 | 9796344 | Minus | 64925-65073                 |

## 15 TABLE 40A: ABOUT 977 GENES UP-REGULATED IN STOMACH CANCER

Table 40A lists about 977 genes up-regulated in stomach cancer compared to normal adult tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" stomach cancer to "average" normal adult tissues was greater than or equal to 2.0. The "average" stomach cancer level was set to the 90th percentile amongst various stomach cancers. The "average" normal adult tissue level was set to the 90th percentile amongst various non-malignant tissues. In order to remove gene-specific background levels of non-specific hybridization, the 15th percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

20 Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 25 R1: Ratio of tumor to normal adult tissues

|    | Pkey   | ExAccn    | UnigenelD | Unigene Title                            | R1    |
|----|--------|-----------|-----------|--|-------|
| 30 | 411243 | AB039886  | Hs.69319  | CA11                                     | 30.66 |
|    | 418007 | M13509    | Hs.83169  | matrix metalloproteinase 1 (interstitial | 16.94 |
|    | 444325 | AW152618  | Hs.16757  | ESTs                                     | 13.51 |
|    | 445891 | AW391342  | Hs.199460 | ESTs                                     | 11.92 |
|    | 448811 | AI590371  | Hs.174759 | ESTs                                     | 11.08 |
| 35 | 431723 | AW058350  | Hs.16762  | Homo sapiens mRNA; cDNA DKFZp564B2062 (f | 10.84 |
|    | 409757 | NM_001898 | Hs.123114 | cystatin SN                              | 10.38 |
|    | 421110 | AJ250717  | Hs.1355   | cathepsin E                              | 9.11  |
|    | 428368 | BE440042  | Hs.83326  | matrix metalloproteinase 3 (stromelysin  | 8.66  |
|    | 446998 | N99013    | Hs.16762  | Homo sapiens mRNA; cDNA DKFZp564B2062 (f | 8.50  |
| 40 | 406687 | M31126    | Hs.272620 | pregnancy specific beta-1-glycoprotein 9 | 7.11  |
|    | 428651 | AF196478  | Hs.188401 | annexin A10                              | 6.86  |
|    | 425211 | M18667    | Hs.1867   | progastricsin (pepsinogen C)             | 6.51  |
|    | 423673 | BE003054  | Hs.1695   | matrix metalloproteinase 12 (macrophage  | 6.49  |
|    | 409683 | U33317    | Hs.711    | defensin, alpha 6, Paneth cell-specific  | 6.39  |
| 45 | 422260 | AA315993  | Hs.105484 | ESTs, Weakly similar to LITB_HUMAN LITHO | 6.31  |
|    | 428664 | AK001666  | Hs.189095 | similar to SALL1 (sal (Drosophila)-like  | 6.25  |
|    | 409041 | AB033025  | Hs.50081  | KIAA1199 protein                         | 5.72  |
|    | 408380 | AF123050  | Hs.44532  | diubiquitin                              | 5.72  |
|    | 428953 | AA306610  | Hs.194676 | DKFZP434C013 protein                     | 5.46  |
| 50 | 450685 | L15533    | Hs.423    | pancreatitis-associated protein          | 5.40  |
|    | 409187 | AF154830  | Hs.50966  | carbamoyl-phosphate synthetase 1, mitoch | 5.34  |
|    | 434206 | AW136973  | Hs.288516 | ESTs, Weakly similar to S69890 mitogen i | 5.16  |
|    | 421346 | Z34277    | Hs.103707 | apomucin                                 | 5.14  |
|    | 427585 | D31152    | Hs.179729 | collagen, type X, alpha 1 (Schmid melaph | 5.06  |
| 55 | 425679 | X05997    | Hs.159177 | lipase, gastric                          | 4.94  |
|    | 421582 | AI910275  | Hs.1406   | trefoil factor 1 (breast cancer, estroge | 4.93  |
|    | 434414 | AI798376  |           | gb:tr34b07.x1 NC_CGAP_Ov23 Homo sapiens  | 4.92  |
|    | 422956 | BE545072  | Hs.122579 | hypothetical protein FLJ10461            | 4.89  |
|    | 448105 | AW591433  | Hs.170675 | ESTs, Weakly similar to TMS2_HUMAN TRANS | 4.84  |
| 60 | 423575 | C18863    | Hs.163443 | Homo sapiens cDNA FLJ11576 fis, clone HE | 4.72  |
|    | 413385 | M34455    | Hs.840    | indoleamine-pyrole 2,3 dioxygenase       | 4.72  |
|    | 417866 | AW067903  | Hs.82772  | collagen, type XI, alpha 1               | 4.68  |
|    | 448693 | AW004854  | Hs.228320 | Homo sapiens cDNA: FLJ23537 fis, clone L | 4.53  |
|    | 441377 | BE218239  | Hs.202656 | ESTs                                     | 4.51  |
| 65 | 419278 | AU076799  | Hs.1247   | apolipoprotein A-IV                      | 4.48  |
|    | 407811 | AW190902  | Hs.40098  | cysteine knot superfamily 1, BMP antagon | 4.47  |
|    | 403422 |           |           |  | 4.38  |
|    | 403776 |           |           |  | 4.32  |
|    | 418478 | U38945    | Hs.1174   | cyclin-dependent kinase inhibitor 2A (me | 4.32  |
| 70 | 428242 | H55709    | Hs.2250   | leukemia inhibitory factor (cholinergic  | 4.30  |
|    | 421341 | AJ243212  | Hs.279611 | deleted in malignant brain tumors 1      | 4.30  |
|    | 451181 | AI796330  | Hs.207461 | ESTs                                     | 4.26  |
|    | 432168 | AK000563  | Hs.272805 | hypothetical protein FLJ20556            | 4.23  |
|    | 454464 | AW811606  | Hs.271819 | Homo sapiens cDNA: FLJ22751 fis, clone K | 4.20  |
| 75 | 448844 | AI581519  | Hs.177164 | ESTs                                     | 4.14  |
|    | 428434 | AW363590  | Hs.65551  | ESTs, Weakly similar to AF172993 1 PLUNC | 4.13  |
|    | 452461 | N78223    | Hs.108106 | transcription factor                     | 4.08  |
|    | 409420 | Z15008    | Hs.54451  | laminin, gamma 2 (nicein (100kD), kalini | 4.04  |
|    | 431611 | U58766    | Hs.264428 | tissue specific transplantation antigen  | 4.04  |
| 80 | 413719 | BE439580  | Hs.75498  | small inducible cytokine subfamily A (Cy | 4.03  |
|    | 430044 | AA464510  | Hs.152812 | ESTs                                     | 4.02  |
|    | 409956 | AW103364  | Hs.727    | inhibin, beta A (activin A, activin AB a | 4.01  |
|    | 422420 | U03398    | Hs.1524   | tumor necrosis factor (ligand) superfam  | 4.00  |
|    | 420159 | AI572490  | Hs.99785  | Homo sapiens cDNA: FLJ21245 fis, clone C | 3.98  |
|    | 428227 | AA321649  | Hs.2248   | small inducible cytokine subfamily B (Cy | 3.91  |

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| 5  | 422168 | AA586894  | Hs.112408 | S100 calcium-binding protein A7 (psorias  | 3.87 |
|    | 452304 | AA025386  | Hs.51311  | ESTs, Weakly similar to S10590 cysteine   | 3.84 |
|    | 412140 | AA219691  | Hs.73625  | RAB6 interacting, kinesin-like (rabkinas  | 3.82 |
|    | 414812 | X72755    | Hs.77367  | monokine induced by gamma interferon      | 3.81 |
|    | 419833 | AA251131  | Hs.220697 | ESTs                                      | 3.81 |
| 10 | 446232 | AI281848  | Hs.165547 | ESTs                                      | 3.74 |
|    | 432398 | AA307808  | Hs.2979   | trefoil factor 2 (spasmodic protein 1)    | 3.70 |
|    | 451105 | AI761324  |           | gb:wi60b11.x1 NCI_CGAP_Co16 Homo sapiens  | 3.67 |
|    | 413281 | AA861271  | Hs.34396  | ESTs                                      | 3.66 |
|    | 432867 | AW016936  | Hs.233364 | ESTs                                      | 3.66 |
| 15 | 424046 | AF027866  | Hs.138202 | serine (or cysteine) proteinase inhibito  | 3.65 |
|    | 457465 | AW301344  | Hs.195969 | ESTs                                      | 3.65 |
|    | 414918 | AI219207  | Hs.72222  | Homo sapiens cDNA FLJ113459 fis, clone PL | 3.61 |
|    | 418738 | AW388633  | Hs.6682   | ESTs                                      | 3.60 |
|    | 427778 | AA412323  | Hs.105323 | ESTs                                      | 3.60 |
| 20 | 454293 | H49739    | Hs.134013 | ESTs, Moderately similar to NK homeobox   | 3.59 |
|    | 452194 | AI694413  | Hs.298262 | ESTs, Weakly similar to dJ88J8.1 [H.sapi  | 3.57 |
|    | 442577 | AA292998  | Hs.163900 | ESTs                                      | 3.57 |
|    | 426174 | AA547959  | Hs.115838 | ESTs                                      | 3.53 |
|    | 452862 | AW378065  | Hs.8687   | ESTs                                      | 3.51 |
| 25 | 418869 | AW516565  | Hs.258279 | ESTs                                      | 3.48 |
|    | 430178 | AW449612  | Hs.152475 | ESTs                                      | 3.48 |
|    | 430397 | AI924533  | Hs.105607 | ESTs                                      | 3.46 |
|    | 418054 | NM_002318 | Hs.83354  | lysyl oxidase-like 2                      | 3.45 |
|    | 442295 | AI827248  | Hs.224398 | Homo sapiens cDNA FLJ11469 fis, clone HE  | 3.44 |
| 30 | 425921 | NM_007231 | Hs.162211 | solute carrier family 6 (neurotransmitte  | 3.44 |
|    | 431764 | AA515212  | Hs.271819 | Homo sapiens cDNA: FLJ22751 fis, clone K  | 3.43 |
|    | 421948 | L42583    | Hs.111758 | keratin 6A                                | 3.43 |
|    | 444381 | BE387335  | Hs.283713 | ESTs, Weakly similar to CA54_HUMAN COLLA  | 3.41 |
|    | 442896 | R37725    | Hs.261108 | ESTs                                      | 3.41 |
| 35 | 452281 | T93500    | Hs.28792  | Homo sapiens cDNA FLJ11041 fis, clone PL  | 3.39 |
|    | 444783 | AK001468  | Hs.62180  | anillin (Drosophila Scraps homolog), act  | 3.39 |
|    | 408832 | AW085690  | Hs.63428  | ESTs                                      | 3.39 |
|    | 406685 | M18728    |           | gb:Human nonspecific crossreacting antig  | 3.37 |
|    | 437527 | AI241019  | Hs.145644 | ESTs                                      | 3.37 |
| 40 | 433084 | M18079    | Hs.282265 | fatty acid binding protein 2, intestinal  | 3.37 |
|    | 452401 | NM_007115 | Hs.29352  | tumor necrosis factor, alpha-induced pro  | 3.36 |
|    | 441318 | AI078234  | Hs.176130 | ESTs                                      | 3.35 |
|    | 458897 | U85642    | Hs.138506 | ESTs                                      | 3.33 |
|    | 413808 | J00287    | Hs.182183 | caldesmon 1                               | 3.33 |
| 45 | 411274 | NM_002776 | Hs.69423  | kallikrein 10                             | 3.32 |
|    | 418406 | X73501    | Hs.84905  | cytokeratin 20                            | 3.32 |
|    | 419559 | Y07828    | Hs.91096  | ring finger protein                       | 3.32 |
|    | 423217 | NM_000094 | Hs.1640   | collagen, type VII, alpha 1 (epidermolys  | 3.31 |
|    | 423271 | W47225    | Hs.126256 | interleukin 1, beta                       | 3.31 |
| 50 | 411558 | AA102670  | Hs.70725  | gamma-aminobutyric acid (GABA) A recepto  | 3.30 |
|    | 427722 | AK000123  | Hs.180479 | hypothetical protein FLJ20116             | 3.30 |
|    | 422310 | AA316622  | Hs.98370  | cytochrome P540 family member predicted   | 3.30 |
|    | 430704 | AW813091  |           | gb:RC3-ST0186-240400-111-d07 ST0186 Homo  | 3.29 |
|    | 411263 | BE297802  | Hs.69360  | kinesin-like 6 (mitotic centromere-assoc  | 3.29 |
| 55 | 443211 | AI128388  | Hs.143655 | ESTs                                      | 3.29 |
|    | 443426 | AF098158  | Hs.9329   | chromosome 20 open reading frame 1        | 3.28 |
|    | 441085 | AW136551  | Hs.181245 | Homo sapiens cDNA FLJ12532 fis, clone NT  | 3.28 |
|    | 452121 | NM_004081 | Hs.70936  | deleted in azoospermia                    | 3.27 |
|    | 408633 | AW963372  | Hs.46677  | PRO2000 protein                           | 3.27 |
| 60 | 447342 | AI199268  | Hs.19322  | ESTs                                      | 3.25 |
|    | 419229 | AI827237  | Hs.282884 | ESTs                                      | 3.24 |
|    | 443957 | AA521049  | Hs.34487  | hypothetical protein FLJ23412             | 3.23 |
|    | 452699 | AW295390  | Hs.213062 | ESTs                                      | 3.23 |
|    | 425188 | AK002052  | Hs.155071 | hypothetical protein FLJ11190             | 3.23 |
| 65 | 400289 | X07820    | Hs.2258   | matrix metalloproteinase 10 (stromelysin  | 3.21 |
|    | 408524 | D87942    | Hs.46328  | fucosyltransferase 2 (secretor status in  | 3.20 |
|    | 437897 | AA770561  | Hs.146170 | hypothetical protein FLJ22969             | 3.20 |
|    | 453922 | AF053306  | Hs.36708  | budding uninhibited by benzimidazoles 1   | 3.19 |
|    | 453160 | AI263307  | Hs.146228 | ESTs                                      | 3.19 |
| 70 | 406690 | M29540    | Hs.220529 | carcinoembryonic antigen-related cell ad  | 3.19 |
|    | 430187 | AI799909  | Hs.158989 | ESTs                                      | 3.18 |
|    | 416209 | AA236776  | Hs.79078  | MAD2 (mitotic arrest deficient, yeast, h  | 3.16 |
|    | 447048 | AW393080  | Hs.228320 | Homo sapiens cDNA: FLJ23537 fis, clone L  | 3.14 |
|    | 408113 | T82427    | Hs.194101 | Homo sapiens cDNA: FLJ20869 fis, clone A  | 3.14 |
| 75 | 425465 | L18964    | Hs.1904   | protein kinase C, iota                    | 3.13 |
|    | 425826 | U97698    | Hs.159593 | mucin 6, gastric                          | 3.13 |
|    | 431662 | AA513406  | Hs.152307 | ESTs                                      | 3.13 |
|    | 419216 | AU076718  | Hs.164021 | small inducible cytokine subfamily B (Cy  | 3.13 |
|    | 418203 | X54942    | Hs.83758  | CDC28 protein kinase 2                    | 3.12 |
| 80 | 417315 | AI080042  | Hs.180450 | ribosomal protein S24                     | 3.11 |
|    | 433001 | AF217513  | Hs.279905 | clone HQ0310 PRO0310p1                    | 3.11 |
|    | 459587 | AA031956  |           | gb:zk15e04.s1 Soares_pregnant_uterus_NbH  | 3.11 |
|    | 450159 | AI702416  | Hs.200771 | ESTs, Weakly similar to CAN2_HUMAN CALPA  | 3.11 |
|    | 434370 | AF130988  | Hs.58346  | downless (mouse) homolog                  | 3.10 |
|    | 421190 | U95031    | Hs.102482 | mucin 5, subtype B, tracheobronchial      | 3.10 |
|    | 421379 | Y15221    | Hs.103982 | small inducible cytokine subfamily B (Cy  | 3.10 |
|    | 420380 | AA640891  | Hs.102406 | ESTs                                      | 3.10 |

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|    | 414774 | X02419    | Hs.77274                                 | plasminogen activator, urokinase         | 3.10 |
|    | 415989 | A1267700  | Hs.111128                                | ESTs                                     | 3.09 |
|    | 407137 | T97307    | Hs.199067                                | v-erb-b2 avian erythroblastic leukemia v | 3.09 |
| 5  | 407289 | AA135159  | Hs.203349                                | Homo sapiens cDNA FLJ12149 fis, clone MA | 3.09 |
|    | 420297 | A1628272  | Hs.88323                                 | ESTs                                     | 3.08 |
|    | 447519 | U46258    | Hs.23448                                 | ESTs                                     | 3.08 |
|    | 448045 | AJ297436  | Hs.20166                                 | prostate stem cell antigen               | 3.07 |
|    | 431956 | AK002032  | Hs.272245                                | Homo sapiens cDNA FLJ11170 fis, clone PL | 3.06 |
| 10 | 410286 | A1739159  | Hs.61898                                 | DKFZP586N2124 protein                    | 3.05 |
|    | 409632 | W74001    | Hs.55279                                 | serine (or cysteine) proteinase inhibito | 3.05 |
|    | 454034 | NM_000691 | Hs.575                                   | aldehyde dehydrogenase 3                 | 3.05 |
|    | 436481 | AA379597  | Hs.5199                                  | HSPC150 protein similar to ubiquitin-con | 3.05 |
|    | 430573 | AA744550  | Hs.136345                                | ESTs                                     | 3.05 |
| 15 | 428987 | NM_004751 | Hs.194710                                | glucosaminyl (N-acetyl) transferase 3, m | 3.04 |
|    | 424252 | AK000520  | Hs.143811                                | hypothetical protein FLJ20513            | 3.04 |
|    | 436291 | BE568452  | Hs.5101                                  | protein regulator of cytokinesis 1       | 3.03 |
|    | 415992 | C05837    | Hs.145807                                | Homo sapiens cDNA FLJ13593 fis, clone PL | 3.03 |
|    | 411789 | AF245505  | Hs.72157                                 | Homo sapiens adican mRNA, complete cds   | 3.02 |
| 20 | 417956 | AA210704  | Hs.190465                                | ESTs                                     | 3.02 |
|    | 408908 | BE296227  | Hs.48915                                 | serine/threonine kinase 15               | 3.01 |
|    | 422330 | D30783    | Hs.115263                                | epiregulin                               | 3.01 |
|    | 425071 | NM_013989 | Hs.154424                                | deiodinase, iodothyronine, type II       | 3.00 |
|    | 425761 | AW664214  | Hs.196729                                | ESTs                                     | 2.99 |
| 25 | 432978 | AF126743  | Hs.279884                                | DNAJ domain-containing                   | 2.99 |
|    | 418546 | AA224827  | gb:nc32g04.s1 NCI_CGAP_Pr2 Homo sapiens  | 2.99                                     |      |
|    | 425371 | D49441    | Hs.155981                                | mesothelin                               | 2.99 |
|    | 422440 | NM_004812 | Hs.116724                                | aldo-keto reductase family 1, member B11 | 2.98 |
|    | 439453 | BE264974  | Hs.6566                                  | thyroid hormone receptor interactor 13   | 2.98 |
|    | 413278 | BE563085  | Hs.833                                   | interferon-stimulated protein, 15 kDa    | 2.97 |
| 30 | 428450 | NM_014791 | Hs.184339                                | KIAA0175 gene product                    | 2.95 |
|    | 424345 | AK001380  | Hs.145479                                | Homo sapiens cDNA FLJ10518 fis, clone NT | 2.95 |
|    | 433133 | AB027249  | Hs.104741                                | PDZ-binding kinase; T-cell originated pr | 2.94 |
|    | 432269 | NM_002447 | Hs.2942                                  | macrophage stimulating 1 receptor (c-me) | 2.94 |
| 35 | 432917 | NM_014125 | Hs.279812                                | PRO0327 protein                          | 2.94 |
|    | 433384 | AJ021992  | Hs.124244                                | ESTs                                     | 2.93 |
|    | 432731 | R31178    | Hs.287820                                | fibronectin 1                            | 2.93 |
|    | 420552 | AK000492  | Hs.98806                                 | hypothetical protein                     | 2.92 |
|    | 428303 | AW974476  | Hs.183601                                | regulator of G-protein signalling 16     | 2.92 |
| 40 | 409687 | T51125    | Hs.8493                                  | ESTs                                     | 2.91 |
|    | 434377 | AW137148  | Hs.136348                                | osteoblast specific factor 2 (fascitin   | 2.89 |
|    | 417791 | AW965339  | Hs.111471                                | ESTs                                     | 2.89 |
|    | 457288 | AA521458  | Hs.192738                                | ESTs                                     | 2.89 |
|    | 456181 | L36463    | Hs.1030                                  | ras inhibitor                            | 2.89 |
| 45 | 450190 | T51387    | gb:yb20e08.r1 Stratagene fetal spleen (9 | 2.88                                     |      |
|    | 411573 | AB029000  | Hs.70823                                 | KIAA1077 protein                         | 2.88 |
|    | 430204 | AA618335  | Hs.146137                                | ESTs, Weakly similar to putative [C.eleg | 2.88 |
|    | 434808 | AF155108  | Hs.256150                                | ESTs, Highly similar to NY-REN-41 antige | 2.87 |
|    | 450983 | AA305384  | Hs.25740                                 | ERO1 (S. cerevisiae)-like                | 2.87 |
| 50 | 418670 | AA601036  | Hs.285083                                | ESTs                                     | 2.87 |
|    | 416661 | AA634543  | Hs.79440                                 | IGF-II mRNA-binding protein 3            | 2.87 |
|    | 409723 | AW885757  | Hs.257862                                | ESTs                                     | 2.87 |
|    | 435099 | AC004770  | Hs.4756                                  | flap structure-specific endonuclease 1   | 2.86 |
|    | 408660 | AA525775  | Hs.292523                                | ESTs                                     | 2.86 |
| 55 | 434032 | AW009951  | Hs.206892                                | ESTs                                     | 2.85 |
|    | 418216 | AA662240  | Hs.283099                                | AF15q14 protein                          | 2.85 |
|    | 453331 | A1240665  | Hs.8895                                  | ESTs                                     | 2.85 |
|    | 450221 | AA328102  | Hs.24641                                 | cytoskeleton associated protein 2        | 2.84 |
|    | 402075 |           |  |  | 2.84 |
| 60 | 410145 | AW886300  | gb:RC5-OT0078-100400-023-C11 OT0078 Homo | 2.83                                     |      |
|    | 410681 | AW246890  | Hs.65425                                 | calbindin 1, (28kD)                      | 2.83 |
|    | 439867 | AA847510  | Hs.161292                                | ESTs                                     | 2.83 |
|    | 443715 | A1583187  | Hs.9700                                  | cyclin E1                                | 2.83 |
|    | 420005 | AW271106  | Hs.133294                                | ESTs                                     | 2.83 |
| 65 | 417366 | BE185289  | Hs.1076                                  | small proline-rich protein 1B (comifin)  | 2.83 |
|    | 422283 | AW411307  | Hs.114311                                | CDC45 (cell division cycle 45, S.cerevis | 2.82 |
|    | 404567 |           |  |  | 2.82 |
|    | 422158 | L10343    | Hs.112341                                | protease inhibitor 3, skin-derived (SKAL | 2.82 |
|    | 449224 | AW995911  | Hs.299883                                | hypothetical protein FLJ23399            | 2.81 |
| 70 | 407584 | W25945    | Hs.18745                                 | ESTs                                     | 2.81 |
|    | 453884 | AA355925  | Hs.36232                                 | KIAA0186 gene product                    | 2.81 |
|    | 449032 | AA045573  | Hs.22900                                 | nuclear factor (erythroid-derived 2)-lik | 2.80 |
|    | 422809 | AK001379  | Hs.121028                                | hypothetical protein FLJ10549            | 2.79 |
|    | 449722 | BE280074  | Hs.23960                                 | cyclin B1                                | 2.79 |
|    | 445676 | A1247763  | Hs.16928                                 | ESTs                                     | 2.79 |
| 75 | 424308 | AW975531  | Hs.154443                                | minichromosome maintenance deficient (S. | 2.78 |
|    | 453028 | AB006532  | Hs.31442                                 | RecQ protein-like 4                      | 2.78 |
|    | 421777 | BE562088  | Hs.108196                                | HSPC037 protein                          | 2.78 |
|    | 452571 | W31518    | Hs.34665                                 | ESTs                                     | 2.77 |
|    | 420759 | T11832    | Hs.127797                                | ESTs                                     | 2.77 |
| 80 | 422675 | BE018517  | Hs.119140                                | eukaryotic translation initiation factor | 2.77 |
|    | 412723 | AA648459  | Hs.179912                                | ESTs                                     | 2.76 |
|    | 439670 | AF088076  | Hs.59507                                 | ESTs, Weakly similar to AC004858 3 U1 sm | 2.76 |
|    | 400298 | AA032279  | Hs.61635                                 | six transmembrane epithelial antigen of  | 2.76 |

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|    | 414569 | AF109298  | Hs.118258 | prostate cancer associated protein 1     | 2.76 |
|    | 449378 | AW664026  | Hs.59892  | ESTs                                     | 2.75 |
|    | 423903 | M57765    | Hs.1721   | interleukin 11                           | 2.75 |
|    | 412059 | AA317962  | Hs.249721 | ESTs                                     | 2.75 |
| 5  | 431104 | AW970859  | Hs.269109 | ESTs                                     | 2.75 |
|    | 439759 | AL359055  | Hs.67709  | Homo sapiens mRNA full length insert cDN | 2.75 |
|    | 450701 | H39960    | Hs.288467 | Homo sapiens cDNA FLJ12280 fis, clone MA | 2.75 |
|    | 452940 | AA029722  | Hs.20279  | ESTs                                     | 2.74 |
| 10 | 408690 | AW864542  |           | gb:PM4-SN0016-120500-003-h02 SN0016 Homo | 2.74 |
|    | 407777 | AA161071  | Hs.71465  | squalene epoxidase                       | 2.73 |
|    | 432201 | AI538613  | Hs.135657 | ESTs                                     | 2.73 |
|    | 414416 | AW409985  | Hs.76084  | lamin B2                                 | 2.73 |
|    | 414617 | AI339520  | Hs.20524  | ESTs, Moderately similar to hexokinase I | 2.73 |
|    | 432407 | AA221036  | Hs.285026 | HERV-H LTR-associating 1                 | 2.73 |
| 15 | 444301 | AK000136  | Hs.10760  | hypothetical protein FLJ20129            | 2.72 |
|    | 450375 | AA009647  | Hs.8850   | a disintegrin and metalloproteinase doma | 2.72 |
|    | 441362 | BE614410  | Hs.23044  | RAD51 (S. cerevisiae) homolog (E coli Re | 2.72 |
|    | 408298 | AI745325  | Hs.271923 | Homo sapiens cDNA: FLJ22785 fis, clone K | 2.72 |
| 20 | 426711 | AA383471  | Hs.180659 | conserved gene amplified in osteosarcoma | 2.71 |
|    | 429432 | AI678059  | Hs.202675 | synaptonemal complex protein 2           | 2.71 |
|    | 450506 | NM_004460 | Hs.418    | fibroblast activation protein, alpha     | 2.71 |
|    | 427528 | AU077143  | Hs.179565 | minichromosome maintenance deficient (S. | 2.71 |
|    | 418801 | AA228366  | Hs.115122 | ESTs                                     | 2.71 |
| 25 | 440283 | AI732892  | Hs.190489 | ESTs                                     | 2.71 |
|    | 429486 | AF155827  | Hs.203963 | hypothetical protein FLJ10339            | 2.71 |
|    | 408366 | AW511255  | Hs.258082 | ESTs                                     | 2.70 |
|    | 406399 |           |           |  | 2.69 |
|    | 434217 | AW014795  | Hs.23349  | ESTs                                     | 2.68 |
| 30 | 449785 | AI225235  | Hs.288300 | Homo sapiens cDNA: FLJ23231 fis, clone C | 2.68 |
|    | 446269 | AW263155  | Hs.14559  | hypothetical protein FLJ10540            | 2.68 |
|    | 443349 | AI052572  | Hs.269864 | ESTs                                     | 2.68 |
|    | 426514 | BE616633  | Hs.301122 | bone morphogenetic protein 7 (osteogenic | 2.67 |
|    | 417079 | U65590    | Hs.81134  | interleukin 1 receptor antagonist        | 2.67 |
| 35 | 444754 | T83911    | Hs.11881  | transmembrane 4 superfamily member 4     | 2.67 |
|    | 424687 | J05070    | Hs.151738 | matrix metalloproteinase 9 (gelatinase B | 2.66 |
|    | 439979 | AW500291  | Hs.6823   | hypothetical protein FLJ10430            | 2.65 |
|    | 424408 | AI754813  | Hs.146428 | collagen, type V, alpha 1                | 2.65 |
|    | 430832 | AI073913  | Hs.100686 | ESTs, Weakly similar to secreted cement  | 2.65 |
| 40 | 427217 | AA399272  | Hs.144341 | ESTs                                     | 2.65 |
|    | 429170 | NM_001394 | Hs.2359   | dual specificity phosphatase 4           | 2.64 |
|    | 450400 | AI694722  | Hs.279744 | ESTs                                     | 2.64 |
|    | 435380 | AA679001  | Hs.192221 | ESTs                                     | 2.64 |
|    | 432375 | BE536069  | Hs.2962   | S100 calcium-binding protein P           | 2.63 |
| 45 | 453700 | AB009426  | Hs.560    | apolipoprotein B mRNA editing enzyme, ca | 2.63 |
|    | 422938 | NM_001809 | Hs.1594   | centromere protein A (17kD)              | 2.63 |
|    | 453134 | AA032211  | Hs.118493 | ESTs                                     | 2.63 |
|    | 420727 | H75701    | Hs.99886  | complement component 4-binding protein,  | 2.62 |
|    | 408868 | AW292286  | Hs.255058 | ESTs                                     | 2.62 |
| 50 | 414972 | BE263782  | Hs.77695  | KIAA0008 gene product                    | 2.62 |
|    | 440255 | AI932285  | Hs.160569 | ESTs                                     | 2.62 |
|    | 403055 |           |           |  | 2.62 |
|    | 443247 | BE614387  | Hs.47378  | ESTs, Moderately similar to hypothetical | 2.62 |
|    | 447400 | AK000322  | Hs.18457  | hypothetical protein FLJ20315            | 2.61 |
| 55 | 413753 | U17760    | Hs.301103 | Human DNA sequence from clone 272L16 on  | 2.61 |
|    | 445114 | AW991959  | Hs.254664 | ESTs                                     | 2.61 |
|    | 422397 | AJ223366  | Hs.116051 | myeloma overexpressed gene(in a subset o | 2.60 |
|    | 407366 | AF026942  |           | gb:Homo sapiens cig33 mRNA, partial sequ | 2.60 |
|    | 432009 | AL137424  |           | gb:Homo sapiens mRNA; cDNA DKFZp761G2123 | 2.60 |
| 60 | 440249 | AI246590  | Hs.125325 | ESTs                                     | 2.60 |
|    | 433220 | AI076192  | Hs.131933 | ESTs                                     | 2.60 |
|    | 438533 | AI440266  | Hs.170673 | ESTs, Weakly similar to AF126780 1 retin | 2.60 |
|    | 436251 | BE515065  | Hs.5092   | nucleolar protein (KKE/D repeat)         | 2.60 |
|    | 424717 | H03754    | Hs.152213 | wingless-type MMTV integration site fami | 2.60 |
| 65 | 448988 | Y09763    | Hs.22785  | gamma-aminobutyric acid (GABA) A recepto | 2.60 |
|    | 425463 | AK000740  | Hs.157986 | hypothetical protein FLJ20733            | 2.60 |
|    | 435370 | AI964074  | Hs.225838 | ESTs                                     | 2.59 |
|    | 432215 | AU076609  | Hs.2934   | ribonucleotide reductase M1 polypeptide  | 2.59 |
|    | 409142 | AL136877  | Hs.50758  | chromosome-associated polypeptide C      | 2.59 |
| 70 | 443919 | AI091284  | Hs.135224 | ESTs                                     | 2.58 |
|    | 413268 | AL039079  | Hs.75256  | regulator of G-protein signalling 1      | 2.58 |
|    | 404519 |           |           |  | 2.58 |
|    | 414998 | NM_002543 | Hs.77729  | oxidised low density lipoprotein (lectin | 2.57 |
|    | 429597 | NM_003816 | Hs.2442   | a disintegrin and metalloproteinase doma | 2.57 |
| 75 | 426841 | AI052358  | Hs.193726 | ESTs                                     | 2.57 |
|    | 416768 | AA363733  | Hs.1032   | regenerating islet-derived 1 alpha (panc | 2.57 |
|    | 417933 | X02308    | Hs.82962  | thymidylate synthetase                   | 2.56 |
|    | 433675 | AW977653  | Hs.110771 | Homo sapiens cDNA: FLJ21904 fis, clone H | 2.56 |
|    | 441384 | AA447849  | Hs.288660 | protease, serine, 23                     | 2.56 |
| 80 | 451939 | U80456    | Hs.27311  | single-minded (Drosophila) homolog 2     | 2.56 |
|    | 418867 | D31771    | Hs.89404  | msh (Drosophila) homeo box homolog 2     | 2.55 |
|    | 449042 | AW294985  | Hs.301148 | potassium voltage-gated channel, Isk-rel | 2.55 |
|    | 416065 | BE267931  | Hs.78996  | proliferating cell nuclear antigen       | 2.55 |
|    | 414132 | AI801235  | Hs.48480  | ESTs                                     | 2.55 |

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|----|--------|-----------|-----------|---|------|
| 5  | 431890 | X17033    | Hs.271986 | integrin, alpha 2 (CD49B, alpha 2 subuni  | 2.55 |
|    | 407830 | NM_001086 | Hs.587    | arylacetamide deacetylase (esterase)      | 2.55 |
|    | 434815 | AF155582  | Hs.46744  | core1 UDP-galactose:N-acetylgalactosamin  | 2.54 |
|    | 415250 | F02614    | Hs.27319  | ESTs                                      | 2.54 |
|    | 435647 | AI653240  | Hs.49823  | ESTs                                      | 2.54 |
| 10 | 459306 | AW578452  | Hs.232988 | ESTs, Weakly similar to mucin [H.sapiens  | 2.54 |
|    | 414361 | AI086138  | Hs.204044 | ESTs                                      | 2.54 |
|    | 425782 | U66468    | Hs.159525 | cell growth regulatory with EF-hand doma  | 2.53 |
|    | 416984 | H38765    | Hs.80706  | diaphorase (NADH/NADPH) (cytochrome b-5   | 2.53 |
|    | 431183 | NM_006855 | Hs.250696 | KDEL (Lys-Asp-Glu-Leu) endoplasmic retic  | 2.53 |
| 15 | 436043 | AW563838  | Hs.168830 | Homo sapiens cDNA FLJ12135 fis, clone MA  | 2.53 |
|    | 456743 | AI630124  | Hs.7434   | ESTs                                      | 2.53 |
|    | 410268 | AA316181  | Hs.61635  | six transmembrane epithelial antigen of   | 2.52 |
|    | 424905 | NM_002497 | Hs.153704 | NIMA (never in mitosis gene a)-related k  | 2.52 |
|    | 411734 | AW374954  | Hs.71779  | Homo sapiens DNA from chromosome 19, cos  | 2.52 |
| 20 | 432657 | AA831815  | Hs.270940 | ESTs                                      | 2.51 |
|    | 434080 | AI820719  | Hs.154662 | hypothetical protein PRO1472              | 2.51 |
|    | 438190 | AA780020  | Hs.136798 | ESTs                                      | 2.51 |
|    | 418969 | W33191    | Hs.28907  | hypothetical protein FLJ20258             | 2.51 |
|    | 446405 | AW451259  | Hs.57851  | ESTs                                      | 2.51 |
| 25 | 450002 | AI679524  | Hs.201629 | ESTs, Moderately similar to ALU8_HUMAN A  | 2.51 |
|    | 431808 | M30703    | Hs.270833 | amphiregulin (schwannoma-derived growth   | 2.51 |
|    | 429093 | NM_000253 | Hs.195799 | microsomal triglyceride transfer protein  | 2.50 |
|    | 447634 | AW967902  | Hs.5152   | Homo sapiens cDNA: FLJ22618 fis, clone H  | 2.50 |
|    | 436393 | AW022213  | Hs.143617 | ESTs                                      | 2.50 |
| 30 | 453751 | R36762    | Hs.101282 | Homo sapiens mRNA: cDNA DKFZp434B102 (fr  | 2.49 |
|    | 445669 | AI570830  | Hs.174870 | ESTs                                      | 2.49 |
|    | 445865 | AI262584  | Hs.145575 | ESTs                                      | 2.49 |
|    | 448437 | AW470125  |           | gb:xbw60c04.x1 NCI_CGAP_Pan1 Homo sapiens | 2.49 |
|    | 414883 | AA926960  | Hs.77550  | CDC28 protein kinase 1                    | 2.49 |
| 35 | 406747 | AI925153  | Hs.217493 | annexin A2                                | 2.49 |
|    | 446921 | AB012113  | Hs.16530  | small inducible cytokine subfamily A (Cy  | 2.49 |
|    | 426322 | J05068    | Hs.2012   | transcobalamin I (vitamin B12 binding pr  | 2.48 |
|    | 412903 | BE007967  | Hs.155795 | ESTs                                      | 2.48 |
|    | 422515 | AW500470  | Hs.117950 | multifunctional polypeptide similar to S  | 2.48 |
| 40 | 447030 | AW444659  | Hs.232184 | ESTs                                      | 2.48 |
|    | 448454 | NM_005879 | Hs.21254  | TRAF interacting protein                  | 2.48 |
|    | 419092 | J05581    | Hs.89603  | mucin 1, transmembrane                    | 2.48 |
|    | 406671 | AA129547  | Hs.285754 | met proto-oncogene (hepatocyte growth fa  | 2.48 |
|    | 409640 | U78722    | Hs.55481  | zinc finger protein 165                   | 2.48 |
| 45 | 424639 | AI917494  | Hs.131329 | ESTs                                      | 2.48 |
|    | 404171 |           |           |   | 2.47 |
|    | 414747 | U30872    | Hs.77204  | centromere protein F (350/400kD, mitotin  | 2.47 |
|    | 407839 | AA045144  | Hs.161566 | ESTs                                      | 2.47 |
|    | 410406 | AI969703  | Hs.301842 | ESTs                                      | 2.47 |
| 50 | 452220 | BE158006  | Hs.212296 | ESTs                                      | 2.46 |
|    | 427691 | AW194426  | Hs.20726  | ESTs                                      | 2.46 |
|    | 421493 | BE300341  | Hs.104925 | ectodermal-neural cortex (with BTB-like   | 2.46 |
|    | 444838 | AV651680  | Hs.208558 | ESTs                                      | 2.46 |
|    | 413816 | AW958181  | Hs.189998 | ESTs                                      | 2.46 |
| 55 | 408296 | AL117452  | Hs.44155  | DKFZP586G1517 protein                     | 2.46 |
|    | 436613 | AA972691  | Hs.192974 | Homo sapiens cDNA FLJ12735 fis, clone NT  | 2.45 |
|    | 445417 | AK001058  | Hs.12680  | Homo sapiens cDNA FLJ10196 fis, clone HE  | 2.45 |
|    | 432874 | W94322    | Hs.279651 | melanoma inhibitory activity              | 2.45 |
|    | 425268 | AI807883  | Hs.156932 | ESTs                                      | 2.45 |
| 60 | 425397 | J04088    | Hs.156346 | topoisomerase (DNA) II alpha (170kD)      | 2.45 |
|    | 408308 | AL033377  | Hs.44197  | hypothetical protein DKFZp564D0462        | 2.45 |
|    | 427961 | AW293165  | Hs.143134 | ESTs                                      | 2.45 |
|    | 422363 | T55979    | Hs.115474 | replication factor C (activator 1) 3 (38  | 2.45 |
|    | 433083 | AL042759  | Hs.191762 | ESTs                                      | 2.45 |
| 65 | 439848 | AW979249  |           | gb:EST391359 MAGE resequences, MAGP Homo  | 2.44 |
|    | 431924 | AK000850  | Hs.272203 | Homo sapiens cDNA FLJ20843 fis, clone AD  | 2.44 |
|    | 431457 | NM_012211 | Hs.256297 | integrin, alpha 11                        | 2.44 |
|    | 443949 | AW827419  | Hs.235070 | ESTs                                      | 2.44 |
|    | 416498 | U33632    | Hs.79351  | potassium channel, subfamily K, member 1  | 2.44 |
| 70 | 428484 | AF104032  | Hs.184601 | solute carrier family 7 (cationic amino   | 2.43 |
|    | 431958 | X63629    | Hs.2877   | cadherin 3, type 1, P-cadherin (placenta  | 2.43 |
|    | 413833 | Z15005    | Hs.75573  | centromere protein E (312kD)              | 2.43 |
|    | 407243 | AA058357  | Hs.74466  | carcinoembryonic antigen-related cell ad  | 2.43 |
|    | 410044 | BE566742  | Hs.58169  | highly expressed in cancer, rich in leuc  | 2.43 |
| 75 | 424273 | W40460    | Hs.144442 | phospholipase A2, group X                 | 2.42 |
|    | 409533 | AW969543  | Hs.21291  | mitogen-activated protein kinase kinase   | 2.42 |
|    | 453966 | BE148734  | Hs.252833 | ESTs                                      | 2.42 |
|    | 427043 | AA397679  | Hs.298460 | ESTs                                      | 2.42 |
|    | 419741 | NM_007019 | Hs.93002  | ubiquitin carrier protein E2-C            | 2.42 |
| 80 | 449987 | AW079749  | Hs.184719 | ESTs, Weakly similar to AF116721 112 PRO  | 2.42 |
|    | 433159 | AB035898  | Hs.150587 | kinesin-like protein 2                    | 2.42 |
|    | 439396 | BE562958  | Hs.74346  | ESTs, Weakly similar to /prediction       | 2.42 |
|    | 426427 | M86699    | Hs.169840 | TTK protein kinase                        | 2.41 |
|    | 434725 | AK000796  | Hs.4104   | hypothetical protein                      | 2.41 |
|    | 427719 | AI393122  | Hs.134726 | ESTs                                      | 2.41 |
|    | 433312 | AI241331  | Hs.131765 | ESTs                                      | 2.41 |
|    | 432615 | AA557191  | Hs.55028  | ESTs                                      | 2.41 |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 407047 | X65965    |           | gb:H.sapiens SOD-2 gene for manganese su | 2.41 |
|    | 419220 | AA811938  | Hs.291759 | ESTs                                     | 2.40 |
|    | 416530 | U62801    | Hs.79361  | kallikrein 6 (neurosin, zyme)            | 2.40 |
|    | 435219 | AA676349  | Hs.190331 | ESTs                                     | 2.40 |
| 5  | 447164 | AF026941  | Hs.17518  | Homo sapiens cig5 mRNA, partial sequence | 2.40 |
|    | 416713 | T70174    |           | gb:yc18b03.s1 Stratagene lung (937210) H | 2.40 |
|    | 418322 | AA284166  | Hs.84113  | cyclin-dependent kinase inhibitor 3 (CDK | 2.40 |
|    | 409902 | AI337658  | Hs.156351 | ESTs                                     | 2.40 |
|    | 443597 | AI078418  |           | gb:oz05e03.x1 Soares_fetal_liver_spleen_ | 2.40 |
| 10 | 404253 |           |           |  | 2.40 |
|    | 428970 | BE276891  | Hs.194691 | retinoic acid induced 3                  | 2.40 |
|    | 443462 | AI064690  | Hs.171176 | ESTs                                     | 2.39 |
|    | 418693 | AI750878  | Hs.87409  | thrombospondin 1                         | 2.39 |
|    | 451237 | AW600293  |           | gb:EST00049.pGEM-T library Homo sapiens  | 2.39 |
| 15 | 407756 | AA116021  | Hs.38260  | ubiquitin specific protease 18           | 2.39 |
|    | 437935 | AW939591  | Hs.5940   | hypothetical protein FLJ20063            | 2.39 |
|    | 445625 | BE246743  | Hs.288529 | Homo sapiens cDNA: FLJ22635 fis, clone H | 2.39 |
|    | 435937 | AA830893  | Hs.119769 | ESTs                                     | 2.39 |
|    | 438993 | AA828995  |           | gb:od77b08.s1 NCI_CGAP_Ov2 Homo sapiens  | 2.38 |
| 20 | 422082 | AA016188  | Hs.111244 | hypothetical protein                     | 2.38 |
|    | 435849 | BE305242  | Hs.112442 | ESTs, Weakly similar to CLDE_HUMAN CLAUD | 2.38 |
|    | 407242 | M18728    |           | gb:Human nonspecific crossreacting antig | 2.38 |
|    | 450396 | AU077002  | Hs.24950  | regulator of G-protein signalling 5      | 2.38 |
| 25 | 430354 | AA954810  | Hs.239784 | human homolog of Drosophila Scribble     | 2.38 |
|    | 422578 | AF239666  | Hs.1545   | caudal type homeo box transcription fact | 2.38 |
|    | 446342 | BE298665  | Hs.14846  | Homo sapiens mRNA; cDNA DKFZp564D016 (fr | 2.38 |
|    | 450737 | AW007152  | Hs.203330 | ESTs                                     | 2.38 |
|    | 428070 | T63918    | Hs.182313 | retinol-binding protein 2, cellular      | 2.38 |
| 30 | 416111 | AA033813  | Hs.79018  | chromatin assembly factor 1, subunit A ( | 2.37 |
|    | 433345 | AI681545  | Hs.152982 | Homo sapiens cDNA FLJ13117 fis, clone NT | 2.37 |
|    | 427557 | NM_002659 | Hs.179657 | plasminogen activator, urokinase recepto | 2.37 |
|    | 423554 | M90516    | Hs.1674   | glutamine-fructose-6-phosphate transamin | 2.37 |
|    | 453204 | R10799    | Hs.191990 | ESTs                                     | 2.37 |
| 35 | 453876 | AW021748  | Hs.110406 | ESTs                                     | 2.36 |
|    | 425081 | X74794    | Hs.154443 | minichromosome maintenance deficient (S. | 2.36 |
|    | 434682 | AA827165  | Hs.191958 | ESTs                                     | 2.36 |
|    | 439737 | AI751438  | Hs.41271  | Homo sapiens mRNA full length insert cDN | 2.36 |
|    | 414108 | AI267592  | Hs.75761  | SFRS protein kinase 1                    | 2.36 |
| 40 | 417900 | BE250127  | Hs.82906  | CDC20 (cell division cycle 20, S. cerevi | 2.36 |
|    | 428046 | AW812795  | Hs.155381 | ESTs, Moderately similar to I38022 hypot | 2.36 |
|    | 448826 | AI580252  | Hs.293246 | ESTs, Weakly similar to putative p150 [H | 2.36 |
|    | 441020 | W79283    | Hs.35962  | ESTs                                     | 2.36 |
|    | 448019 | AW947164  | Hs.195641 | ESTs                                     | 2.36 |
| 45 | 431753 | X76029    | Hs.2841   | neuromedin U                             | 2.36 |
|    | 441703 | AW390054  | Hs.192843 | ESTs                                     | 2.36 |
|    | 410361 | BE391804  | Hs.62661  | guanylate binding protein 1, interferon- | 2.36 |
|    | 418526 | BE019020  | Hs.85838  | solute carrier family 15 (monocarboxylic | 2.36 |
|    | 444478 | W07318    | Hs.240    | M-phase phosphoprotein 1                 | 2.36 |
| 50 | 421878 | AA299652  | Hs.111496 | Homo sapiens cDNA FLJ11643 fis, clone HE | 2.35 |
|    | 428388 | AA729827  | Hs.101265 | Homo sapiens cDNA: FLJ22593 fis, clone H | 2.35 |
|    | 436961 | AW375974  | Hs.156704 | ESTs                                     | 2.35 |
|    | 408194 | AA601038  | Hs.191797 | ESTs                                     | 2.35 |
|    | 438578 | AA811244  | Hs.164168 | ESTs                                     | 2.35 |
| 55 | 429183 | AB014604  | Hs.197955 | KIAA0704 protein                         | 2.35 |
|    | 435663 | AI023707  | Hs.134273 | ESTs                                     | 2.35 |
|    | 430290 | AI734110  | Hs.136355 | ESTs                                     | 2.34 |
|    | 423441 | R68649    | Hs.278359 | absent in melanoma 1 like                | 2.34 |
|    | 453900 | AW003582  | Hs.226414 | ESTs, Weakly similar to ALU8_HUMAN ALU S | 2.33 |
| 60 | 450378 | AW249181  | Hs.19954  | ESTs, Weakly similar to cDNA EST yk386e1 | 2.33 |
|    | 432877 | AW974111  | Hs.292477 | ESTs                                     | 2.33 |
|    | 451928 | AI823801  | Hs.30315  | ESTs                                     | 2.33 |
|    | 426227 | U67058    | Hs.168102 | Human proteinase activated receptor-2 mR | 2.33 |
|    | 418245 | AA088767  | Hs.83883  | transmembrane, prostate androgen induced | 2.33 |
| 65 | 415083 | AI632683  | Hs.27179  | Homo sapiens cDNA FLJ12933 fis, clone NT | 2.33 |
|    | 435106 | AA100847  | Hs.193380 | ESTs, Highly similar to AF174600 1 F-box | 2.33 |
|    | 432193 | AA372264  | Hs.273193 | hypothetical protein FLJ10706            | 2.33 |
|    | 458531 | AA367718  | Hs.159083 | ESTs                                     | 2.33 |
|    | 449532 | W74653    | Hs.271593 | ESTs                                     | 2.33 |
| 70 | 446354 | AW449650  | Hs.202249 | ESTs                                     | 2.33 |
|    | 409703 | NM_006187 | Hs.56009  | 2'-5'-oligoadenylate synthetase 3        | 2.33 |
|    | 419373 | NM_003244 | Hs.90077  | TG-interacting factor (TALE family homeo | 2.32 |
|    | 435607 | W73428    | Hs.8750   | uncharacterized bone marrow protein BM04 | 2.32 |
|    | 405818 |           |           |  | 2.32 |
| 75 | 423132 | AF070647  | Hs.124126 | Homo sapiens clone 24438 mRNA sequence   | 2.32 |
|    | 444371 | BE540274  | Hs.239    | forkhead box M1                          | 2.32 |
|    | 432675 | AI791855  | Hs.105884 | ESTs                                     | 2.32 |
|    | 411773 | NM_006799 | Hs.72026  | protease, serine, 21 (testisin)          | 2.31 |
|    | 448569 | BE382657  | Hs.21486  | signal transducer and activator of trans | 2.31 |
|    | 434775 | AA648983  | Hs.212911 | ESTs                                     | 2.31 |
| 80 | 407378 | AA299264  |           | gb:EST11752 Uterus Homo sapiens cDNA 5'  | 2.31 |
|    | 442353 | BE379594  | Hs.49136  | ESTs                                     | 2.31 |
|    | 422611 | AA158177  | Hs.118722 | fucosyltransferase 8 (alpha (1,6) fucosy | 2.31 |
|    | 409965 | AA079229  |           | gb:zm95f04.r1 Stratagene colon HT29 (937 | 2.31 |

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|----|--------|-----------|-----------|--|------|
|    | 421677 | H64092    | Hs.38282  | ESTs                                     | 2.31 |
|    | 419493 | AF001212  | Hs.90744  | proteasome (prosome, macropain) 26S subu | 2.31 |
|    | 424435 | AB011167  | Hs.146957 | KIAA0595 protein                         | 2.30 |
| 5  | 446880 | AI811807  | Hs.108646 | Homo sapiens cDNA FLJ12534 fis, clone NT | 2.30 |
|    | 452795 | AW392555  | Hs.18878  | hypothetical protein FLJ21620            | 2.30 |
|    | 452834 | AI638627  | Hs.105685 | ESTs                                     | 2.30 |
|    | 409262 | AK000631  | Hs.52256  | hypothetical protein FLJ20624            | 2.30 |
|    | 428125 | AA393071  | Hs.182579 | leucine aminopeptidase                   | 2.30 |
| 10 | 417655 | AA780791  | Hs.14014  | ESTs, Weakly similar to KIAA0973 protein | 2.29 |
|    | 407287 | AI678812  | Hs.201658 | ESTs, Weakly similar to ALU4_HUMAN ALU S | 2.29 |
|    | 428923 | BE047698  | Hs.188785 | ESTs                                     | 2.29 |
|    | 452203 | X57522    | Hs.158164 | ATP-binding cassette, sub-family B (MDR/ | 2.29 |
|    | 409402 | AF208234  | Hs.695    | cystatin B (stefin B)                    | 2.29 |
| 15 | 419359 | AL043202  | Hs.90073  | chromosome segregation 1 (yeast homolog) | 2.29 |
|    | 451999 | AW176401  | Hs.27424  | DEAD/H (Asp-Glu-Ala-Asp/His) box polypep | 2.29 |
|    | 400811 | AF219139  | Hs.87726  | KIAA0154 protein: ADP-ribosylation facto | 2.29 |
|    | 436396 | AI683487  | Hs.299112 | Homo sapiens cDNA FLJ11441 fis, clone HE | 2.28 |
|    | 442152 | R39246    | Hs.239666 | Homo sapiens cDNA FLJ13495 fis, clone PL | 2.28 |
| 20 | 420931 | AF044197  | Hs.100431 | small inducible cytokine B subfamily (Cy | 2.28 |
|    | 410174 | AA306007  | Hs.59461  | DKFZP434C245 protein                     | 2.28 |
|    | 425247 | NM_005940 | Hs.155324 | matrix metalloproteinase 11 (stromelysin | 2.28 |
|    | 438170 | AI916685  | Hs.194601 | ESTs                                     | 2.28 |
|    | 445378 | AV653564  | Hs.226946 | ESTs                                     | 2.28 |
|    | 428048 | AA705745  | Hs.185070 | ESTs                                     | 2.28 |
| 25 | 414696 | AF002020  | Hs.76918  | Niemann-Pick disease, type C1            | 2.27 |
|    | 444665 | BE613126  | Hs.47783  | ESTs, Weakly similar to T12540 hypotheti | 2.27 |
|    | 427660 | AI741320  | Hs.114121 | Homo sapiens cDNA: FLJ23228 fis, clone C | 2.27 |
|    | 422128 | AW881145  | Hs.107431 | gb:QV0-OT0033-010400-182-a07 OT0033 Homo | 2.27 |
| 30 | 433535 | AF111106  | Hs.3382   | protein phosphatase 4, regulatory subuni | 2.27 |
|    | 415857 | AA866115  | Hs.301646 | Homo sapiens cDNA FLJ11381 fis, clone HE | 2.27 |
|    | 421155 | H87879    | Hs.102267 | lysyl oxidase                            | 2.27 |
|    | 405545 |           |           |  | 2.27 |
|    | 449467 | AW205006  | Hs.197042 | ESTs                                     | 2.27 |
| 35 | 445537 | AJ245671  | Hs.12844  | EGF-like-domain, multiple 6              | 2.27 |
|    | 450680 | AF131784  | Hs.25318  | Homo sapiens clone 25194 mRNA sequence   | 2.26 |
|    | 423634 | AW959908  | Hs.1690   | heparin-binding growth factor binding pr | 2.26 |
|    | 443868 | W88483    | Hs.293650 | ESTs                                     | 2.26 |
|    | 407742 | AF186252  | Hs.38084  | sulfotransferase family, cytosolic, 1C,  | 2.26 |
| 40 | 428330 | L22524    | Hs.2256   | matrix metalloproteinase 7 (matrilysin,  | 2.26 |
|    | 432655 | AA832195  | Hs.292266 | ESTs                                     | 2.26 |
|    | 429731 | AK001592  | Hs.212172 | beta,beta-carotene 15,15'-dioxygenase ho | 2.26 |
|    | 400514 |           |           |  | 2.26 |
|    | 431846 | BE019924  | Hs.271580 | uroplakin 1B                             | 2.26 |
|    | 439521 | AI808955  | Hs.58248  | ESTs                                     | 2.26 |
| 45 | 426010 | AA136563  | Hs.1975   | Homo sapiens cDNA: FLJ21007 fis, clone C | 2.26 |
|    | 437641 | AA811452  | Hs.291911 | ESTs                                     | 2.26 |
|    | 418982 | AI348838  | Hs.13073  | ESTs                                     | 2.26 |
|    | 411393 | AW797437  | Hs.69771  | B-factor, properdin                      | 2.26 |
|    | 414809 | AI434699  | Hs.77356  | transferrin receptor (p90, CD71)         | 2.25 |
| 50 | 419488 | AA316241  | Hs.90691  | nucleophosmin/nucleoplasmin 3            | 2.25 |
|    | 434540 | NM_016045 | Hs.5184   | TH1 drosophila homolog                   | 2.25 |
|    | 449962 | AA004879  | Hs.187820 | ESTs                                     | 2.25 |
|    | 410196 | AI936442  | Hs.59838  | hypothetical protein FLJ10808            | 2.25 |
| 55 | 456844 | AI264155  | Hs.152981 | CDP-diacylglycerol synthase (phosphatida | 2.25 |
|    | 414368 | W70171    | Hs.75939  | uridine monophosphate kinase             | 2.25 |
|    | 408353 | BE439838  | Hs.44298  | hypothetical protein                     | 2.25 |
|    | 439223 | AW238299  | Hs.23945  | ESTs                                     | 2.25 |
|    | 448753 | AL048858  | Hs.224355 | ESTs, Weakly similar to A39650 protein k | 2.25 |
| 60 | 428479 | Y00272    | Hs.184572 | cell division cycle 2, G1 to S and G2 to | 2.24 |
|    | 432403 | AA550815  | Hs.124840 | ESTs                                     | 2.24 |
|    | 424971 | AA479005  | Hs.154036 | tumor suppressing subtransferable candid | 2.24 |
|    | 432673 | AB028859  | Hs.278605 | ER-associated DNAJ; ER-associated Hsp40  | 2.24 |
|    | 446887 | AI346656  | Hs.156652 | Homo sapiens cDNA: FLJ22800 fis, clone K | 2.24 |
| 65 | 452833 | BE559681  | Hs.30736  | KIAA0124 protein                         | 2.24 |
|    | 409432 | D49372    | Hs.54460  | small inducible cytokine subfamily A (Cy | 2.24 |
|    | 422039 | BE567832  | Hs.82148  | hypothetical protein                     | 2.24 |
|    | 429925 | NM_000786 | Hs.226213 | cytochrome P450, 51 (lanosterol 14-alpha | 2.24 |
|    | 445413 | AA151342  | Hs.12677  | CGI-147 protein                          | 2.23 |
| 70 | 423645 | AI215632  | Hs.147487 | ESTs                                     | 2.23 |
|    | 447532 | AK000614  | Hs.18791  | hypothetical protein FLJ20607            | 2.23 |
|    | 423515 | AA327017  | Hs.162204 | ESTs                                     | 2.23 |
|    | 444743 | AA045648  | Hs.11817  | nudix (nucleoside diphosphate linked moi | 2.23 |
|    | 434518 | H56995    | Hs.37372  | Homo sapiens DNA binding peptide mRNA, p | 2.23 |
| 75 | 435602 | AF217515  | Hs.283532 | uncharacterized bone marrow protein BM03 | 2.23 |
|    | 449974 | AW970948  | Hs.269403 | ESTs                                     | 2.23 |
|    | 424927 | AW973666  | Hs.153850 | hypothetical protein C321D2.4            | 2.23 |
|    | 457982 | AW856093  | Hs.183617 | ESTs                                     | 2.23 |
|    | 414420 | AA043424  | Hs.76095  | immediate early response 3               | 2.23 |
| 80 | 449019 | AI949095  | Hs.67776  | ESTs, Weakly similar to ALU7_HUMAN ALU S | 2.23 |
|    | 431840 | AA534908  | Hs.2860   | POU domain, class 5, transcription facto | 2.23 |
|    | 452930 | AW195285  | Hs.194097 | ESTs                                     | 2.23 |
|    | 436391 | AJ227892  | Hs.146274 | ESTs                                     | 2.23 |
|    | 439186 | AI697274  | Hs.6487   | Xq28, 2000bp sequence contig. ORF        | 2.23 |

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|    | 427254 | AL121523  | Hs.97774  | ESTs                                     | 2.22 |
|    | 424517 | AI539443  | Hs.137447 | Homo sapiens cDNA FLJ12169 fis, clone MA | 2.22 |
|    | 414732 | AW410976  | Hs.77152  | minichromosome maintenance deficient (S. | 2.22 |
|    | 411835 | U29343    | Hs.72550  | hyaluronan-mediated motility receptor (R | 2.22 |
| 5  | 427647 | W19744    | Hs.180059 | Homo sapiens cDNA FLJ20653 fis, clone KA | 2.22 |
|    | 438223 | AA781171  |           | gb:aj24d05.s1 Scores_testis_NHT Homo sap | 2.22 |
|    | 434504 | AI887341  | Hs.121590 | Homo sapiens cDNA FLJ12827 fis, clone NT | 2.22 |
|    | 450149 | AW969781  | Hs.293440 | ESTs, Moderately similar to ZIC2 protein | 2.22 |
|    | 439211 | AI890347  | Hs.271923 | Homo sapiens cDNA: FLJ22785 fis, clone K | 2.22 |
| 10 | 401519 |           |           |  | 2.22 |
|    | 441794 | AW197794  | Hs.253338 | ESTs                                     | 2.22 |
|    | 412108 | AA100293  | Hs.185043 | ESTs                                     | 2.22 |
|    | 431849 | AI670823  | Hs.85573  | Homo sapiens mRNA; cDNA DKFZp566N034 (fr | 2.22 |
|    | 444969 | AI203334  | Hs.160628 | ESTs                                     | 2.21 |
| 15 | 408901 | AK001330  | Hs.48855  | hypothetical protein FLJ10468            | 2.21 |
|    | 434423 | NM_006769 | Hs.3844   | LIM domain only 4                        | 2.21 |
|    | 439328 | W07411    | Hs.118212 | ESTs, Moderately similar to ALU3_HUMAN A | 2.21 |
|    | 400021 |           |           | AFFX control: STAT1                      | 2.21 |
|    | 432140 | AK000404  | Hs.272688 | hypothetical protein FLJ20397            | 2.21 |
| 20 | 434170 | AA626509  | Hs.122329 | ESTs                                     | 2.21 |
|    | 423453 | AW450737  | Hs.128791 | CGI-09 protein                           | 2.21 |
|    | 428438 | NM_001955 | Hs.2271   | endothelin 1                             | 2.21 |
|    | 433102 | AI343966  | Hs.158528 | ESTs                                     | 2.21 |
|    | 421470 | R27496    | Hs.1378   | annexin A3                               | 2.21 |
| 25 | 425499 | T62489    |           | gb:yc03f09.r1 Stratagene lung (937210) H | 2.21 |
|    | 438280 | AW015534  | Hs.217493 | annexin A2                               | 2.21 |
|    | 440381 | AA917808  | Hs.190495 | ESTs                                     | 2.20 |
|    | 453779 | N35187    | Hs.43388  | ESTs                                     | 2.20 |
| 30 | 433627 | AF078866  | Hs.284296 | Homo sapiens cDNA: FLJ22993 fis, clone K | 2.20 |
|    | 417944 | AU077196  | Hs.82985  | collagen, type V, alpha 2                | 2.20 |
|    | 452299 | AW206330  | Hs.73239  | hypothetical protein FLJ10901            | 2.20 |
|    | 422689 | AW856665  |           | gb:RC3-CT0297-290100-013-d03 CT0297 Homo | 2.20 |
|    | 448457 | H65629    | Hs.245997 | ESTs                                     | 2.20 |
| 35 | 416221 | BE513171  | Hs.79086  | mitochondrial ribosomal protein L3       | 2.20 |
|    | 426125 | X87241    | Hs.166994 | FAT tumor suppressor (Drosophila) homolo | 2.20 |
|    | 430603 | AA148164  | Hs.247280 | HBV associated factor                    | 2.20 |
|    | 425274 | BE281191  | Hs.155462 | minichromosome maintenance deficient (mi | 2.20 |
|    | 452679 | Z42387    | Hs.4299   | Homo sapiens cDNA: FLJ20965 fis, clone A | 2.20 |
| 40 | 410619 | BE512730  | Hs.65114  | keratin 18                               | 2.20 |
|    | 424332 | AA338919  | Hs.101615 | ESTs                                     | 2.20 |
|    | 442490 | AW965078  | Hs.30212  | thyroid receptor interacting protein 15  | 2.20 |
|    | 418661 | NM_001949 | Hs.1189   | Human mRNA for KIAA0075 gene, partial cd | 2.20 |
|    | 419341 | N71463    | Hs.118888 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 2.20 |
| 45 | 427920 | Z11502    | Hs.181107 | annexin A13                              | 2.19 |
|    | 413879 | AA132961  | Hs.212533 | Homo sapiens cDNA: FLJ22572 fis, clone H | 2.19 |
|    | 419752 | AA249573  | Hs.152618 | ESTs                                     | 2.19 |
|    | 441436 | AW137772  | Hs.185980 | ESTs                                     | 2.19 |
|    | 413095 | AA494359  | Hs.30715  | ESTs                                     | 2.19 |
|    | 403208 |           |           |  | 2.19 |
| 50 | 422596 | AF063611  | Hs.118633 | 2'-5'oligoadenylate synthetase-like      | 2.19 |
|    | 444261 | AA298958  | Hs.10724  | MDS023 protein                           | 2.19 |
|    | 419474 | AW968619  | Hs.155849 | ESTs                                     | 2.19 |
|    | 453883 | AI638516  | Hs.77448  | aldehyde dehydrogenase 4 (glutamate gamm | 2.18 |
| 55 | 423401 | NM_001992 | Hs.128087 | coagulation factor II (thrombin) recepto | 2.18 |
|    | 453450 | AW797627  | Hs.89474  | ADP-ribosylation factor 6                | 2.18 |
|    | 440250 | AA876179  | Hs.134650 | ESTs                                     | 2.18 |
|    | 444334 | BE296785  | Hs.10848  | KIAA0187 gene product                    | 2.18 |
|    | 437616 | AI797163  | Hs.207954 | ESTs                                     | 2.18 |
| 60 | 451807 | W52854    | Hs.27099  | DKFZP564J0863 protein                    | 2.18 |
|    | 430441 | BE398091  | Hs.5880   | DKFZP434D156 protein                     | 2.18 |
|    | 414602 | AW630088  | Hs.76550  | Homo sapiens mRNA; cDNA DKFZp564B1264 (f | 2.18 |
|    | 411678 | AI907114  | Hs.71465  | squalene epoxidase                       | 2.18 |
|    | 453735 | AI066629  | Hs.125073 | ESTs                                     | 2.18 |
| 65 | 450499 | AA235207  | Hs.250456 | hypothetical protein DKFZp762F2011       | 2.18 |
|    | 452291 | AF015592  | Hs.28853  | CDC7 (cell division cycle 7, S. cerevisi | 2.18 |
|    | 421532 | AW138207  | Hs.146170 | hypothetical protein FLJ22969            | 2.18 |
|    | 444342 | NM_014398 | Hs.10887  | similar to lysosome-associated membrane  | 2.18 |
|    | 451099 | R52795    | Hs.25954  | interleukin 13 receptor, alpha 2         | 2.18 |
|    | 444207 | AI565004  | Hs.79572  | cathepsin D (lysosomal aspartyl protease | 2.18 |
| 70 | 425873 | NM_013390 | Hs.160417 | transmembrane protein 2                  | 2.17 |
|    | 417404 | NM_007350 | Hs.82101  | pleckstrin homology-like domain, family  | 2.17 |
|    | 449437 | AI702038  | Hs.100057 | Homo sapiens cDNA: FLJ22902 fis, clone K | 2.17 |
|    | 446995 | AI355012  |           | gb:qu16d10.x1 NCL_CGAP_Ov23 Homo sapiens | 2.17 |
|    | 431548 | AI834273  | Hs.9711   | Homo sapiens cDNA FLJ13018 fis, clone NT | 2.17 |
| 75 | 411127 | AA668995  | Hs.218329 | hypothetical protein                     | 2.17 |
|    | 439961 | AA857451  | Hs.269696 | ESTs                                     | 2.17 |
|    | 429125 | AA446854  | Hs.271004 | ESTs                                     | 2.17 |
|    | 407103 | AA424881  | Hs.256301 | ESTs                                     | 2.17 |
|    | 435990 | AI015862  | Hs.131793 | ESTs                                     | 2.17 |
| 80 | 415116 | AA160363  | Hs.269956 | ESTs                                     | 2.17 |
|    | 440052 | AI633744  | Hs.195648 | ESTs                                     | 2.17 |
|    | 423961 | D13666    | Hs.136348 | osteoblast specific factor 2 (fasciclin  | 2.17 |
|    | 431070 | AW408164  | Hs.249184 | transcription factor 19 (SC1)            | 2.16 |



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|    | 443599 | AI079559  | Hs.134125 | ESTs                                     | 2.16 |
|    | 423623 | AB011117  | Hs.129943 | KIAA0545 protein                         | 2.16 |
|    | 427258 | AA400091  | Hs.39421  | ESTs                                     | 2.16 |
| 5  | 418113 | AI272141  | Hs.83484  | SRF (sex determining region Y)-box 4     | 2.16 |
|    | 450835 | BE262773  | Hs.25584  | hypothetical protein FLJ10767            | 2.16 |
|    | 428698 | AA852773  | Hs.297939 | ESTs, Weakly similar to T17344 hypotheti | 2.16 |
|    | 421408 | AI688223  | Hs.104114 | H.sapiens HCG I mRNA                     | 2.16 |
|    | 449057 | AB037784  | Hs.22941  | KIAA1363 protein                         | 2.16 |
| 10 | 408947 | AL080093  | Hs.49117  | Homo sapiens mRNA; cDNA DKFZp564N1662 (f | 2.16 |
|    | 443552 | N65982    | Hs.109434 | ESTs                                     | 2.16 |
|    | 448153 | Y10805    | Hs.20521  | HMT1 (hnRNP methyltransferase, S. cerevi | 2.16 |
|    | 424653 | AW977534  | Hs.151469 | calcium/calmodulin-dependent serine prot | 2.16 |
|    | 431341 | AA307211  | Hs.251531 | proteasome (prosome, macropain) subunit, | 2.16 |
| 15 | 452865 | AI924046  | Hs.119567 | ESTs                                     | 2.16 |
|    | 432789 | D26361    | Hs.3104   | KIAA0042 gene product                    | 2.16 |
|    | 438580 | AA811262  | Hs.299202 | ESTs                                     | 2.16 |
|    | 422192 | AA305159  | Hs.113019 | fts485                                   | 2.15 |
|    | 425607 | U09860    | Hs.158333 | protease, serine, 7 (enterokinase)       | 2.15 |
| 20 | 447289 | AW247017  | Hs.36978  | melanoma antigen, family A, 3            | 2.15 |
|    | 447674 | BE270640  | Hs.19192  | cyclin-dependent kinase 2                | 2.15 |
|    | 441021 | AW578716  | Hs.7644   | H1 histone family, member 2              | 2.15 |
|    | 442432 | BE093589  | Hs.38178  | Homo sapiens cDNA: FLJ23468 fis, clone H | 2.15 |
|    | 426471 | M22440    | Hs.170009 | transforming growth factor, alpha        | 2.15 |
| 25 | 431941 | AK000106  | Hs.272227 | Homo sapiens cDNA FLJ20099 fis, clone CO | 2.15 |
|    | 414761 | AU077228  | Hs.77256  | enhancer of zeste (Drosophila) homolog 2 | 2.15 |
|    | 447033 | AI357412  | Hs.157601 | ESTs                                     | 2.15 |
|    | 410407 | X66839    | Hs.63287  | carbonic anhydrase IX                    | 2.15 |
|    | 446077 | BE251048  | Hs.22579  | Homo sapiens clone CDABP0036 mRNA sequen | 2.15 |
| 30 | 420900 | AL045633  | Hs.44269  | ESTs                                     | 2.15 |
|    | 411975 | AI916058  | Hs.144583 | ESTs, Weakly similar to gag [H.sapiens]  | 2.15 |
|    | 419239 | AA468183  | Hs.184598 | Homo sapiens cDNA: FLJ23241 fis, clone C | 2.15 |
|    | 449571 | AW016812  | Hs.200266 | ESTs                                     | 2.15 |
|    | 452721 | AJ269529  | Hs.30377  | Homo sapiens EST from clone 470080, full | 2.15 |
| 35 | 410491 | AA465131  | Hs.64001  | Homo sapiens clone 25218 mRNA sequence   | 2.14 |
|    | 410654 | NM_006033 | Hs.65370  | lipase, endothelial                      | 2.14 |
|    | 435730 | AB020635  | Hs.4984   | KIAA0828 protein                         | 2.14 |
|    | 452835 | AK001269  | Hs.30738  | hypothetical protein FLJ10407            | 2.14 |
|    | 452092 | BE245374  | Hs.27842  | hypothetical protein FLJ11210            | 2.14 |
| 40 | 401708 |           |           |  | 2.14 |
|    | 411400 | AA311919  | Hs.69851  | GAR1 protein                             | 2.14 |
|    | 448526 | AB028946  | Hs.21361  | KIAA1023 protein                         | 2.14 |
|    | 421175 | AB879099  | Hs.102397 | GIOT-3 for gonadotropin inducible transc | 2.14 |
|    | 412338 | AA151527  | Hs.69485  | Homo sapiens cDNA FLJ12436 fis, clone NT | 2.14 |
| 45 | 420894 | AA744597  | Hs.88854  | ESTs                                     | 2.14 |
|    | 409235 | AA188827  | Hs.7988   | ESTs, Weakly similar to endo-alpha-D-man | 2.14 |
|    | 412870 | N22788    | Hs.82407  | Homo sapiens HSPC296 mRNA, partial cds   | 2.14 |
|    | 447760 | AI431328  | Hs.291179 | ESTs, Weakly similar to topoisomerase I  | 2.14 |
|    | 413511 | AI627178  | Hs.75412  | Arginine-rich protein                    | 2.13 |
| 50 | 432945 | AL043683  | Hs.271357 | ESTs, Weakly similar to unnamed protein  | 2.13 |
|    | 418592 | X99226    | Hs.284153 | Fanconi anemia, complementation group A  | 2.13 |
|    | 441790 | AW294909  | Hs.132208 | ESTs                                     | 2.13 |
|    | 425298 | AK000209  | Hs.155556 | hypothetical protein FLJ20202            | 2.13 |
|    | 450956 | AW193531  | Hs.205647 | ESTs, Moderately similar to ALU1_HUMAN A | 2.13 |
| 55 | 419569 | AI971651  | Hs.91143  | jagged 1 (Alagille syndrome)             | 2.13 |
|    | 421508 | NM_004833 | Hs.105115 | absent in melanoma 2                     | 2.13 |
|    | 453975 | AW009808  | Hs.270829 | ESTs                                     | 2.13 |
|    | 413670 | AB000115  | Hs.75470  | hypothetical protein, expressed in osteo | 2.13 |
| 60 | 422783 | AA598956  | Hs.120439 | ethanolamine kinase                      | 2.13 |
|    | 444542 | AI161293  | Hs.146852 | ESTs, Weakly similar to KIAA0525 protein | 2.13 |
|    | 410418 | D31382    | Hs.63325  | transmembrane protease, serine 4         | 2.13 |
|    | 419791 | AI579909  | Hs.105104 | ESTs                                     | 2.13 |
|    | 414860 | BE255593  | Hs.77502  | methionine adenosyltransferase II, alpha | 2.13 |
|    | 425860 | L29339    | Hs.1964   | solute carrier family 5 (sodium/glucose  | 2.13 |
| 65 | 414839 | X63692    | Hs.77462  | DNA (cytosine-5-)-methyltransferase 1    | 2.13 |
|    | 437050 | AA766420  | Hs.291606 | ESTs                                     | 2.13 |
|    | 430217 | N47863    | Hs.180450 | ribosomal protein S24                    | 2.13 |
|    | 420923 | AF097021  | Hs.273321 | differentially expressed in hematopoieti | 2.12 |
|    | 409012 | AL117435  | Hs.49725  | DKFZP434I216 protein                     | 2.12 |
| 70 | 450645 | AL117441  | Hs.25264  | DKFZP434N126 protein                     | 2.12 |
|    | 431322 | AW970622  |           | gb:EST382704 MAGE resequences, MAGK Homo | 2.12 |
|    | 451356 | AA748418  | Hs.164577 | ESTs                                     | 2.12 |
|    | 429534 | AW976987  | Hs.163327 | ESTs                                     | 2.12 |
|    | 428365 | AA295331  | Hs.183861 | Homo sapiens cDNA FLJ20042 fis, clone CO | 2.12 |
| 75 | 441495 | AW294603  | Hs.127039 | ESTs                                     | 2.12 |
|    | 443564 | AI921685  | Hs.199713 | ESTs                                     | 2.12 |
|    | 410839 | NM_006849 | Hs.66581  | protein disulfide isomerase              | 2.12 |
|    | 433640 | AW390125  | Hs.240443 | Homo sapiens cDNA: FLJ23538 fis, clone L | 2.12 |
| 80 | 442947 | R40800    | Hs.21303  | ESTs                                     | 2.12 |
|    | 414987 | AA524394  | Hs.165544 | ESTs                                     | 2.12 |
|    | 450510 | AA010056  | Hs.242998 | ESTs                                     | 2.12 |
|    | 427475 | AA403151  | Hs.191605 | ESTs                                     | 2.12 |
|    | 444670 | H58373    | Hs.37494  | ESTs                                     | 2.12 |
|    | 452099 | BE612992  | Hs.27931  | hypothetical protein FLJ10507 similar to | 2.12 |

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|----|--------|-----------|-----------|--|------|
|    | 433748 | R12244    |           | gb:yl33c12.r1 Soares fetal liver spleen  | 2.12 |
|    | 415138 | C18356    | Hs.78045  | tissue factor pathway inhibitor 2        | 2.11 |
|    | 438138 | R98299    | Hs.177502 | ESTs                                     | 2.11 |
|    | 414788 | X78342    | Hs.77313  | cyclin-dependent kinase (CDC2-like) 10   | 2.11 |
| 5  | 415474 | NM_014252 | Hs.78457  | solute carrier family 25 (mitochondrial  | 2.11 |
|    | 416472 | AA180755  | Hs.193094 | ESTs, Moderately similar to ALU4_HUMAN A | 2.11 |
|    | 412490 | AW803564  | Hs.288850 | Homo sapiens cDNA: FLJ22528 fis, clone H | 2.11 |
|    | 410718 | AI920783  | Hs.191435 | ESTs                                     | 2.11 |
| 10 | 425811 | AL039104  | Hs.159557 | karyopherin alpha 2 (RAG cohort 1, impor | 2.11 |
|    | 433344 | AI741506  | Hs.186753 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 2.11 |
|    | 447197 | R36075    |           | gb:yh88b01.s1 Soares placenta Nb2HP Homo | 2.11 |
|    | 431621 | AW292329  | Hs.163481 | ESTs                                     | 2.11 |
|    | 418522 | AA605038  | Hs.7149   | Homo sapiens cDNA: FLJ21950 fis, clone H | 2.11 |
| 15 | 433849 | BE465884  | Hs.280728 | ESTs                                     | 2.11 |
|    | 438038 | AI732629  | Hs.194161 | ESTs, Weakly similar to TA2R HUMAN, BETA | 2.11 |
|    | 422032 | AA476966  | Hs.110857 | polymerase (RNA) III (DNA directed) poly | 2.11 |
|    | 409717 | AW452871  | Hs.56043  | CGI-115 protein                          | 2.11 |
|    | 410566 | AA373210  | Hs.43047  | Homo sapiens cDNA FLJ13585 fis, clone PL | 2.11 |
| 20 | 445837 | AI261700  | Hs.145544 | ESTs                                     | 2.11 |
|    | 414334 | AA824298  | Hs.21331  | hypothetical protein FLJ10036            | 2.11 |
|    | 436326 | BE085236  | Hs.181244 | major histocompatibility complex, class  | 2.10 |
|    | 423880 | BE278111  | Hs.134200 | DKFZP564C186 protein                     | 2.10 |
|    | 421574 | AJ000152  | Hs.105924 | defensin, beta 2                         | 2.10 |
| 25 | 437103 | AW139408  | Hs.152940 | ESTs                                     | 2.10 |
|    | 435550 | AI224456  | Hs.4934   | H.sapiens polyA site DNA                 | 2.10 |
|    | 450747 | AI064821  | Hs.48306  | ESTs, Highly similar to EWS_HUMAN RNA-BI | 2.10 |
|    | 437033 | AW248364  | Hs.5409   | RNA polymerase I subunit                 | 2.10 |
|    | 417640 | D30857    | Hs.82353  | protein C receptor, endothelial (EPCR)   | 2.10 |
| 30 | 431120 | AA492588  |           | gb:ng99c08.s1 NCI_CGAP_Thy1 Homo sapiens | 2.10 |
|    | 430510 | AW162916  | Hs.241576 | hypothetical protein PRO2577             | 2.10 |
|    | 429669 | BE185499  | Hs.2471   | KIAA0020 gene product                    | 2.10 |
|    | 407881 | AW072003  | Hs.40968  | heparan sulfate (glucosamine) 3-O-sulfot | 2.10 |
|    | 436124 | AA705012  | Hs.269584 | ESTs                                     | 2.10 |
| 35 | 436415 | BE265254  | Hs.5181   | proliferation-associated 2G4, 38kD       | 2.10 |
|    | 451121 | AW973795  | Hs.128927 | Homo sapiens cDNA FLJ13903 fis, clone TH | 2.10 |
|    | 453968 | AA847843  | Hs.62711  | ESTs                                     | 2.10 |
|    | 437549 | AA759149  |           | gb:ah70e03.s1 Soares_testis_NHT Homo sap | 2.10 |
| 40 | 407887 | AA579668  | Hs.41072  | serine (or cysteine) proteinase inhibito | 2.10 |
|    | 447720 | AL038765  | Hs.161304 | ESTs                                     | 2.09 |
|    | 434769 | AA648884  | Hs.134278 | Homo sapiens cDNA FLJ12676 fis, clone NT | 2.09 |
|    | 429743 | AA804398  | Hs.288995 | hypothetical protein FLJ20813            | 2.09 |
|    | 447815 | AI432199  | Hs.247084 | ESTs                                     | 2.09 |
|    | 441675 | AI914329  | Hs.5461   | ESTs                                     | 2.09 |
| 45 | 434274 | AA628539  | Hs.116252 | ESTs, Moderately similar to ALU1_HUMAN A | 2.09 |
|    | 411571 | AA122393  | Hs.70811  | hypothetical protein FLJ20516            | 2.09 |
|    | 442525 | AF150282  | Hs.145945 | ESTs                                     | 2.09 |
|    | 423750 | AF165883  | Hs.132415 | prefoldin 2                              | 2.09 |
|    | 449199 | AI990122  | Hs.196988 | ESTs                                     | 2.09 |
| 50 | 415363 | AI670947  | Hs.78406  | phosphatidylinositol-4-phosphate 5-kinas | 2.09 |
|    | 432543 | AA552690  | Hs.152423 | Homo sapiens cDNA: FLJ21274 fis, clone C | 2.09 |
|    | 418462 | BE001596  | Hs.85266  | integrin, beta 4                         | 2.09 |
|    | 432093 | H28383    |           | gb:yl52c03.r1 Soares breast 3NbHBst Homo | 2.09 |
|    | 407862 | BE548267  | Hs.50724  | Homo sapiens cDNA FLJ10934 fis, clone OV | 2.09 |
| 55 | 434442 | AA737415  | Hs.152826 | ESTs                                     | 2.09 |
|    | 442671 | AI005668  | Hs.134779 | EST                                      | 2.09 |
|    | 428771 | AB028992  | Hs.193143 | KIAA1069 protein                         | 2.09 |
|    | 430335 | D80007    | Hs.239499 | KIAA0185 protein                         | 2.08 |
|    | 425087 | R62424    | Hs.126059 | ESTs                                     | 2.08 |
| 60 | 412530 | AA766268  | Hs.266273 | Homo sapiens cDNA FLJ13346 fis, clone OV | 2.08 |
|    | 443450 | N66045    | Hs.133529 | ESTs                                     | 2.08 |
|    | 418753 | BE217818  | Hs.87016  | Homo sapiens cDNA: FLJ22538 fis, clone K | 2.08 |
|    | 432204 | AI916132  | Hs.121593 | Homo sapiens cDNA FLJ13123 fis, clone NT | 2.08 |
|    | 439018 | AW300887  | Hs.26638  | ESTs, Weakly similar to unnamed protein  | 2.08 |
| 65 | 418300 | AI433074  | Hs.86682  | Homo sapiens cDNA: FLJ21578 fis, clone C | 2.08 |
|    | 431628 | AF146277  | Hs.265561 | CD2-associated protein                   | 2.08 |
|    | 446528 | AU076640  | Hs.15243  | nucleolar protein 1 (120kD)              | 2.08 |
|    | 432284 | AA532807  | Hs.105822 | ESTs                                     | 2.08 |
|    | 411372 | AI147861  | Hs.213289 | low density lipoprotein receptor (famili | 2.08 |
| 70 | 459319 | NM_000059 |           | gb:Homo sapiens breast cancer 2, early o | 2.08 |
|    | 408730 | AV660717  | Hs.47144  | DKFZP586N0819 protein                    | 2.08 |
|    | 443607 | AI452512  | Hs.134069 | ESTs                                     | 2.08 |
|    | 422058 | AA862231  |           | gb:oe13g03.s1 NCI_CGAP_Ov2 Homo sapiens  | 2.08 |
|    | 409220 | BE243323  | Hs.51233  | tumor necrosis factor receptor superfami | 2.08 |
| 75 | 429504 | X99133    | Hs.204238 | lipocalin 2 (oncogene 24p3)              | 2.08 |
|    | 409686 | AK000002  | Hs.55879  | Homo sapiens mRNA for FLJ00036 protein,  | 2.08 |
|    | 438394 | BE379623  | Hs.27693  | CGI-124 protein                          | 2.08 |
|    | 413092 | AA126856  | Hs.118665 | ESTs                                     | 2.08 |
|    | 413715 | AW851121  | Hs.75497  | Homo sapiens cDNA: FLJ22139 fis, clone H | 2.08 |
| 80 | 423020 | AA383092  | Hs.1608   | replication protein A3 (14kD)            | 2.07 |
|    | 438378 | AW970529  | Hs.86434  | Homo sapiens cDNA: FLJ21816 fis, clone H | 2.07 |
|    | 453379 | AA035261  | Hs.61753  | ESTs                                     | 2.07 |
|    | 432125 | AW972667  | Hs.287510 | Homo sapiens cDNA FLJ12300 fis, clone MA | 2.07 |
|    | 449370 | AK002114  | Hs.23495  | hypothetical protein FLJ11252            | 2.07 |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 449318 | AW236021  | Hs.108788 | ESTs, Weakly similar to zeste [D.melanog | 2.07 |
|    | 450096 | AI682088  | Hs.223368 | ESTs                                     | 2.07 |
|    | 454011 | M31008    | Hs.37009  | alkaline phosphatase, intestinal         | 2.07 |
|    | 427876 | AI494291  | Hs.111977 | ESTs                                     | 2.07 |
| 5  | 422901 | R81936    | Hs.121576 | aspartate beta-hydroxylase               | 2.07 |
|    | 419235 | AW470411  | Hs.288433 | neurotrophin                             | 2.07 |
|    | 449207 | AL044222  | Hs.23255  | nucleoporin 155kD                        | 2.07 |
|    | 408243 | Y00787    | Hs.624    | interleukin 8                            | 2.07 |
|    | 415652 | T79213    | Hs.272073 | ESTs                                     | 2.07 |
| 10 | 446546 | BE167687  | Hs.156628 | ESTs                                     | 2.07 |
|    | 411765 | H43346    |           | gb:yp09a04.r1 Soares breast 3NbHBst Homo | 2.07 |
|    | 423472 | AF041260  | Hs.129057 | breast carcinoma amplified sequence 1    | 2.07 |
|    | 436211 | AK001581  | Hs.80961  | polymerase (DNA directed), gamma         | 2.07 |
|    | 456157 | AW979153  |           | gb:EST391263 MAGE resequences, MAGP Homo | 2.06 |
| 15 | 407143 | C14076    | Hs.248968 | EST                                      | 2.06 |
|    | 454269 | AI961060  | Hs.296411 | ESTs, Moderately similar to KF1A_HUMAN K | 2.06 |
|    | 432440 | X63597    | Hs.2996   | sucrase-isomaltase                       | 2.06 |
|    | 410668 | BE379794  | Hs.65403  | hypothetical protein                     | 2.06 |
|    | 422765 | AW409701  | Hs.1578   | baculoviral IAP repeat-containing 5 [sur | 2.06 |
| 20 | 450434 | AA166950  | Hs.18645  | ESTs, Weakly similar to partial CDS [C.e | 2.06 |
|    | 439832 | T81829    | Hs.14870  | ESTs                                     | 2.06 |
|    | 456264 | AW974175  | Hs.105251 | ESTs                                     | 2.06 |
|    | 431201 | AA678405  | Hs.8854   | Human transcription unit PVT gene, exons | 2.06 |
| 25 | 445021 | AK002025  | Hs.12251  | Homo sapiens cDNA FLJ11163 fis, clone PL | 2.06 |
|    | 438714 | AA814859  | Hs.294112 | ESTs                                     | 2.06 |
|    | 445318 | AW500652  | Hs.200885 | ESTs                                     | 2.06 |
|    | 439951 | AI347067  | Hs.124636 | ESTs                                     | 2.06 |
|    | 433681 | AI004377  | Hs.200360 | Homo sapiens cDNA FLJ13027 fis, clone NT | 2.06 |
| 30 | 428307 | W27393    | Hs.183648 | protein tyrosine phosphatase, receptor I | 2.06 |
|    | 426874 | N67325    | Hs.247132 | ESTs                                     | 2.06 |
|    | 451295 | AI557212  | Hs.17132  | ESTs                                     | 2.06 |
|    | 432584 | AA928829  | Hs.47099  | Homo sapiens cDNA: FLJ21212 fis, clone C | 2.06 |
|    | 433027 | AF191018  | Hs.279923 | putative nucleotide binding protein, est | 2.06 |
| 35 | 433716 | AA608808  | Hs.225118 | ESTs                                     | 2.06 |
|    | 429412 | NM_006235 | Hs.2407   | POU domain, class 2, associating factor  | 2.06 |
|    | 426235 | AI631964  | Hs.34447  | ESTs                                     | 2.06 |
|    | 449026 | BE500946  | Hs.209105 | ESTs                                     | 2.06 |
|    | 437016 | AU076916  | Hs.5398   | guanine monophosphate synthetase         | 2.06 |
| 40 | 400019 |           |           | AFFX control: STAT1                      | 2.06 |
|    | 408873 | AL046017  | Hs.23247  | ESTs                                     | 2.06 |
|    | 442547 | AA306997  | Hs.268362 | ESTs, Weakly similar to hypothetical pro | 2.06 |
|    | 455778 | BE088746  |           | gb:CM2-BT0693-210300-123-d09 BT0693 Homo | 2.06 |
|    | 439975 | AW328081  | Hs.6817   | Homo sapiens putative oncogene protein m | 2.06 |
| 45 | 433037 | NM_014158 | Hs.279938 | HSPC067 protein                          | 2.06 |
|    | 440086 | NM_005402 | Hs.288757 | v-rat simian leukemia viral oncogene hom | 2.06 |
|    | 436414 | BE264633  | Hs.143638 | WD repeat domain 4                       | 2.05 |
|    | 411770 | NM_014278 | Hs.71992  | heat shock protein (hsp110 family)       | 2.05 |
|    | 407293 | AA602234  | Hs.270551 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 2.05 |
| 50 | 409459 | D86407    | Hs.54481  | low density lipoprotein receptor-related | 2.05 |
|    | 436238 | AK002163  | Hs.301724 | ESTs, Highly similar to unnamed protein  | 2.05 |
|    | 400517 | AF242388  | Hs.149585 | lengsin                                  | 2.05 |
|    | 439943 | AW083789  | Hs.124620 | ESTs                                     | 2.05 |
|    | 421904 | BE143533  | Hs.109309 | hypothetical protein FLJ20035            | 2.05 |
| 55 | 417850 | AA215724  | Hs.82741  | primase, polypeptide 1 (49kD)            | 2.05 |
|    | 417491 | AW376842  | Hs.1085   | guanylate cyclase 2C (heat stable entero | 2.05 |
|    | 453775 | NM_002916 | Hs.35120  | replication factor C (activator 1) 4 (37 | 2.05 |
|    | 435525 | AI831297  | Hs.123310 | ESTs                                     | 2.05 |
|    | 412627 | BE391959  | Hs.74276  | chloride intracellular channel 1         | 2.05 |
| 60 | 439702 | AW085525  | Hs.134182 | ESTs                                     | 2.05 |
|    | 440005 | AK000517  | Hs.6844   | hypothetical protein FLJ20510            | 2.05 |
|    | 432979 | AA573263  | Hs.120860 | ESTs                                     | 2.05 |
|    | 417308 | H60720    | Hs.81892  | KIAA0101 gene product                    | 2.05 |
|    | 432925 | AA878324  | Hs.192734 | ESTs                                     | 2.05 |
| 65 | 446311 | AW007294  | Hs.149795 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 2.05 |
|    | 427871 | AW992405  | Hs.59622  | ESTs, Weakly similar to unknown [H.sapie | 2.05 |
|    | 453804 | AA300204  | Hs.35276  | KIAA0852 protein                         | 2.05 |
|    | 449939 | T86420    | Hs.272139 | ESTs                                     | 2.05 |
|    | 455666 | BE065813  |           | gb:RC2-BT0318-110100-012-a08 BT0318 Homo | 2.05 |
| 70 | 417819 | AI253112  | Hs.133540 | ESTs                                     | 2.04 |
|    | 427747 | AW411425  | Hs.180655 | serine/threonine kinase 12               | 2.04 |
|    | 415009 | C75253    | Hs.220950 | ESTs                                     | 2.04 |
|    | 437829 | AI358522  | Hs.270188 | ESTs                                     | 2.04 |
|    | 435381 | AW136397  | Hs.247572 | ESTs                                     | 2.04 |
| 75 | 439778 | AL109729  | Hs.18948  | ESTs, Highly similar to HPS1_HUMAN PROTE | 2.04 |
|    | 426753 | AW939252  | Hs.192927 | hypothetical protein FLJ20251            | 2.04 |
|    | 446475 | AI908188  | Hs.209245 | ESTs                                     | 2.04 |
|    | 431394 | AK000692  | Hs.252351 | HERV-H LTR-associating 2                 | 2.04 |
| 80 | 423701 | AA329856  | Hs.143022 | ESTs                                     | 2.04 |
|    | 430680 | AW138724  | Hs.168974 | ESTs, Highly similar to ALU7_HUMAN ALU S | 2.04 |
|    | 422369 | AF005216  | Hs.115541 | Janus kinase 2 (a protein tyrosine kinas | 2.04 |
|    | 432481 | AW451645  | Hs.151504 | Homo sapiens cDNA FLJ11973 fis, clone HE | 2.04 |
|    | 443746 | AW861379  | Hs.160602 | ESTs                                     | 2.04 |
|    | 400792 | AA635062  | Hs.50094  | Homo sapiens mRNA; cDNA DKFZp43400515 (f | 2.04 |

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| 5  | 432393 | AW205863  | Hs.133988 | ESTs, Weakly similar to I52825 gene MAC2 | 2.04 |
|    | 430785 | Z30201    |           | gb:HHEA22G Atrium cDNA library Human hea | 2.04 |
|    | 428343 | AL043021  | Hs.12705  | ESTs, Weakly similar to plakophilin 2b [ | 2.04 |
|    | 419329 | AY007220  | Hs.288998 | S100-type calcium binding protein A14    | 2.04 |
|    | 452488 | N74921    | Hs.184389 | ESTs                                     | 2.04 |
| 10 | 403485 |           |           |  | 2.04 |
|    | 413313 | NM_002047 | Hs.75280  | glycyl-tRNA synthetase                   | 2.04 |
|    | 407634 | AW016569  | Hs.301280 | ESTs, Highly similar to AF241831 1 intra | 2.04 |
|    | 433326 | AI379486  | Hs.159430 | ESTs                                     | 2.03 |
|    | 451129 | BE072881  |           | gb:RC2-BT0548-200300-012-e09 BT0548 Homo | 2.03 |
| 15 | 429165 | AW009886  | Hs.118258 | prostate cancer associated protein 1     | 2.03 |
|    | 422963 | M79141    | Hs.13234  | ESTs                                     | 2.03 |
|    | 418684 | U82987    | Hs.87246  | Bcl-2 binding component 3                | 2.03 |
|    | 407824 | AA147884  | Hs.9812   | ESTs                                     | 2.03 |
|    | 434551 | BE387162  | Hs.280858 | ESTs, Highly similar to XPB_HUMAN DNA-RE | 2.03 |
| 20 | 440246 | W52010    | Hs.191379 | ESTs                                     | 2.03 |
|    | 444006 | BE395085  | Hs.10086  | type I transmembrane protein Fn14        | 2.03 |
|    | 431301 | AA502384  | Hs.151529 | ESTs                                     | 2.03 |
|    | 452705 | H49805    | Hs.246005 | ESTs                                     | 2.03 |
|    | 421724 | AB037832  | Hs.107287 | KIAA1411 protein                         | 2.03 |
| 25 | 420637 | AW976153  |           | gb:EST388262 MAGE resequences, MAGN Homo | 2.03 |
|    | 450200 | AW975625  | Hs.173088 | ESTs                                     | 2.03 |
|    | 447474 | AW614220  | Hs.189402 | ESTs                                     | 2.03 |
|    | 418852 | BE537037  | Hs.273294 | hypothetical protein FLJ20069            | 2.03 |
|    | 445019 | AI205540  | Hs.281295 | ESTs                                     | 2.03 |
| 30 | 435202 | AI971313  | Hs.170204 | KIAA0551 protein                         | 2.03 |
|    | 431842 | NM_005764 | Hs.271473 | epithelial protein up-regulated in carci | 2.03 |
|    | 436198 | AK001125  | Hs.300922 | Homo sapiens cDNA FLJ10263 fis, clone HE | 2.03 |
|    | 440773 | AA352702  | Hs.37747  | hypothetical protein FLJ12484            | 2.03 |
|    | 443425 | AI056776  | Hs.133397 | ESTs                                     | 2.03 |
| 35 | 454166 | AW993356  | Hs.2055   | ubiquitin-activating enzyme E1 (A1S9T an | 2.03 |
|    | 407975 | X89426    | Hs.41716  | endothelial cell-specific molecule 1 (NO | 2.03 |
|    | 428299 | AL038004  | Hs.29419  | ESTs                                     | 2.03 |
|    | 418735 | N48769    | Hs.44609  | ESTs                                     | 2.03 |
|    | 442053 | R35343    | Hs.24968  | Human DNA sequence from clone RP1-233G16 | 2.03 |
| 40 | 415757 | AA830854  | Hs.187810 | ESTs                                     | 2.03 |
|    | 432559 | AW452948  | Hs.257631 | ESTs                                     | 2.03 |
|    | 425912 | AL137629  | Hs.162189 | serine/threonine kinase with Dbl- and pl | 2.02 |
|    | 419395 | BE268326  | Hs.90280  | 5-aminimidazole-4-carboxamide ribonucle  | 2.02 |
|    | 417576 | AA339449  | Hs.82285  | phosphoribosylglycinamide formyltransfer | 2.02 |
| 45 | 418559 | AA225048  | Hs.104207 | ESTs                                     | 2.02 |
|    | 410855 | X97795    | Hs.66718  | RAD54 (S.cerevisiae)-like                | 2.02 |
|    | 433906 | AI167816  | Hs.43355  | ESTs                                     | 2.02 |
|    | 422072 | AB018255  | Hs.111138 | KIAA0712 gene product                    | 2.02 |
|    | 419546 | AA244199  |           | gb:nc06c05.s1 NCL_CGAP_Pr1 Homo sapiens  | 2.02 |
| 50 | 446229 | AI744964  | Hs.14449  | KIAA1609 protein                         | 2.02 |
|    | 450516 | AA902656  | Hs.21943  | NIF3 (Ngg1 interacting factor 3, S.pombe | 2.02 |
|    | 431721 | AB032996  | Hs.268044 | KIAA1170 protein                         | 2.02 |
|    | 419807 | R77402    |           | gb:yi75f11.s1 Soares placenta Nb2HP Homo | 2.02 |
|    | 438192 | AI859065  | Hs.16808  | ESTs, Weakly similar to paraplegin-like  | 2.02 |
| 55 | 401866 |           |           |  | 2.02 |
|    | 443129 | R16075    | Hs.21668  | ESTs                                     | 2.02 |
|    | 426991 | AK001536  | Hs.285803 | Homo sapiens cDNA FLJ12852 fis, clone NT | 2.01 |
|    | 414731 | AI890434  | Hs.77135  | Homo sapiens mRNA; cDNA DKFZp586A191 (fr | 2.01 |
|    | 424783 | AA913909  | Hs.153088 | TATA box binding protein (TBP)-associate | 2.01 |
| 60 | 413293 | AL047483  | Hs.75270  | GTP-binding protein homologous to Saccha | 2.01 |
|    | 435787 | AW162767  | Hs.100914 | hypothetical protein FLJ10352            | 2.01 |
|    | 422599 | BE387202  | Hs.118638 | non-metastatic cells 1, protein (NM23A)  | 2.01 |
|    | 442660 | AW138174  | Hs.130651 | ESTs                                     | 2.01 |
|    | 456553 | AA721325  | Hs.189058 | ESTs, Weakly similar to cAMP-regulated g | 2.01 |
| 65 | 431630 | NM_002204 | Hs.265829 | integrin, alpha 3 (antigen CD49C, alpha  | 2.01 |
|    | 431300 | AA502346  |           | gb:ne26b03.s1 NCL_CGAP_Co3 Homo sapiens  | 2.01 |
|    | 443180 | R15875    | Hs.70945  | ESTs                                     | 2.01 |
|    | 450914 | AI743761  | Hs.142528 | ESTs                                     | 2.01 |
|    | 448275 | BE514434  | Hs.20830  | synaptic Ras GTPase activating protein 1 | 2.01 |
| 70 | 405484 |           |           |  | 2.01 |
|    | 436469 | AK001455  | Hs.5198   | Down syndrome critical region gene 2     | 2.01 |
|    | 451273 | NM_014811 | Hs.26163  | KIAA0649 gene product                    | 2.01 |
|    | 439696 | W95298    | Hs.171882 | ESTs                                     | 2.01 |
|    | 432378 | AI493046  | Hs.146133 | ESTs                                     | 2.01 |
| 75 | 417975 | AA641836  | Hs.30085  | Homo sapiens cDNA: FLJ23186 fis, clone L | 2.01 |
|    | 453665 | AA626250  | Hs.181165 | eukaryotic translation elongation factor | 2.01 |
|    | 419981 | AA897581  | Hs.126773 | ESTs                                     | 2.01 |
|    | 445808 | AV655234  | Hs.298083 | ESTs                                     | 2.01 |
|    | 435767 | H73505    | Hs.117874 | ESTs                                     | 2.01 |
| 80 | 430466 | AF052573  | Hs.241517 | polymerase (DNA directed), theta         | 2.01 |
|    | 452747 | BE153855  | Hs.61460  | ESTs                                     | 2.01 |
|    | 422790 | AA809875  | Hs.25933  | ESTs                                     | 2.01 |
|    | 443303 | U67319    | Hs.9216   | caspase 7, apoptosis-related cysteine pr | 2.01 |
|    | 433929 | AI375499  | Hs.27379  | ESTs                                     | 2.01 |
|    | 410008 | AA079552  |           | gb:zm20h12.s1 Stratagene pancreas (93720 | 2.01 |
|    | 448954 | AB014564  | Hs.22616  | KIAA0664 protein                         | 2.00 |
|    | 440774 | AI420611  | Hs.127832 | ESTs                                     | 2.00 |

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| 5  | 451351 | AW058261 | Hs.168213     | ESTs, Weakly similar to ALU1_HUMAN ALU S | 2.00 |
|    | 442961 | BE614474 | Hs.289074     | Homo sapiens cDNA FLJ13986 fls, clone Y7 | 2.00 |
|    | 424420 | BE614743 | Hs.146688     | prostaglandin E synthase                 | 2.00 |
|    | 407154 | H79677   | gb.yu76g10.s1 | Soares fetal liver spleen                | 2.00 |
|    | 410240 | AL157424 | Hs.61289      | synaptojanin 2                           | 2.00 |
| 10 | 426830 | AA385751 | Hs.160392     | ESTs                                     | 2.00 |
|    | 435014 | BE560898 | Hs.10026      | ribosomal protein L17 isolog             | 2.00 |
|    | 408620 | AI918693 | Hs.81848      | RAD21 (S. pombe) homolog                 | 2.00 |
|    | 432829 | W60377   | Hs.57772      | ESTs                                     | 2.00 |
|    | 406752 | AI285598 | Hs.217493     | annexin A2                               | 2.00 |

TABLE 40A:

|    |             |                                       |
|----|-------------|---------------------------------------|
| 15 | Pkey:       | Unique Eos probeset identifier number |
|    | CAT number: | Gene cluster number                   |
|    | Accession:  | Genbank accession numbers             |

|    |        |            |   |
|----|--------|------------|---|
| 20 | Pkey   | CAT number | Accession   |
|    | 408690 | 107490_1   | AW864542 AA056567 AW882724  |
|    | 409965 | 116301_1   | AA079229 AA079201 AA078874  |
|    | 410008 | 116812_1   | AA079552 BE142525 BE142527  |
|    | 410145 | 1178960_1  | AW886300 AW887902 AW887893 AW886291 AW592641  |
|    | 411765 | 125700_1   | H43346 AA248302 AA095182  |
| 25 | 416713 | 1610889_1  | T70174 H79244 T69850 H79151   |
|    | 418546 | 176677_1   | AA224827 T59708 T59843 BE156903   |
|    | 419546 | 185766_1   | AA244199 AA244272 H57440  |
|    | 419807 | 188252_1   | R77402 AA262462 AA250988 R06794   |
|    | 420637 | 195241_1   | AW976153 AA278945 AA747691  |
| 30 | 422058 | 210815_1   | AA862231 AA659033 AA302799 AA302798   |
|    | 422128 | 211994_1   | AW881145 AA490718 M85637 AA304575 T06067 AA331991   |
|    | 422689 | 219896_1   | AW856665 AA315006 AW954733  |
|    | 425499 | 252539_1   | T62489 T62634 AA828581 AA358569   |
| 35 | 430704 | 322217_1   | AW813091 AW206655 AA484440  |
|    | 430785 | 323486_1   | Z30201 AA486132 T72025  |
|    | 431120 | 328264_1   | AA492588 AA492498 AA492571  |
|    | 431300 | 331217_1   | AA502346 BE159863   |
|    | 431322 | 331543_1   | AW970622 AA503009 AA502998 AA502989 AA502805 T92188   |
| 40 | 432009 | 34025_1    | AL137424 BE007148 T52277  |
|    | 432093 | 341283_1   | H28383 AW972670 H28359 AA525808   |
|    | 433748 | 37385_1    | R12244 H71290 AI110858 AF090916 AF075357 AA011531   |
|    | 434414 | 38585_1    | AI798376 S46400 AW811617 AW811616 W00557 BE142245 AW858232 AW861851 AW858362 AA232351 AA218567 AA055556 AW858231          |
| 45 |        |            | AW857541 AW814172 H66214 AW814398 AF134164 AA243093 AA173345 AA199942 AA223384 AA227092 AA227080 T12379 AA092174 T61139   |
|    |        |            | AA149776 AA699829 AW879188 AW813567 AW813538 AI267168 AA157718 AA157719 AA100472 AA100774 AA130756 AA157705 AA157730      |
|    |        |            | AA157715 AA053524 AW849581 AW854566 C05254 AW882836 T92637 AW812621 AA206583 AA209204 BE156909 AA226824 AI829309 AW991957 |
|    |        |            | N66951 AA527374 H66215 AA045564 AI694265 H60808 AA149726 AW195620 BE081333 BE073424 AW817652 AW817705 AW817703 AW817659   |
|    |        |            | BE081531 H59570   |
| 50 | 437549 | 438403_1   | AA759149 AW751066 AW844938  |
|    | 438223 | 452646_1   | AA781171 AI202139 AI202098  |
|    | 438993 | 467651_1   | AA828995 AA834879 AI926361  |
|    | 439848 | 477806_1   | AW979249 D63277 AA846968  |
|    | 443597 | 574739_1   | AI078418 W80626 AW387769  |
|    | 446995 | 702707_1   | AI355012 AW812856   |
| 55 | 447197 | 711623_1   | R36075 AI366546 R36167  |
|    | 448437 | 763310_1   | AW470125 AI734872 AI749559 AW856504 AI583942 AW779036 AW843429 AW844876 AI520713 AW847236                                 |
|    | 450190 | 827655_1   | T51387 AW191595 T51271 AI686285   |
|    | 451105 | 859083_1   | AI761324 AW880941 AW880937  |
|    | 451129 | 859870_1   | BE072881 BE072946 AI762181  |
|    | 451237 | 863269_1   | AW500293 AI767468   |
| 60 | 455666 | 1349545_1  | BE065813 BE065788 BE065889 BE065832   |
|    | 455778 | 1364506_1  | BE088746 BE088802 BE088755 BE088876 BE088947 BE088881 BE088952  |
|    | 456157 | 158261_1   | AW979153 AA176957 AA826015  |

TABLE 40C:

|    |              |   |
|----|--------------|---|
| 65 | Pkey:        | Unique number corresponding to an Eos probeset  |
|    | Ref:         | Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <u>Nature</u> 402:489-495. |
|    | Strand:      | Indicates DNA strand from which exons were predicted.   |
| 70 | NI_position: | Indicates nucleotide positions of predicted exons.  |

|    |        |         |        |   |
|----|--------|---------|--------|---|
| 75 | Pkey   | Ref     | Strand | NI_position   |
|    | 400514 | 9796594 | Minus  | 78844-79025,80850-80991,89754-89941,93750-93891                       |
|    | 401519 | 6649315 | Plus   | 157315-157950   |
|    | 401708 | 2951946 | Plus   | 154511-155298   |
|    | 401866 | 8018106 | Plus   | 73126-73623   |
|    | 402075 | 8117407 | Plus   | 121907-122035,122804-122921,124019-124161,124455-124610,125672-126076 |
|    | 403055 | 8748904 | Minus  | 109532-110225   |
|    | 403208 | 7630829 | Minus  | 147706-147903,148667-148804   |
|    | 403422 | 9665041 | Minus  | 151169-151561   |
| 80 | 403485 | 9966528 | Plus   | 2888-3001,3198-3532,3655-4117   |
|    | 403776 | 7770611 | Minus  | 1414-1513,1624-1756   |
|    | 404171 | 9930793 | Plus   | 173667-173783,176876-177055   |
|    | 404253 | 9367202 | Minus  | 55675-56055   |

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|   |        |         |       |   |
|---|--------|---------|-------|---|
| 5 | 404519 | 8152000 | Plus  | 12817-13000                               |
|   | 404567 | 7249169 | Minus | 101320-101501                             |
|   | 405484 | 5922025 | Plus  | 199214-199579,199672-199920,200262-200495 |
|   | 405545 | 1054740 | Plus  | 118677-118807,119091-119296,121626-121823 |
|   | 405818 | 4071056 | Plus  | 29055-29196                               |
|   | 406399 | 9256288 | Minus | 63448-63554                               |

TABLE 41A: ABOUT 634 SEQUENCES UP-REGULATED IN STOMACH CANCER

Table 41A lists about 634 genes up-regulated in stomach cancer compared to normal adult tissues that are likely to be extracellular or cell-surface proteins. These were selected as for Table 40A and the predicted protein contained a structural domain that is indicative of extracellular localization (e.g. ig, fn3, egf, 7tm domains). Predicted protein domains are noted.

Pkey: Unique Eos probeset identifier number

ExAccn: Exemplar Accession number, Genbank accession number

UnigeneID: Unigene number

Unigene Title: Unigene gene title

PSDomain: Protein Structural Domain

R1: Ratio of tumor to normal adult tissues

|    |        |           |           |                 |   |       |
|----|--------|-----------|-----------|-----------------|---|-------|
| 20 | Pkey   | ExAccn    | UnigeneID | Unigene Title   | PSDomain  | R1    |
|    | 411243 | AB039886  | Hs.69319  | CA11            | SS  | 30.66 |
|    | 418007 | M13509    | Hs.83169  | matrix metallo  | hemopexin,Peptidase_M10,SS                        | 16.94 |
|    | 448811 | AI590371  | Hs.174759 | ESTs            | TM  | 11.08 |
| 25 | 409757 | NM_001898 | Hs.123114 | cystatin SN     | cystatin,SS                                       | 10.38 |
|    | 421110 | AJ250717  | Hs.1355   | cathepsin E     | asp,SS  | 9.11  |
|    | 428368 | BE440042  | Hs.83326  | matrix metallo  | hemopexin,Peptidase_M10,SS                        | 8.66  |
|    | 406687 | M31126    | Hs.272620 | pregnancy speci | hemopexin, TM,                                    | 7.11  |
|    | 428651 | AF196478  | Hs.188401 | annexin A10     | annexin, TM,                                      | 6.86  |
| 30 | 425211 | M18667    | Hs.1867   | progastricin (  | asp, TM, SS                                       | 6.51  |
|    | 423673 | BE003054  | Hs.1695   | matrix metallo  | hemopexin,Peptidase_M10,SS                        | 6.49  |
|    | 409683 | U33317    | Hs.711    | defensin, alpha | defensins,Defensin_propep,SS                      | 6.39  |
|    | 428664 | AK001666  | Hs.189095 | similar to SALL | zf-C2H2, TM, SS                                   | 6.25  |
|    | 408380 | AF123050  | Hs.44532  | diubiquitin     | ubiquitin, 7tm_3, ANF_receptor, sushi, 7tm_1, TM, | 5.72  |
| 35 | 428953 | AA306610  | Hs.194676 | DKFZP434C013 pr | art, TNFR_c6, DEAD, Stathmin, TM, SS              | 5.46  |
|    | 450685 | L15533    | Hs.423    | pancreatitis-as | lectin_c, TM, SS                                  | 5.40  |
|    | 409187 | AF154830  | Hs.50966  | carbamoyl-phosp | GATase, CPSase_L_chain, CPSase_sm_chain, MGS, TM, | 5.34  |
|    | 434206 | AW136973  | Hs.288516 | ESTs, Weakly si | PH, TM,   | 5.16  |
|    | 421346 | Z34277    | Hs.103707 | apomucin        | Cys_knot, vwd,                                    | 5.14  |
| 40 | 427585 | D31152    | Hs.179729 | collagen, type  | C1q, Collagen, TM, SS                             | 5.06  |
|    | 425679 | X05997    | Hs.159177 | lipase, gastric | abhydrolase, SS                                   | 4.94  |
|    | 421582 | AI910275  | Hs.1406   | trefoil factor  | trefoil, trypsin, TM, SS                          | 4.93  |
|    | 422956 | BE545072  | Hs.122579 | hypothetical pr | TM  | 4.89  |
|    | 448105 | AW591433  | Hs.170675 | ESTs, Weakly si | trypsin, TM,                                      | 4.84  |
| 45 | 413385 | M34455    | Hs.840    | indoleamine-pyr | IDO, TM,  | 4.72  |
|    | 417866 | AW067903  | Hs.82772  | collagen, type  | TSPN, Collagen, COLFI, SS                         | 4.68  |
|    | 419278 | AU076799  | Hs.1247   | apolipoprotein  | Apolipoprotein, SS                                | 4.48  |
|    | 407811 | AW190902  | Hs.40098  | cysteine knot s | SS  | 4.47  |
|    | 403422 |           |           |                 | SS  | 4.38  |
| 50 | 403776 |           |           |                 | IL8, TM, SS                                       | 4.32  |
|    | 418478 | U38945    | Hs.1174   | cyclin-dependen | ank, TM, SS                                       | 4.32  |
|    | 428242 | H55709    | Hs.2250   | leukemia inhibi | LIF_OSM, SS                                       | 4.30  |
|    | 421341 | AJ243212  | Hs.279611 | deleted in mali | SS  | 4.30  |
|    | 428434 | AW363590  | Hs.65551  | ESTs, Weakly si | SS  | 4.13  |
| 55 | 409420 | Z15008    | Hs.54451  | laminin, gamma  | laminin_EGF, laminin_B, SS                        | 4.04  |
|    | 431611 | U58766    | Hs.264428 | tissue specific | Epimerase, TM, SS                                 | 4.04  |
|    | 413719 | BE439580  | Hs.75498  | small inducible | IL8, SS   | 4.03  |
|    | 409956 | AW103364  | Hs.727    | inhibin, beta A | TGF-beta, TGFB_propeptide, SS                     | 4.01  |
|    | 422420 | U03398    | Hs.1524   | tumor necrosis  | TNF, TM,  | 4.00  |
| 60 | 428227 | AA321649  | Hs.2248   | small inducible | IL8, TM, SS                                       | 3.91  |
|    | 422168 | AA586894  | Hs.112408 | S100 calcium-bi | ethand, TM,                                       | 3.87  |
|    | 412140 | AA219691  | Hs.73625  | RAB6 interactin | kinesin, TM, SS                                   | 3.82  |
|    | 414812 | X72755    | Hs.77367  | monokine induce | IL8, SS   | 3.81  |
|    | 419833 | AA251131  | Hs.220697 | ESTs            | WHEP-TRS, TM,                                     | 3.81  |
| 65 | 446232 | AI281848  | Hs.165547 | ESTs            | 7tm_3, TM,  | 3.74  |
|    | 432398 | AA307808  | Hs.2979   | trefoil factor  | trefoil, TM, SS                                   | 3.70  |
|    | 432867 | AW016936  | Hs.233364 | ESTs            | GSHPx, TM, SS                                     | 3.66  |
|    | 424046 | AF027866  | Hs.138202 | serine (or cyst | serpin, TM,                                       | 3.65  |
|    | 414918 | AI219207  | Hs.72222  | Homo sapiens cD | TM  | 3.61  |
| 70 | 454293 | H49739    | Hs.134013 | ESTs, Moderatel | TM  | 3.59  |
|    | 442577 | AA292998  | Hs.163900 | ESTs            | TM  | 3.57  |
|    | 426174 | AA547959  | Hs.115838 | ESTs            | SS  | 3.53  |
|    | 418869 | AW516565  | Hs.258279 | ESTs            | Sema, TM,   | 3.48  |
|    | 418054 | NM_002318 | Hs.83354  | lysyl oxidase-I | Lysyl_oxidase, SRCR, SS                           | 3.45  |
| 75 | 442295 | AI827248  | Hs.224398 | Homo sapiens cD | Collagen, COLFI, vwc, TM, SS                      | 3.44  |
|    | 425921 | NM_007231 | Hs.162211 | solute carrier  | SNF, TM,  | 3.44  |
|    | 421948 | L42583    | Hs.111758 | keratin 6A      | filament, TM,                                     | 3.43  |
|    | 444783 | AK001468  | Hs.62180  | anillin (Drosop | PH, TM,   | 3.39  |
|    | 437527 | AI241019  | Hs.145644 | ESTs            | PIPSK, TM, SS                                     | 3.37  |
| 80 | 433084 | M18079    | Hs.282265 | fatty acid bind | lipocalin, SS                                     | 3.37  |
|    | 452401 | NM_007115 | Hs.29352  | tumor necrosis  | Xlink, CUB, TM, SS                                | 3.36  |
|    | 458897 | U85642    | Hs.138506 | ESTs            | TM  | 3.33  |
|    | 413808 | J00287    | Hs.182183 | caldesmon 1     | asp, TM, SS                                       | 3.33  |
|    | 411274 | NM_002776 | Hs.69423  | kallikrein 10   | trypsin, TM,                                      | 3.32  |

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|    |        |           |           |                   |   |      |
|----|--------|-----------|-----------|-------------------|---|------|
|    | 418406 | X73501    | Hs.84905  | cytokeratin 20    | filament,TM,                                | 3.32 |
|    | 419559 | Y07828    | Hs.91096  | ring finger pro   | zf-C3HC4,zf-B_box,TM,                       | 3.32 |
|    | 423217 | NM_000094 | Hs.1640   | collagen, type    | fn3,Collagen,Kunitz_BPT1,vwa,SS             | 3.31 |
| 5  | 411558 | AA102670  | Hs.70725  | gamma-aminobuty   | neur_chan,TM,SS                             | 3.30 |
|    | 427722 | AK000123  | Hs.180479 | hypothetical pr   | PH,SS                                       | 3.30 |
|    | 422310 | AA316622  | Hs.98370  | cytochrome P540   | p450,SS                                     | 3.30 |
|    | 411263 | BE297802  | Hs.69360  | kinesin-like 6    | kinesin,TM,                                 | 3.29 |
|    | 443426 | AF098158  | Hs.9329   | chromosome 20 o   | TM  | 3.28 |
| 10 | 452121 | NM_004081 | Hs.70936  | deleted in azoo   | TM  | 3.27 |
|    | 447342 | AI199268  | Hs.19322  | ESTs              | TM,SS                                       | 3.25 |
|    | 452699 | AW295390  | Hs.213062 | ESTs              | TM  | 3.23 |
|    | 425188 | AK002052  | Hs.155071 | hypothetical pr   | TM  | 3.23 |
|    | 400289 | X07820    | Hs.2258   | matrix metallopro | hemopexin,SS                                | 3.21 |
|    | 408524 | D87942    | Hs.46328  | fucosyltransfer   | Glyco_transf_11,TM,SS                       | 3.20 |
| 15 | 437897 | AA770561  | Hs.146170 | hypothetical pr   | TM  | 3.20 |
|    | 453922 | AF053306  | Hs.36708  | budding uninhib   | TM  | 3.19 |
|    | 406690 | M29540    | Hs.220529 | carcinoembryoni   | ig,TM,SS                                    | 3.19 |
|    | 416209 | AA236776  | Hs.79078  | MAD2 (mitotic a   | HORMA,SS                                    | 3.16 |
| 20 | 408113 | T82427    | Hs.194101 | Homo sapiens cD   | 7tm_3,TM,                                   | 3.14 |
|    | 425465 | L18964    | Hs.1904   | protein kinase    | Ski_Sno,DAG_PE-bind,OPR,pkise,pkise_C,TM,SS | 3.13 |
|    | 419216 | AU076718  | Hs.164021 | small inducible   | IL8,TM,SS                                   | 3.13 |
|    | 418203 | X54942    | Hs.83758  | CDC28 protein k   | CKS,TM,                                     | 3.12 |
|    | 417315 | AI080042  | Hs.180450 | ribosomal prote   | TM,SS                                       | 3.11 |
| 25 | 433001 | AF217513  | Hs.279905 | clone HQ0310 PR   | TM,SS                                       | 3.11 |
|    | 459587 | AA031956  |           | gb:zk15e04.s1 S   | UM,TM,                                      | 3.11 |
|    | 421379 | Y15221    | Hs.103982 | small inducible   | IL8,TM,SS                                   | 3.10 |
|    | 414774 | X02419    | Hs.77274  | plasminogen act   | kringle,trypsin,SS                          | 3.10 |
|    | 407289 | AA135159  | Hs.203349 | Homo sapiens cD   | TM  | 3.09 |
| 30 | 447519 | U46258    | Hs.23448  | ESTs              | histone,Ribosomal_L22e,TM,                  | 3.08 |
|    | 448045 | AJ297436  | Hs.20166  | prostate stem c   | TM,SS                                       | 3.07 |
|    | 431956 | AK002032  | Hs.272245 | Homo sapiens cD   | RA,SS                                       | 3.06 |
|    | 409632 | W74001    | Hs.55279  | serine (or cyst   | serpin,TM,                                  | 3.05 |
| 35 | 454034 | NM_000691 | Hs.575    | aldehyde dehydr   | aldedh,TM,                                  | 3.05 |
|    | 436481 | AA379597  | Hs.5199   | HSPC150 protein   | UO_con,TM,                                  | 3.05 |
|    | 428987 | NM_004751 | Hs.194710 | glucosaminyl (N   | Branch,TM,SS                                | 3.04 |
|    | 424252 | AK000520  | Hs.143811 | hypothetical pr   | casein_kappa,SS                             | 3.04 |
|    | 436291 | BE568452  | Hs.5101   | protein regulat   | TM  | 3.03 |
|    | 411789 | AF245505  | Hs.72157  | Homo sapiens ad   | ig,LRRCT,SS                                 | 3.02 |
| 40 | 417956 | AA210704  | Hs.190465 | ESTs              | sushi,SS                                    | 3.02 |
|    | 408908 | BE296227  | Hs.48915  | serine/threonin   | pkise,TM,SS                                 | 3.01 |
|    | 422330 | D30783    | Hs.115263 | epiregulin        | EGF,TM,SS                                   | 3.01 |
|    | 425071 | NM_013989 | Hs.154424 | deiodinase, iod   | T4_deiodise,TM,SS                           | 3.00 |
|    | 425761 | AW664214  | Hs.196729 | ESTs              | SH3,TM,                                     | 2.99 |
| 45 | 432978 | AF126743  | Hs.279884 | DNAJ domain-con   | DJ,TM,                                      | 2.99 |
|    | 418546 | AA224827  |           | gb:nc32g04.s1 N   | vwa,integrin_A,FG-GAP,TM,SS                 | 2.99 |
|    | 425371 | D49441    | Hs.155981 | mesothelin        | TM,SS                                       | 2.99 |
|    | 422440 | NM_004812 | Hs.116724 | aldo-keto reduc   | aldo_ket_red,TM,                            | 2.98 |
|    | 439453 | BE264974  | Hs.65666  | thyroid hormone   | AAA,TM,                                     | 2.98 |
| 50 | 413278 | BE563085  | Hs.833    | interferon-stim   | ubiquitin,TM,                               | 2.97 |
|    | 428450 | NM_014791 | Hs.184339 | KIAA0175 gene p   | pkise,KA1,TM,                               | 2.95 |
|    | 424345 | AK001380  | Hs.145479 | Homo sapiens cD   | TM,SS                                       | 2.95 |
|    | 433133 | AB027249  | Hs.104741 | PDZ-binding kin   | pkise,TM,                                   | 2.94 |
|    | 432269 | NM_002447 | Hs.2942   | macrophage stim   | pkise,Sema,Plexin_repeat,TIG,TM,SS          | 2.94 |
| 55 | 432917 | NM_014125 | Hs.279812 | PRO0327 protein   | TM  | 2.94 |
|    | 432731 | R31178    | Hs.287820 | fibronectin 1     | SS  | 2.93 |
|    | 420552 | AK000492  | Hs.98806  | hypothetical pr   | SS  | 2.92 |
|    | 428303 | AW974476  | Hs.183601 | regulator of G-   | RGS,TM,                                     | 2.92 |
|    | 409687 | T51125    | Hs.8493   | ESTs              | Ets,SAM_PNT,TM,                             | 2.91 |
| 60 | 457288 | AA521458  | Hs.192738 | ESTs              | TM  | 2.89 |
|    | 456181 | L36463    | Hs.1030   | ras inhibitor     | RA,VPS9,TM,SS                               | 2.89 |
|    | 450190 | T51387    |           | gb:yb20e08.r1 S   | SH3,TM,                                     | 2.88 |
|    | 430204 | AA618335  | Hs.146137 | ESTs, Weakly si   | TM  | 2.88 |
|    | 434808 | AF155108  | Hs.256150 | ESTs, Highly si   | TM  | 2.87 |
| 65 | 450983 | AA305384  | Hs.25740  | ERO1 (S. cerevi   | SS  | 2.87 |
|    | 418670 | AA601036  | Hs.285083 | ESTs              | TM  | 2.87 |
|    | 416661 | AA634543  | Hs.79440  | IGF-II mRNA-bin   | KH-domain,TM,                               | 2.87 |
|    | 435099 | AC004770  | Hs.4756   | flap structure-   | XPG_,XPG_N,TM,                              | 2.86 |
|    | 402075 |           |           |                   | serpin,TM,                                  | 2.84 |
| 70 | 410681 | AW246890  | Hs.65425  | calbindin 1, (2   | elhand,FHA,BRCT,adh_short,adh_short_C2,TM,  | 2.83 |
|    | 439867 | AA847510  | Hs.161292 | ESTs              | TM  | 2.83 |
|    | 443715 | AI583187  | Hs.9700   | cyclin E1         | cyclin,TM,SS                                | 2.83 |
|    | 417366 | BE185289  | Hs.1076   | small proline-r   | Corrinin,TM,                                | 2.83 |
|    | 422283 | AW411307  | Hs.114311 | CDC45 (cell div   | CDC45,TM,SS                                 | 2.82 |
| 75 | 404567 |           |           |                   | HECT,zf-UBR1,TM,                            | 2.82 |
|    | 422158 | L10343    | Hs.112341 | protease inhibi   | wap,SS                                      | 2.82 |
|    | 449224 | AW995911  | Hs.299883 | hypothetical pr   | fn3,TM,                                     | 2.81 |
|    | 407584 | W25945    | Hs.18745  | ESTs              | PK,SS                                       | 2.81 |
|    | 453884 | AA355925  | Hs.36232  | KIAA0186 gene p   | TM  | 2.81 |
| 80 | 449032 | AA045573  | Hs.22900  | nuclear factor    | bZIP,Chromo_shadow,TM,SS                    | 2.80 |
|    | 422809 | AK001379  | Hs.121028 | hypothetical pr   | IQ,TM,                                      | 2.79 |
|    | 449722 | BE280074  | Hs.23960  | cyclin B1         | cyclin,TM,                                  | 2.79 |
|    | 453028 | AB006532  | Hs.31442  | RecQ protein-li   | DEAD,helicase_C,TM,                         | 2.78 |
|    | 421777 | BE562088  | Hs.108196 | HSPC037 protein   | TM  | 2.78 |

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|    |        |           |           |                 |   |      |
|----|--------|-----------|-----------|-----------------|---|------|
|    | 452571 | W31518    | Hs.34665  | ESTs            | TM  | 2.77 |
|    | 422675 | BE018517  | Hs.119140 | eukaryotic tran | elF-5a,TM,                                | 2.77 |
|    | 400298 | AA032279  | Hs.61635  | six transmembra | TM  | 2.76 |
| 5  | 414569 | AF109298  | Hs.118258 | prostate cancer | TM  | 2.76 |
|    | 449378 | AW664026  | Hs.59892  | ESTs            | TM  | 2.75 |
|    | 423903 | MS7765    | Hs.1721   | interleukin 11  | TM,SS                                     | 2.75 |
|    | 431104 | AW970859  | Hs.269109 | ESTs            | Sema,TM,SS                                | 2.75 |
|    | 452940 | AA029722  | Hs.20279  | ESTs            | 7tm_1,TM,SS                               | 2.74 |
| 10 | 432201 | AI538613  | Hs.135657 | ESTs            | trypsin,TM,                               | 2.73 |
|    | 414617 | AI339520  | Hs.20524  | ESTs, Moderatel | hexokise,TM,                              | 2.73 |
|    | 444301 | AK000136  | Hs.10760  | hypothetical pr | LRR,TM,                                   | 2.72 |
|    | 426711 | AA383471  | Hs.180669 | conserved gene  | TM  | 2.71 |
|    | 429432 | AI678059  | Hs.202676 | synapionemal co | TM  | 2.71 |
| 15 | 450506 | NM_004460 | Hs.418    | fibroblast acti | Peptidase_S9,DPPIV_N_term,SS              | 2.71 |
|    | 427528 | AU077143  | Hs.179565 | minichromosome  | MCM,TM,SS                                 | 2.71 |
|    | 418801 | AA228366  | Hs.115122 | ESTs            | integrin_A,FG-GAP,TM,SS                   | 2.71 |
|    | 429486 | AF155827  | Hs.203963 | hypothetical pr | SNF2_N,helicase_C,TM,                     | 2.71 |
|    | 408365 | AW511255  | Hs.258082 | ESTs            | SS  | 2.70 |
| 20 | 406399 |           |           |                 | kazal,TM,SS                               | 2.69 |
|    | 446269 | AW263155  | Hs.14559  | hypothetical pr | TM  | 2.68 |
|    | 426514 | BE616633  | Hs.301122 | bone morphogene | TGF-beta,TGFb_propeptide,TM,SS            | 2.67 |
|    | 417079 | U65590    | Hs.81134  | interleukin 1 r | IL1,SS                                    | 2.67 |
|    | 444754 | T83911    | Hs.11881  | transmembrane 4 | TM,SS                                     | 2.67 |
| 25 | 424687 | J05070    | Hs.151738 | matrix metallop | fn2,hemopexin,Peptidase_M10,SS            | 2.66 |
|    | 439979 | AW600291  | Hs.6823   | hypothetical pr | TM  | 2.65 |
|    | 430832 | AI073913  | Hs.100686 | ESTs, Weakly si | TM,SS                                     | 2.65 |
|    | 429170 | NM_001394 | Hs.2359   | dual specificit | DSPc,Rhodanese,TM,                        | 2.64 |
|    | 450400 | AI694722  | Hs.279744 | ESTs            | TM  | 2.64 |
| 30 | 435380 | AA679001  | Hs.192221 | ESTs            | Occludin,TM,SS                            | 2.64 |
|    | 432375 | BE536069  | Hs.2962   | S100 calcium-bi | S_100,efhand,TM,SS                        | 2.63 |
|    | 453700 | AB009426  | Hs.560    | apolipoprotein  | dCMP_cyt_deam,sugar_lr,TM,SS              | 2.63 |
|    | 422938 | NM_001809 | Hs.1594   | centromere prot | histone,TM,                               | 2.63 |
|    | 453134 | AA032211  | Hs.118493 | ESTs            | adh_short,TM,SS                           | 2.63 |
| 35 | 420727 | H75701    | Hs.99886  | complement comp | sushi,                                    | 2.62 |
|    | 408868 | AW292286  | Hs.255058 | ESTs            | TM  | 2.62 |
|    | 414972 | BE263782  | Hs.77695  | KIAA0008 gene p | TM  | 2.62 |
|    | 403055 |           |           |                 | filament,TM,SS                            | 2.62 |
| 40 | 447400 | AK000322  | Hs.18457  | hypothetical pr | zf-C3HC4,TM,                              | 2.61 |
|    | 413753 | U17760    | Hs.301103 | Human DNA seque | laminin_EGF,laminin_Nterm,SS              | 2.61 |
|    | 433220 | AI076192  | Hs.131933 | ESTs            | TM  | 2.60 |
|    | 436251 | BE515065  | Hs.5092   | nucleolar prote | Nop,TM,SS                                 | 2.60 |
|    | 448988 | Y09763    | Hs.22785  | gamma-aminobuty | neur_chan,TM,SS                           | 2.60 |
|    | 425463 | AK000740  | Hs.157986 | hypothetical pr | TM  | 2.60 |
| 45 | 435370 | AI964074  | Hs.225838 | ESTs            | EGF,fn3,fibrinogen_C,TM,SS                | 2.59 |
|    | 432215 | AU076609  | Hs.2934   | ribonucleotide  | ribonucleo_red,ribonuc_red_lg,TM,         | 2.59 |
|    | 409142 | AL136877  | Hs.50758  | chromosome-asso | SMC_N,TM,SS                               | 2.59 |
|    | 443919 | AI091284  | Hs.135224 | ESTs            | adh_short,TM,SS                           | 2.58 |
|    | 413268 | AL039079  | Hs.75256  | regulator of G- | RGS,TM,                                   | 2.58 |
| 50 | 404519 |           |           |                 | defensins,SS                              | 2.58 |
|    | 414998 | NM_002543 | Hs.77729  | oxidised low de | TM  | 2.57 |
|    | 429597 | NM_003816 | Hs.2442   | a disintegrin a | TM,SS                                     | 2.57 |
|    | 426841 | AI052358  | Hs.193726 | ESTs            | asp,TM,SS                                 | 2.57 |
| 55 | 416768 | AA363733  | Hs.1032   | regenerating is | lectin_c,SS                               | 2.57 |
|    | 417933 | X02308    | Hs.82962  | thymidylate syn | thymidylat_synt,SS                        | 2.56 |
|    | 441384 | AA447849  | Hs.288660 | protease, serin | TM  | 2.56 |
|    | 451939 | U80456    | Hs.27311  | single-Drosophi | PAC,PAS,BPL,BPL_C,TM,                     | 2.56 |
|    | 418867 | D31771    | Hs.89404  | msh (Miosophila | homeobox,TM,                              | 2.55 |
|    | 416065 | BE267931  | Hs.78996  | proliferating c | TM  | 2.55 |
| 60 | 431890 | X17033    | Hs.271986 | integrin, alpha | vwa,integrin_A,FG-GAP,TM,SS               | 2.55 |
|    | 407830 | NM_001086 | Hs.587    | arylacetamide d | COesterase,7tm_1,TM,SS                    | 2.55 |
|    | 434815 | AF155582  | Hs.46744  | core1 UDP-galac | SS  | 2.54 |
|    | 435647 | AI653240  | Hs.49823  | ESTs            | TM  | 2.54 |
|    | 459306 | AW578452  | Hs.232988 | ESTs, Weakly si | TM,SS                                     | 2.54 |
| 65 | 414361 | AI086138  | Hs.204044 | ESTs            | TM  | 2.54 |
|    | 425782 | U66468    | Hs.159525 | cell growth reg | SS  | 2.53 |
|    | 416984 | H38765    | Hs.80706  | diaphorase (NAD | TM  | 2.53 |
|    | 431183 | NM_006855 | Hs.250696 | KDEL (Lys-Asp-G | ER_lumen_recept,IRK,DEAD,helicase_C,TM,SS | 2.53 |
|    | 456743 | AI630124  | Hs.7434   | ESTs            | TM  | 2.53 |
| 70 | 410268 | AA316181  | Hs.61635  | six transmembra | TM  | 2.52 |
|    | 424905 | NM_002497 | Hs.153704 | NIMA (never in  | pkise,TM,                                 | 2.52 |
|    | 432657 | AA831815  | Hs.270940 | ESTs            | TM  | 2.51 |
|    | 434080 | AI820719  | Hs.154662 | hypothetical pr | DJ_CXXCXGXG,TM,SS                         | 2.51 |
|    | 418969 | W33191    | Hs.28907  | hypothetical pr | SH3,TM,                                   | 2.51 |
| 75 | 431808 | M30703    | Hs.270833 | amphiregulin (s | EGF,TM,SS                                 | 2.51 |
|    | 429093 | NM_000253 | Hs.195799 | microsomal trig | Vitellogenin_N,TM,SS                      | 2.50 |
|    | 447634 | AW967902  | Hs.5152   | Homo sapiens cD | TM  | 2.50 |
|    | 436393 | AW022213  | Hs.143617 | ESTs            | Galactosyl_T_2,TM,SS                      | 2.50 |
|    | 453751 | R36762    | Hs.101282 | Homo sapiens mR | TM  | 2.49 |
| 80 | 445865 | AI262584  | Hs.145675 | ESTs            | SS  | 2.49 |
|    | 414883 | AA926960  | Hs.77560  | CDC28 protein k | CKS,TM,                                   | 2.49 |
|    | 406747 | AI925153  | Hs.217493 | annexin A2      | TM  | 2.49 |
|    | 446921 | AB012113  | Hs.16530  | small inducible | IL8,SS                                    | 2.49 |
|    | 426322 | J05068    | Hs.2012   | transcobalamin  | Cobalamin_bind,TM,SS                      | 2.48 |



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| 5  | 422515 | AW500470  | Hs.117950 | multifunctional | AIRC,SAICAR_synt,TM,            | 2.48 |
|    | 447030 | AW444659  | Hs.232184 | ESTs            | TM                              | 2.48 |
|    | 448454 | NM_005879 | Hs.21254  | TRAF interactin | zf-C3HC4,TM,                    | 2.48 |
|    | 419092 | J05581    | Hs.89603  | mucin 1, transm | SEA,TM,SS                       | 2.48 |
|    | 409640 | U78722    | Hs.55481  | zinc finger pro | zf-C2H2,SCAN,TM,                | 2.48 |
| 10 | 404171 |           |           |                 | sodfe,TM,                       | 2.47 |
|    | 414747 | U30872    | Hs.77204  | centromere prot | SS                              | 2.47 |
|    | 410406 | AI969703  | Hs.301842 | ESTs            | FGGY,TM,                        | 2.47 |
|    | 452220 | BE158006  | Hs.212296 | ESTs            | FG-GAP,TM,SS                    | 2.46 |
|    | 421493 | BE300341  | Hs.104925 | ectodermal-neur | BTB,Kelch,TM,                   | 2.46 |
| 15 | 444838 | AV651680  | Hs.208558 | ESTs            | integrin_A,FG-GAP,TM,SS         | 2.46 |
|    | 413816 | AW958181  | Hs.189998 | ESTs            | AMP-binding,G_glu_transsept,TM, | 2.46 |
|    | 436613 | AA972691  | Hs.192974 | Homo sapiens cD | TM,SS                           | 2.45 |
|    | 432874 | W94322    | Hs.279651 | melanoma inhibi | SH3,SS                          | 2.45 |
|    | 425397 | J04088    | Hs.156346 | topoisomerase ( | HATPase_c,SS                    | 2.45 |
| 20 | 422363 | T55979    | Hs.115474 | replication fac | TM                              | 2.45 |
|    | 431924 | AK000850  | Hs.272203 | Homo sapiens cD | SH3,TM,                         | 2.44 |
|    | 431457 | NM_012211 | Hs.256297 | integrin, alpha | FG-GAP,vwa,TM,SS                | 2.44 |
|    | 416498 | U33632    | Hs.79351  | potassium chann | TM                              | 2.44 |
|    | 428484 | AF104032  | Hs.184601 | solute carrier  | aa_permeases,TM,                | 2.43 |
| 25 | 431958 | X63629    | Hs.2877   | cadherin 3, typ | cadherin,Cadherin_C_term,TM,SS  | 2.43 |
|    | 413833 | Z15005    | Hs.75573  | centromere prot | kinesin,TM,                     | 2.43 |
|    | 407243 | AA058357  | Hs.74466  | carcinoembryoni | TM,SS                           | 2.43 |
|    | 410044 | BE566742  | Hs.58169  | highly expresse | TM,SS                           | 2.43 |
|    | 424273 | W40460    | Hs.144442 | phospholipase A | phoslip,TM,SS                   | 2.42 |
| 30 | 409533 | AW969543  | Hs.21291  | mitogen-activat | TM,SS                           | 2.42 |
|    | 419741 | NM_007019 | Hs.93002  | ubiquitin can   | UQ_con,efhand,TM,SS             | 2.42 |
|    | 449987 | AW079749  | Hs.184719 | ESTs, Weakly si | ABC_tran,ABC_membrane,TM,       | 2.42 |
|    | 433159 | AB035898  | Hs.150587 | kinesin-like pr | kinesin,Myosin_tail,TM,SS       | 2.42 |
|    | 439396 | BE562958  | Hs.74346  | ESTs, Weakly si | SS                              | 2.42 |
| 35 | 426427 | M86699    | Hs.169840 | TTK protein kin | pkise,TM,                       | 2.41 |
|    | 434725 | AK000796  | Hs.4104   | hypothetical pr | TM                              | 2.41 |
|    | 433312 | AI241331  | Hs.131765 | ESTs            | zf-C2H2,SS                      | 2.41 |
|    | 407047 | X65965    |           | gb:H.sapiens SO | sodfe,TM,                       | 2.41 |
|    | 419220 | AA811938  | Hs.291759 | ESTs            | TM,SS                           | 2.40 |
| 40 | 416530 | U62801    | Hs.79361  | kallikrein 6 (n | trypsin_pro_isomerase,TM,SS     | 2.40 |
|    | 435219 | AA676349  | Hs.190331 | ESTs            | TM                              | 2.40 |
|    | 418322 | AA284166  | Hs.84113  | cyclin-dependen | SS                              | 2.40 |
|    | 404253 |           |           |                 | histone,TM,SS                   | 2.40 |
|    | 428970 | BE276891  | Hs.194691 | retinoic acid i | 7tm_3,TM,                       | 2.40 |
| 45 | 418693 | AI750878  | Hs.87409  | thrombospondin  | EGF,TSPN,tsp_1,tsp_3,vwc,SS     | 2.39 |
|    | 451237 | AW600293  |           | gb:EST00049 pGE | TM                              | 2.39 |
|    | 407756 | AA116021  | Hs.38260  | ubiquitin speci | UCH-1,UCH-2,SS                  | 2.39 |
|    | 437935 | AW939591  | Hs.5940   | hypothetical pr | TM,SS                           | 2.39 |
|    | 445625 | BE246743  | Hs.288529 | Homo sapiens cD | TM                              | 2.39 |
| 50 | 435937 | AA830893  | Hs.119769 | ESTs            | TM                              | 2.39 |
|    | 438993 | AA828995  |           | gb:od77b08.s1 N | integrin_B,TM,SS                | 2.38 |
|    | 422082 | AA016188  | Hs.111244 | hypothetical pr | TM                              | 2.38 |
|    | 450396 | AU077002  | Hs.24950  | regulator of G- | RGS,TM,                         | 2.38 |
|    | 422578 | AF239666  | Hs.1545   | caudal type hom | homeobox,SS                     | 2.38 |
| 55 | 428070 | T63918    | Hs.182313 | retinol-binding | lipocalin,TM,                   | 2.38 |
|    | 416111 | AA033813  | Hs.79018  | chromatin assem | TM,SS                           | 2.37 |
|    | 433345 | AI681545  | Hs.152982 | Homo sapiens cD | TM                              | 2.37 |
|    | 427557 | NM_002659 | Hs.179657 | plasminogen act | UPAR_LY6,SS                     | 2.37 |
|    | 423554 | M90516    | Hs.1674   | glutamine-fruct | GATase_2,SIS,TM,SS              | 2.37 |
| 60 | 453204 | R10799    | Hs.191990 | ESTs            | TM                              | 2.37 |
|    | 425081 | X74794    | Hs.154443 | minichromosome  | MCM,TM,                         | 2.36 |
|    | 434682 | AA827165  | Hs.191958 | ESTs            | TM                              | 2.36 |
|    | 414108 | AI267592  | Hs.75761  | SFRS protein ki | pkise,TM,                       | 2.36 |
|    | 417900 | BE250127  | Hs.82906  | CDC20 (cell div | WD40,TM,                        | 2.36 |
| 65 | 428046 | AW812795  | Hs.155381 | ESTs, Moderatel | ank,SS                          | 2.36 |
|    | 448019 | AW947164  | Hs.195641 | ESTs            | TM                              | 2.36 |
|    | 431753 | X76029    | Hs.2841   | neuromedin U    | NMU,TM,SS                       | 2.36 |
|    | 410361 | BE391804  | Hs.62661  | guanylate bindi | GBP,TM,SS                       | 2.36 |
|    | 418526 | BE019020  | Hs.85838  | solute carrier  | MCT,TM,SS                       | 2.36 |
| 70 | 444478 | W07318    | Hs.240    | M-phase phospho | kinesin,SS                      | 2.36 |
|    | 436961 | AW375974  | Hs.156704 | ESTs            | TM                              | 2.35 |
|    | 408194 | AA601038  | Hs.191797 | ESTs            | TM                              | 2.35 |
|    | 438578 | AA811244  | Hs.164168 | ESTs            | formyl_transf,AIRS,GARS,TM,     | 2.35 |
|    | 429183 | AB014604  | Hs.197955 | KIAA0704 protei | TM                              | 2.35 |
| 75 | 453900 | AW003582  | Hs.226414 | ESTs, Weakly si | TM                              | 2.33 |
|    | 432877 | AW974111  | Hs.292477 | ESTs            | Ets,SAM_PNT,TM,                 | 2.33 |
|    | 451928 | AI823801  | Hs.30315  | ESTs            | TM                              | 2.33 |
|    | 418245 | AA088767  | Hs.83883  | transmembrane,  | Idl_recept_a,TM,SS              | 2.33 |
|    | 435106 | AA100847  | Hs.193380 | ESTs, Highly si | TM                              | 2.33 |
| 80 | 432193 | AA372264  | Hs.273193 | hypothetical pr | TM,SS                           | 2.33 |
|    | 449532 | W74653    | Hs.271593 | ESTs            | TM                              | 2.33 |
|    | 409703 | NM_006187 | Hs.56009  | 2'-5'oligoadeny | NTP_transf_2,TM,SS              | 2.33 |
|    | 419373 | NM_003244 | Hs.90077  | TC-interacting  | homeobox,SS                     | 2.32 |
|    | 435607 | W73428    | Hs.8750   | uncharacterized | SS                              | 2.32 |
|    | 405818 |           |           |                 | TM,SS                           | 2.32 |
|    | 444371 | BE540274  | Hs.239    | forkhead box M1 | Fork_head,SS                    | 2.32 |
|    | 432675 | AI791855  | Hs.105884 | ESTs            | PDEase,TM,                      | 2.32 |

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| 5  | 411773 | NM_006799 | Hs.72026  | protease, serin  | trypsin,SS   | 2.31 |
|    | 434775 | AA648983  | Hs.212911 | ESTs             | TM,SS  | 2.31 |
|    | 422611 | AA158177  | Hs.118722 | fucosyltransfer  | SS   | 2.31 |
|    | 419493 | AF001212  | Hs.90744  | proteasome (pro  | SS   | 2.31 |
|    | 424435 | AB011167  | Hs.146957 | KIAA0595 protei  | TM   | 2.30 |
| 10 | 409262 | AK000631  | Hs.52256  | hypothetical pr  | WD40,TM,SS   | 2.30 |
|    | 428125 | AA393071  | Hs.182579 | leucine aminope  | Peptidase_M17,TM,SS                                | 2.30 |
|    | 417655 | AA780791  | Hs.14014  | ESTs, Weakly si  | TM   | 2.29 |
|    | 407287 | AI678812  | Hs.201658 | ESTs, Weakly si  | ras,TM,SS  | 2.29 |
|    | 428923 | BE047698  | Hs.188785 | ESTs             | TM,SS  | 2.29 |
| 15 | 452203 | X57522    | Hs.158164 | ATP-binding cas  | ABC_tran,ABC_membrane,TM,                          | 2.29 |
|    | 409402 | AF208234  | Hs.695    | cystatin B (ste  | cystatin,SS  | 2.29 |
|    | 419359 | AL043202  | Hs.90073  | chromosome segr  | TM,SS  | 2.29 |
|    | 451999 | AW176401  | Hs.27424  | DEAD/H (Asp-Glu  | TM,SS  | 2.29 |
|    | 400811 | AF219139  | Hs.87726  | KIAA0154 protei  | Cobalamin_bind,SS                                  | 2.29 |
| 20 | 420931 | AF044197  | Hs.100431 | small inducible  | IL8,TM,SS  | 2.28 |
|    | 425247 | NM_005940 | Hs.155324 | matrix metallo   | hemopexin,Peptidase_M10,TM,SS                      | 2.28 |
|    | 438170 | AI916685  | Hs.194601 | ESTs             | 2-Hacid_DH,TM,                                     | 2.28 |
|    | 445378 | AV653564  | Hs.226946 | ESTs             | TM   | 2.28 |
|    | 428048 | AA705745  | Hs.185070 | ESTs             | AMP-binding,TM,                                    | 2.28 |
| 25 | 414696 | AF002020  | Hs.76918  | Niemann-Pick di  | Patched,TM,SS                                      | 2.27 |
|    | 433535 | AF111106  | Hs.3382   | protein phospho  | TM   | 2.27 |
|    | 421155 | H87879    | Hs.102267 | lysyl oxidase    | Lysyl_oxidase,SS                                   | 2.27 |
|    | 405545 |           |           |                  | ABC_tran,ABC_membrane,TM,SS                        | 2.27 |
|    | 445537 | AJ245671  | Hs.12844  | EGF-like-domain  | EGF,SS   | 2.27 |
| 30 | 423634 | AW959908  | Hs.1690   | heparin-binding  | TM,SS  | 2.26 |
|    | 407742 | AF186252  | Hs.38084  | sulfotransferase | Sulfotransfer,SS                                   | 2.26 |
|    | 428330 | L22524    | Hs.2256   | matrix metallo   | Peptidase_M10,SS                                   | 2.26 |
|    | 429731 | AK001592  | Hs.212172 | beta,beta-carot  | TM   | 2.26 |
|    | 400514 |           |           |                  | p450,TM,SS   | 2.26 |
| 35 | 431846 | BE019924  | Hs.271580 | uroplakin 1B     | transmembrane4,TM,SS                               | 2.26 |
|    | 426010 | AA136563  | Hs.1975   | Homo sapiens cD  | TM   | 2.26 |
|    | 437641 | AA811452  | Hs.291911 | ESTs             | TM   | 2.26 |
|    | 411393 | AW797437  | Hs.69771  | B-factor, prope  | sushi,trypsin,vwa,DEAD,rmn,EGF,fn3,fibrinogen_C,SS | 2.26 |
|    | 414809 | AI434699  | Hs.77356  | transferrin rec  | PA,Ribosomal_S2,TM,                                | 2.25 |
| 40 | 419488 | AA316241  | Hs.90691  | nucleophosmin/n  | SS   | 2.25 |
|    | 434540 | NM_016045 | Hs.5184   | TH1 drosophila   | TM   | 2.25 |
|    | 410196 | AI936442  | Hs.59838  | hypothetical pr  | UBACT_repeat,TM,                                   | 2.25 |
|    | 456844 | AI264155  | Hs.152981 | CDP-diacylglyce  | Cytidylyltrans,TM,                                 | 2.25 |
|    | 408353 | BE439838  | Hs.44298  | hypothetical pr  | Ribosomal_S17,TM,                                  | 2.25 |
| 45 | 448753 | AL048858  | Hs.224355 | ESTs, Weakly si  | TM   | 2.25 |
|    | 426479 | Y00272    | Hs.184572 | cell division c  | pkise,TM,SS  | 2.24 |
|    | 424971 | AA479005  | Hs.154036 | tumor suppressi  | ion_trans,PH,TM,                                   | 2.24 |
|    | 432673 | AB028859  | Hs.278605 | ER-associated D  | DJ,DJ_C,TM,SS                                      | 2.24 |
|    | 409432 | D49372    | Hs.54460  | small inducible  | IL8,TM,SS  | 2.24 |
| 50 | 429925 | NM_000786 | Hs.226213 | cytochrome P450  | p450,TM,SS   | 2.24 |
|    | 445413 | AA151342  | Hs.12677  | CGI-147 protein  | UPF0099,TM,SS                                      | 2.23 |
|    | 447532 | AK000614  | Hs.18791  | hypothetical pr  | TM   | 2.23 |
|    | 423515 | AA327017  | Hs.162204 | ESTs             | SS   | 2.23 |
|    | 444743 | AA045648  | Hs.11817  | nudix (nucleosi  | mutT,TM,   | 2.23 |
| 55 | 434518 | H56995    | Hs.37372  | Homo sapiens DN  | TM   | 2.23 |
|    | 435602 | AF217515  | Hs.283532 | uncharacterized  | TM,SS  | 2.23 |
|    | 449974 | AW970948  | Hs.269403 | ESTs             | TM,SS  | 2.23 |
|    | 424927 | AW973666  | Hs.153850 | hypothetical pr  | TM   | 2.23 |
|    | 414420 | AA043424  | Hs.75095  | immediate early  | TM   | 2.23 |
| 60 | 431840 | AA534908  | Hs.2860   | POU domain, cla  | homeobox,pou,TM,SS                                 | 2.23 |
|    | 452930 | AW195285  | Hs.194097 | ESTs             | SS   | 2.23 |
|    | 436391 | AJ227892  | Hs.146274 | ESTs             | SS   | 2.23 |
|    | 439186 | AI697274  | Hs.6487   | Xq28, 2000bp se  | Epimerase,SS                                       | 2.23 |
|    | 414732 | AW410976  | Hs.77152  | minichromosome   | MCM,TM,  | 2.22 |
| 65 | 411835 | U29343    | Hs.72550  | hyaluronan-medi  | TM   | 2.22 |
|    | 438223 | AA781171  |           | gb:aj24d05.s1 S  | myosin_head,TM,                                    | 2.22 |
|    | 450149 | AW969781  | Hs.293440 | ESTs, Moderate   | TM   | 2.22 |
|    | 401519 |           |           |                  | filament,TM,                                       | 2.22 |
|    | 441794 | AW197794  | Hs.253338 | ESTs             | ank,TM,  | 2.22 |
| 70 | 408901 | AK001330  | Hs.48855  | hypothetical pr  | TM   | 2.21 |
|    | 434423 | NM_006769 | Hs.3844   | LIM domain only  | LIM,TM,  | 2.21 |
|    | 432140 | AK000404  | Hs.272688 | hypothetical pr  | SS   | 2.21 |
|    | 423453 | AW450737  | Hs.128791 | CGI-09 protein   | Granin,CDP-OH_P_transf,TM,                         | 2.21 |
|    | 428438 | NM_001955 | Hs.2271   | endothelin 1     | endothelin,TM,SS                                   | 2.21 |
| 75 | 421470 | R27496    | Hs.1378   | annexin A3       | annexin,TM,SS                                      | 2.21 |
|    | 440381 | AA917808  | Hs.190495 | ESTs             | TM,SS  | 2.20 |
|    | 453779 | N35187    | Hs.43388  | ESTs             | TM,SS  | 2.20 |
|    | 433627 | AF078866  | Hs.264296 | Homo sapiens cD  | SURF4,TM,  | 2.20 |
|    | 417944 | AU077196  | Hs.82985  | collagen, type   | COLF1,Collagen,vwc,TM,SS                           | 2.20 |
| 80 | 422689 | AW856665  |           | gb:RC3-CT0297-2  | SNF2_N,TM,   | 2.20 |
|    | 448457 | H65629    | Hs.245997 | ESTs             | TM,SS  | 2.20 |
|    | 426125 | X87241    | Hs.166994 | FAT tumor suppr  | EGF,cadherin,laminin_G,TM,SS                       | 2.20 |
|    | 430603 | AA148164  | Hs.247280 | HBV associated   | zf_C3HC4,TM,                                       | 2.20 |
|    | 425274 | BE281191  | Hs.155462 | minichromosome   | MCM,TM,  | 2.20 |
|    | 452679 | Z42387    | Hs.4299   | Homo sapiens cD  | TM   | 2.20 |
|    | 410619 | BE512730  | Hs.65114  | keratin 18       | filament,TM,                                       | 2.20 |
|    | 424332 | AA338919  | Hs.101615 | ESTs             | SS   | 2.20 |

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|    |        |           |           |                 |   |      |
|----|--------|-----------|-----------|-----------------|---|------|
|    | 418661 | NM_001949 | Hs.1189   | Human mRNA for  | E2F_TDP,TM,SS                               | 2.20 |
|    | 419341 | N71463    | Hs.118888 | ESTs, Weakly si | UPF0016,TM,SS                               | 2.20 |
|    | 427920 | Z11502    | Hs.181107 | annexin A13     | annexin,TM,                                 | 2.19 |
|    | 403208 |           |           |                 | lectin_c,TM,SS                              | 2.19 |
| 5  | 422596 | AF063611  | Hs.118633 | Z'-5'oligoadeny | ubiquitin,SS                                | 2.19 |
|    | 444261 | AA298958  | Hs.10724  | MDS023 protein  | TM  | 2.19 |
|    | 423401 | NM_001992 | Hs.128087 | coagulation fac | 7tm_1,TM,SS                                 | 2.18 |
|    | 453450 | AW797627  | Hs.89474  | ADP-ribosylatio | SS  | 2.18 |
| 10 | 444334 | BE296785  | Hs.10848  | KIAA0187 gene p | SS  | 2.18 |
|    | 437616 | AI797163  | Hs.207954 | ESTs            | SMC_N,TM,SS                                 | 2.18 |
|    | 451807 | W52854    | Hs.27099  | DKFZP564J0863 p | TM  | 2.18 |
|    | 430441 | BE398091  | Hs.6880   | DKFZP434D156 pr | TM  | 2.18 |
|    | 411678 | AI907114  | Hs.71465  | squalene epoxid | Monooxygese,TM,                             | 2.18 |
| 15 | 452291 | AF015592  | Hs.28853  | CDC7 (cell divi | pkise,TM,                                   | 2.18 |
|    | 444342 | NM_014398 | Hs.10887  | similar to lyso | Lamp,TM,SS                                  | 2.18 |
|    | 451099 | R52795    | Hs.25954  | interleukin 13  | fn3,TM,SS                                   | 2.18 |
|    | 425873 | NM_013390 | Hs.160417 | transmembrane p | TM  | 2.17 |
|    | 417404 | NM_007350 | Hs.82101  | pleckstrin homo | TM  | 2.17 |
| 20 | 446995 | AI355012  |           | gb:qu16d10.x1 N | TM  | 2.17 |
|    | 439961 | AA857451  | Hs.269696 | ESTs            | TM  | 2.17 |
|    | 429125 | AA446854  | Hs.271004 | ESTs            | TM  | 2.17 |
|    | 407103 | AA424881  | Hs.256301 | ESTs            | TM  | 2.17 |
|    | 415116 | AA160363  | Hs.269956 | ESTs            | ER_lumen_recept,TM,SS                       | 2.17 |
| 25 | 440052 | AI633744  | Hs.195648 | ESTs            | PAC,TM,SS                                   | 2.17 |
|    | 423961 | D13656    | Hs.136348 | osteoblast spec | Fasciclin,TM,SS                             | 2.17 |
|    | 431070 | AW408164  | Hs.249184 | transcription f | FHA,SS                                      | 2.16 |
|    | 443599 | AI079559  | Hs.134125 | ESTs            | TM  | 2.16 |
|    | 427258 | AA400091  | Hs.39421  | ESTs            | TM  | 2.16 |
| 30 | 418113 | AI272141  | Hs.83484  | SRY (sex determ | HMG_box,TM,                                 | 2.16 |
|    | 450835 | BE262773  | Hs.25584  | hypothetical pr | ArfGap,SS                                   | 2.16 |
|    | 449057 | AB037784  | Hs.22941  | KIAA1363 protei | TM  | 2.16 |
|    | 448153 | Y10805    | Hs.20521  | HMT1 (hnRNP met | TM,SS                                       | 2.16 |
|    | 424553 | AW977534  | Hs.151469 | calcium/calmodu | Guanylate_kin,PDZ,pkise,SH3,TM,             | 2.16 |
| 35 | 431341 | AA307211  | Hs.251531 | proteasome (pro | proteasome,TM,                              | 2.16 |
|    | 452865 | AI924046  | Hs.119567 | ESTs            | PMP22_Claudin,TM,SS                         | 2.16 |
|    | 432789 | D26361    | Hs.3104   | KIAA0042 gene p | TM  | 2.16 |
|    | 438580 | AA811262  | Hs.299202 | ESTs            | pkise,TM,                                   | 2.16 |
|    | 422192 | AA305159  | Hs.113019 | fts485          | SS  | 2.15 |
| 40 | 425607 | U09860    | Hs.158333 | protease, serin | Idl_recept_a,trypsin,CUB,SrcR,MAM,SEA,TM,SS | 2.15 |
|    | 447289 | AW247017  | Hs.36978  | melanoma antige | 3Beta_HSD,Epimerase,MAGE,TM,                | 2.15 |
|    | 447674 | BE270640  | Hs.19192  | cyclin-dependen | pkise,TM,                                   | 2.15 |
|    | 441021 | AW578716  | Hs.7644   | H1 histone fami | linker_histone,TM,                          | 2.15 |
|    | 426471 | M22440    | Hs.170009 | transforming gr | EGF,TM,SS                                   | 2.15 |
| 45 | 431941 | AK000106  | Hs.272227 | Homo sapiens cD | pkise,Furin-like,TM,SS                      | 2.15 |
|    | 414761 | AU077228  | Hs.77256  | enhancer of zes | SET,TM,                                     | 2.15 |
|    | 410407 | X66839    | Hs.63287  | carbonic anhydr | carb_anhydrase,TM,SS                        | 2.15 |
|    | 420900 | AL045633  | Hs.44269  | ESTs            | Ald_Xan_dh_C,FAD_binding_5,TM,              | 2.15 |
|    | 419239 | AA468183  | Hs.184598 | Homo sapiens cD | TM  | 2.15 |
| 50 | 452721 | AJ269529  | Hs.30377  | Homo sapiens ES | TM  | 2.15 |
|    | 410664 | NM_006033 | Hs.65370  | lipase, endothe | Ribosomal_L22,lipase,PLAT,TM,SS             | 2.14 |
|    | 452835 | AK001269  | Hs.30738  | hypothetical pr | TM  | 2.14 |
|    | 452092 | BE245374  | Hs.27842  | hypothetical pr | Acyltransferase,TM,SS                       | 2.14 |
|    | 401708 |           |           |                 | SS  | 2.14 |
| 55 | 411400 | AA311919  | Hs.69851  | GAR1 protein    | TM  | 2.14 |
|    | 448526 | AB028946  | Hs.21361  | KIAA1023 protei | TM  | 2.14 |
|    | 421175 | AI879099  | Hs.102397 | GIOT-3 for gona | zf-C2H2,KRAB,TM,SS                          | 2.14 |
|    | 413511 | AI627178  | Hs.75412  | Arginine-rich p | TM  | 2.13 |
| 60 | 432945 | AL043683  | Hs.271357 | ESTs, Weakly si | PK,SS                                       | 2.13 |
|    | 418592 | X99226    | Hs.284153 | Fanconi anemia, | TM  | 2.13 |
|    | 425298 | AK000209  | Hs.155556 | hypothetical pr | TM  | 2.13 |
|    | 450956 | AW193531  | Hs.205647 | ESTs, Moderate  | pkise,TM,SS                                 | 2.13 |
|    | 419569 | AI971651  | Hs.91143  | jagged 1 (Alagi | EGF_DSL,TM,SS                               | 2.13 |
|    | 421508 | NM_004833 | Hs.105115 | absent in melan | TM  | 2.13 |
| 65 | 413670 | AB000115  | Hs.75470  | hypothetical pr | TM  | 2.13 |
|    | 422783 | AA598956  | Hs.120439 | ethanolamine ki | Choline_kise,TM,                            | 2.13 |
|    | 410418 | D31382    | Hs.63325  | transmembrane p | trypsin,Idl_recept_a,TM,SS                  | 2.13 |
|    | 414860 | BE255593  | Hs.77502  | methionine aden | S-AdoMeL_synth,SS                           | 2.13 |
| 70 | 425860 | L29339    | Hs.1964   | solute carrier  | SSF,Ribosomal_S17e,TM,                      | 2.13 |
|    | 414839 | X63692    | Hs.77462  | DNA (cytosine-5 | zf-CXXC,BAH,TM,SS                           | 2.13 |
|    | 437050 | AA766420  | Hs.291606 | ESTs            | TM  | 2.13 |
|    | 430217 | N47863    | Hs.180450 | ribosomal prote | TM,SS                                       | 2.13 |
|    | 409012 | AL117435  | Hs.49725  | DKFZP434I216 pr | RhoGEF,TM,                                  | 2.12 |
|    | 428365 | AA295331  | Hs.183861 | Homo sapiens cD | TM  | 2.12 |
| 75 | 410839 | NM_006849 | Hs.66581  | protein disulf  | thioered,TM,                                | 2.12 |
|    | 450510 | AA010056  | Hs.242998 | ESTs            | TM,SS                                       | 2.12 |
|    | 427475 | AA403151  | Hs.191605 | ESTs            | SS  | 2.12 |
|    | 433748 | R12244    |           | gb:yf33c12.r1 S | AMP-binding,TM,                             | 2.12 |
|    | 415138 | C18356    | Hs.78045  | tissue factor p | Kunitz_BPTI,G-gamma,TM,SS                   | 2.11 |
| 80 | 414788 | X78342    | Hs.77313  | cyclin-dependen | pkise,TM,SS                                 | 2.11 |
|    | 415474 | NM_014252 | Hs.78457  | solute carrier  | mito_carr,TM,                               | 2.11 |
|    | 416472 | AA180756  | Hs.193094 | ESTs, Moderate  | TM  | 2.11 |
|    | 410718 | AI920783  | Hs.191435 | ESTs            | SQS_PSY,TM,SS                               | 2.11 |
|    | 425811 | AL039104  | Hs.159557 | karyopherin alp | Armadillo_seg,IBB,TM,SS                     | 2.11 |

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|    |        |           |           |                 |  |      |
|----|--------|-----------|-----------|-----------------|--|------|
|    | 447197 | R36075    |           | gb:yh88b01.s1 S | SDF,TM,                                | 2.11 |
|    | 431621 | AW292329  | Hs.163481 | ESTs            | PH,Band_41,TM,SS                       | 2.11 |
|    | 433849 | BE465884  | Hs.280728 | ESTs            | SS                                     | 2.11 |
| 5  | 438038 | AI732629  | Hs.194161 | ESTs, Weakly si | Cytidylyltrans,TM,                     | 2.11 |
|    | 422032 | AA476966  | Hs.110857 | polymerase (RNA | TFIIS,TM,SS                            | 2.11 |
|    | 409717 | AW452871  | Hs.56043  | CGI-115 protein | TM                                     | 2.11 |
|    | 445837 | AI261700  | Hs.145544 | ESTs            | TM                                     | 2.11 |
|    | 423880 | BE278111  | Hs.134200 | DKFZP564C186 pr | TM                                     | 2.10 |
| 10 | 421574 | AJ000152  | Hs.105924 | defensin, beta  | Defensin_beta,TM,SS                    | 2.10 |
|    | 437103 | AW139408  | Hs.152940 | ESTs            | Choline_kise,TM,                       | 2.10 |
|    | 450747 | AI064821  | Hs.48306  | ESTs, Highly si | rm,TM,                                 | 2.10 |
|    | 437033 | AW248364  | Hs.5409   | RNA polymerase  | TM                                     | 2.10 |
|    | 417640 | D30857    | Hs.82353  | protein C recep | TM,SS                                  | 2.10 |
| 15 | 431120 | AA492588  |           | gb:ng99c08.s1 N | TM,SS                                  | 2.10 |
|    | 430510 | AW162916  | Hs.241576 | hypothetical pr | TM                                     | 2.10 |
|    | 429669 | BE185499  | Hs.2471   | KIAA0020 gene p | TM                                     | 2.10 |
|    | 407881 | AW072003  | Hs.40968  | heparan sulfate | SS                                     | 2.10 |
|    | 436415 | BE265254  | Hs.5181   | proliferation-a | Peptidase_M24,TM,SS                    | 2.10 |
| 20 | 407887 | AA579668  | Hs.41072  | serine (or cyst | serpin,TM,                             | 2.10 |
|    | 447815 | AI432199  | Hs.247084 | ESTs            | LIM,TM,                                | 2.09 |
|    | 434274 | AA628539  | Hs.116252 | ESTs, Moderatel | rm,TM,SS                               | 2.09 |
|    | 411571 | AA122393  | Hs.70811  | hypothetical pr | SS                                     | 2.09 |
|    | 442525 | AF150282  | Hs.145945 | ESTs            | pkise,TM,                              | 2.09 |
| 25 | 423750 | AF165883  | Hs.132415 | prefoldin 2     | TM                                     | 2.09 |
|    | 449199 | AI990122  | Hs.196988 | ESTs            | ras,TM,                                | 2.09 |
|    | 415363 | AI670947  | Hs.78406  | phosphatidylin  | PIP5K,pkise,TM,SS                      | 2.09 |
|    | 418462 | BE001596  | Hs.85266  | integrin, beta  | integrin_B,fn3,TM,SS                   | 2.09 |
|    | 430335 | D80007    | Hs.239499 | KIAA0185 protei | S1,TM,                                 | 2.08 |
| 30 | 443450 | N66045    | Hs.133529 | ESTs            | TM                                     | 2.08 |
|    | 418753 | BE217818  | Hs.87016  | Homo sapiens cD | TM                                     | 2.08 |
|    | 439018 | AW300887  | Hs.26638  | ESTs, Weakly si | TM,SS                                  | 2.08 |
|    | 431628 | AF146277  | Hs.265561 | CD2-associated  | SH3,SS                                 | 2.08 |
|    | 446528 | AU076640  | Hs.15243  | nucleolar prote | Nol1_Nop2_Sun,TM,                      | 2.08 |
| 35 | 411372 | AI147861  | Hs.213289 | low density lip | EGF,Idl_recept_a,Idl_recept_b,TM,SS    | 2.08 |
|    | 459319 | NM_000059 |           | gb:Homo sapiens | BRCA2_repeat,TM,                       | 2.08 |
|    | 408730 | AV660717  | Hs.47144  | DKFZP586N0819 p | TM,SS                                  | 2.08 |
|    | 409220 | BE243323  | Hs.51233  | tumor necrosis  | TNFR_c6,death,TM,                      | 2.08 |
|    | 429504 | X99133    | Hs.204238 | lipocalin 2 (on | lipocalin,SS                           | 2.08 |
| 40 | 409686 | AK000002  | Hs.55879  | Homo sapiens mR | ABC_tran,ABC_membrane,TM,              | 2.08 |
|    | 413092 | AA126856  | Hs.118665 | ESTs            | EGF,TM,SS                              | 2.08 |
|    | 413715 | AW851121  | Hs.75497  | Homo sapiens cD | cyclin,TM,                             | 2.08 |
|    | 423020 | AA383092  | Hs.1608   | replication pro | TM                                     | 2.07 |
|    | 438378 | AW970529  | Hs.86434  | Homo sapiens cD | TM,SS                                  | 2.07 |
| 45 | 432125 | AW972667  | Hs.287510 | Homo sapiens cD | Band_41,TM,SS                          | 2.07 |
|    | 449370 | AK002114  | Hs.23495  | hypothetical pr | TM,SS                                  | 2.07 |
|    | 454011 | M31008    | Hs.37009  | alkaline phosph | alk_phosphatase,TM,SS                  | 2.07 |
|    | 427876 | AI494291  | Hs.111977 | ESTs            | TM                                     | 2.07 |
|    | 422901 | R81936    | Hs.121576 | aspartate beta- | SS                                     | 2.07 |
| 50 | 449207 | AI044222  | Hs.23255  | nucleoporin 155 | TM,SS                                  | 2.07 |
|    | 408243 | Y00787    | Hs.624    | interleukin 8   | IL8,TM,SS                              | 2.07 |
|    | 446546 | BE167687  | Hs.156628 | ESTs            | Sulfotransfer,TM,SS                    | 2.07 |
|    | 423472 | AF041260  | Hs.129057 | breast carcino  | TM                                     | 2.07 |
|    | 436211 | AK001581  | Hs.80961  | polymerase (DNA | TM                                     | 2.07 |
| 55 | 456157 | AW979153  |           | gb:EST391263 MA | transmembrane4,TM,                     | 2.06 |
|    | 407143 | C14076    | Hs.248968 | EST             | TM                                     | 2.06 |
|    | 432440 | X63597    | Hs.2996   | sucrase-isomalt | Glyco_hydro_31,trefol,TM,SS            | 2.06 |
|    | 410668 | BE379794  | Hs.65403  | hypothetical pr | TM                                     | 2.06 |
|    | 422765 | AW409701  | Hs.1578   | baculoviral IAP | BIR,TM,                                | 2.06 |
| 60 | 439832 | T81829    | Hs.14870  | ESTs            | SS                                     | 2.06 |
|    | 445318 | AW500652  | Hs.200885 | ESTs            | TM                                     | 2.06 |
|    | 439951 | AI347067  | Hs.124636 | ESTs            | TM,SS                                  | 2.06 |
|    | 428307 | W27393    | Hs.183648 | protein tyrosin | TM                                     | 2.06 |
|    | 432584 | AA928829  | Hs.47099  | Homo sapiens cD | SS                                     | 2.06 |
| 65 | 433027 | AF191018  | Hs.279923 | putative nucleo | MMR_HSR1,TM,                           | 2.06 |
|    | 433716 | AA608808  | Hs.225118 | ESTs            | TM                                     | 2.06 |
|    | 429412 | NM_006235 | Hs.2407   | POU domain, cla | TM                                     | 2.06 |
|    | 449026 | BE500946  | Hs.209105 | ESTs            | TM                                     | 2.06 |
|    | 437016 | AU076916  | Hs.5398   | guanine monphos | GATase,GMP_synt_C,TM,                  | 2.06 |
| 70 | 442547 | AA306997  | Hs.268362 | ESTs, Weakly si | SS                                     | 2.06 |
|    | 455778 | BE088746  |           | gb:CM2-BT0693-2 | TM                                     | 2.06 |
|    | 439975 | AW328081  | Hs.6817   | Homo sapiens pu | TM,SS                                  | 2.06 |
|    | 433037 | NM_014158 | Hs.279938 | HSPC067 protein | TM                                     | 2.06 |
|    | 440086 | NM_005402 | Hs.288757 | v-rat simian le | ras,TM,                                | 2.06 |
| 75 | 436414 | BE264633  | Hs.143638 | WD repeat domai | WD40,TM,                               | 2.05 |
|    | 411770 | NM_014278 | Hs.71992  | heat shock prot | HSP70,TM,                              | 2.05 |
|    | 409459 | D86407    | Hs.54481  | low density lip | EGF,Idl_recept_a,Idl_recept_b,TM,SS    | 2.05 |
|    | 436238 | AK002163  | Hs.301724 | ESTs, Highly si | MMR_HSR1,TM,                           | 2.05 |
|    | 400517 | AF242388  | Hs.149585 | lengsin         | TM                                     | 2.05 |
| 80 | 421904 | BE143533  | Hs.109309 | hypothetical pr | SS                                     | 2.05 |
|    | 417850 | AA215724  | Hs.82741  | primase, polype | SS                                     | 2.05 |
|    | 417491 | AW376842  | Hs.1085   | guanylate cycl  | pkise,guanylate_cyc,ANF_receptor,TM,SS | 2.05 |
|    | 453775 | NM_002916 | Hs.35120  | replication fac | AAA,TM,SS                              | 2.05 |
|    | 435525 | AI831297  | Hs.123310 | ESTs            | TM                                     | 2.05 |

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|    |             |                                       |                                 |                 |                                 |      |
|----|-------------|---------------------------------------|---------------------------------|-----------------|---------------------------------|------|
|    | 412627      | BE391959                              | Hs.74276                        | chloride intrac | G_patch,ig,MutS_C,TM,           | 2.05 |
|    | 439702      | AW085525                              | Hs.134182                       | ESTs            | A2M,SS                          | 2.05 |
|    | 440006      | AK000517                              | Hs.6844                         | hypothetical pr | TM                              | 2.05 |
| 5  | 417308      | H60720                                | Hs.81892                        | KIAA0101 gene p | TM                              | 2.05 |
|    | 446311      | AW007294                              | Hs.149795                       | ESTs, Weakly si | pkise,TM,                       | 2.05 |
|    | 427871      | AW992405                              | Hs.59622                        | ESTs, Weakly si | SS                              | 2.05 |
|    | 453804      | AA300204                              | Hs.35276                        | KIAA0852 protei | TM,SS                           | 2.05 |
|    | 449939      | T86420                                | Hs.272139                       | ESTs            | DIL,myosin_head,TM,SS           | 2.05 |
| 10 | 417819      | AI253112                              | Hs.133540                       | ESTs            | TM                              | 2.04 |
|    | 427747      | AW411425                              | Hs.180655                       | serine/threonin | pkise,TM,                       | 2.04 |
|    | 415009      | C75253                                | Hs.220950                       | ESTs            | TM                              | 2.04 |
|    | 437829      | AI358522                              | Hs.270188                       | ESTs            | TM                              | 2.04 |
|    | 428753      | AW939252                              | Hs.192927                       | hypothetical pr | TM                              | 2.04 |
|    | 446475      | AI908188                              | Hs.209245                       | ESTs            | OPR,TM,                         | 2.04 |
| 15 | 431394      | AK000692                              | Hs.252351                       | HERV-H LTR-asso | ig,TM,SS                        | 2.04 |
|    | 423701      | AA329856                              | Hs.143022                       | ESTs            | TM                              | 2.04 |
|    | 422369      | AF005216                              | Hs.115541                       | Janus kinase 2  | SH2,pkise,TM,                   | 2.04 |
|    | 432481      | AW451645                              | Hs.151504                       | Homo sapiens cD | TSPN,Collagen,TM,SS             | 2.04 |
|    | 443746      | AW861379                              | Hs.160602                       | ESTs            | TM                              | 2.04 |
| 20 | 400792      | AA635062                              | Hs.50094                        | Homo sapiens mR | zf-C3HC4,CARD,BIR,TM,           | 2.04 |
|    | 428343      | AL043021                              | Hs.12705                        | ESTs, Weakly si | TM                              | 2.04 |
|    | 419329      | AY007220                              | Hs.288998                       | S100-type calci | TM                              | 2.04 |
|    | 403485      |                                       |                                 |                 | filament,TM,                    | 2.04 |
| 25 | 413313      | NM_002047                             | Hs.75280                        | glycyl-tRNA syn | WHEP-TRS,7tm_2,TM,SS            | 2.04 |
|    | 433326      | AI379486                              | Hs.159430                       | ESTs            | TM                              | 2.03 |
|    | 440246      | W52010                                | Hs.191379                       | ESTs            | serpin,TM,                      | 2.03 |
|    | 444006      | BE395085                              | Hs.10086                        | type I transmem | TM,SS                           | 2.03 |
|    | 452705      | H49805                                | Hs.246005                       | ESTs            | TM                              | 2.03 |
| 30 | 421724      | AB037832                              | Hs.107287                       | KIAA1411 protei | TM                              | 2.03 |
|    | 447474      | AW614220                              | Hs.189402                       | ESTs            | SS                              | 2.03 |
|    | 418852      | BE537037                              | Hs.273294                       | hypothetical pr | TM                              | 2.03 |
|    | 431842      | NM_005764                             | Hs.271473                       | epithelial prot | TM,SS                           | 2.03 |
|    | 440773      | AA352702                              | Hs.37747                        | hypothetical pr | TM                              | 2.03 |
| 35 | 443425      | AI056776                              | Hs.133397                       | ESTs            | TM,SS                           | 2.03 |
|    | 407975      | X89426                                | Hs.41716                        | endothelial cel | IGFBP,SS                        | 2.03 |
|    | 428299      | AL038004                              | Hs.29419                        | ESTs            | TM,SS                           | 2.03 |
|    | 415757      | AA830854                              | Hs.187810                       | ESTs            | TM                              | 2.03 |
|    | 432559      | AW452948                              | Hs.257631                       | ESTs            | PAC,TM,SS                       | 2.03 |
| 40 | 425912      | AL137629                              | Hs.162189                       | serine/threonin | fn3,ig,PH,RhoGEF,TM,SS          | 2.02 |
|    | 419395      | BE268326                              | Hs.90280                        | 5-aminimidazol  | AICARFT_IMPCHas,MGS,TM,         | 2.02 |
|    | 417576      | AA339449                              | Hs.82285                        | phosphoribosylg | AIRS,formyl_transf,GARS,TM,     | 2.02 |
|    | 418559      | AA225048                              | Hs.104207                       | ESTs            | TM                              | 2.02 |
|    | 410855      | X97795                                | Hs.66718                        | RAD54 (S.cerevi | SNF2_N,helicase_C,TM,           | 2.02 |
|    | 422072      | AB018255                              | Hs.111138                       | KIAA0712 gene p | TM                              | 2.02 |
| 45 | 419546      | AA244199                              |                                 | gb.nc06c05.s1 N | Y_phosphatase,TM,               | 2.02 |
|    | 450516      | AA902656                              | Hs.21943                        | NIF3 (Ngg1 inte | DUF34,TM,                       | 2.02 |
|    | 419807      | R77402                                |                                 | gb.yi75f11.s1 S | TM                              | 2.02 |
|    | 438192      | AI859065                              | Hs.16808                        | ESTs, Weakly si | TM,SS                           | 2.02 |
| 50 | 401866      |                                       |                                 |                 | filament,TM,SS                  | 2.02 |
|    | 443129      | R16075                                | Hs.21668                        | ESTs            | TM,SS                           | 2.02 |
|    | 424783      | AA913909                              | Hs.153088                       | TATA box bindin | TM                              | 2.01 |
|    | 413293      | AL047483                              | Hs.75270                        | GTP-binding pro | ras,TM,SS                       | 2.01 |
|    | 435787      | AW162767                              | Hs.100914                       | hypothetical pr | SS                              | 2.01 |
| 55 | 422599      | BE387202                              | Hs.118638                       | non-metastatic  | NDK,SS                          | 2.01 |
|    | 431630      | NM_002204                             | Hs.265829                       | integrin, alpha | FG-GAP,integrin_A,TM,SS         | 2.01 |
|    | 448275      | BE514434                              | Hs.20830                        | synaptic Ras GT | kinesin,PHD,abhydrolase_2,TM,SS | 2.01 |
|    | 405484      |                                       |                                 |                 | filament,SS                     | 2.01 |
|    | 436469      | AK001455                              | Hs.5198                         | Down syndrome c | TM                              | 2.01 |
| 60 | 451273      | NM_014811                             | Hs.26163                        | KIAA0649 gene p | TM                              | 2.01 |
|    | 432378      | AI493046                              | Hs.146133                       | ESTs            | TM                              | 2.01 |
|    | 419981      | AA897581                              | Hs.128773                       | ESTs            | Ski_Sno,SS                      | 2.01 |
|    | 445808      | AV655234                              | Hs.298083                       | ESTs            | sushi,TM,SS                     | 2.01 |
|    | 435767      | H73505                                | Hs.117874                       | ESTs            | Peptidase_S8,P,TM,              | 2.01 |
|    | 430466      | AF052573                              | Hs.241517                       | polymerase (DNA | TM                              | 2.01 |
| 65 | 422790      | AA809875                              | Hs.25933                        | ESTs            | TM                              | 2.01 |
|    | 443303      | U67319                                | Hs.9216                         | caspase 7, apop | ICE_p10,ICE_p20,TM,             | 2.01 |
|    | 410008      | AA079552                              |                                 | gb.zm20h12.s1 S | FG-GAP,TM,SS                    | 2.01 |
|    | 440774      | AI420611                              | Hs.127832                       | ESTs            | zf-MYND,TM,SS                   | 2.00 |
| 70 | 442961      | BE614474                              | Hs.289074                       | Homo sapiens cD | TM                              | 2.00 |
|    | 424420      | BE614743                              | Hs.146688                       | prostaglandin E | MAPEG,TM,SS                     | 2.00 |
|    | 410240      | AL157424                              | Hs.61289                        | synaptotagmin 2 | TM                              | 2.00 |
|    | 435014      | BE560898                              | Hs.10026                        | ribosomal prote | Ribosomal_L17,TM,               | 2.00 |
|    | 406752      | AI285598                              | Hs.217493                       | annexin A2      | TM                              | 2.00 |
| 75 | TABLE 41B:  |                                       |                                 |                 |                                 |      |
|    | Pkey:       | Unique Eos probeset identifier number |                                 |                 |                                 |      |
|    | CAT number: | Gene cluster number                   |                                 |                 |                                 |      |
|    | Accession:  | Genbank accession numbers             |                                 |                 |                                 |      |
| 80 | Pkey        | CAT number                            | Accession                       |                 |                                 |      |
|    | 410008      | 116812_1                              | AA079552 BE142525 BE142527      |                 |                                 |      |
|    | 418546      | 176677_1                              | AA224827 T59708 T59843 BE156903 |                 |                                 |      |
|    | 419546      | 185766_1                              | AA244199 AA244272 H57440        |                 |                                 |      |

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|        |           |  |
|--------|-----------|--|
| 419807 | 188252_1  | R77402 AA262462 AA250988 R06794                                |
| 422689 | 219896_1  | AW856665 AA315006 AW954733                                     |
| 431120 | 328264_1  | AA492588 AA492498 AA492571                                     |
| 433748 | 37385_1   | R12244 H71290 AI110858 AF090916 AF075357 AA011531              |
| 438223 | 452646_1  | AA781171 AI202139 AI202098                                     |
| 438993 | 467651_1  | AA828995 AA834879 AI926361                                     |
| 446995 | 702707_1  | AI355012 AW812856  |
| 447197 | 711623_1  | R36075 AI366546 R36167   |
| 450190 | 827655_1  | T51387 AW191595 T51271 AI686285                                |
| 451237 | 863269_1  | AW600293 AI767468  |
| 455778 | 1364506_1 | BE088746 BE088802 BE088755 BE088876 BE088947 BE088881 BE088952 |
| 456157 | 158261_1  | AW979153 AA176967 AA826015                                     |

TABLE 41C:

Pkey: Unique number corresponding to an Eos probeset  
 Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.  
 Strand: Indicates DNA strand from which exons were predicted.  
 NL\_position: Indicates nucleotide positions of predicted exons.

| Pkey   | Ref     | Strand | NL_position   |
|--------|---------|--------|---|
| 400514 | 9796594 | Minus  | 78844-79025,80850-80991,89754-89941,93750-93891                       |
| 401519 | 6649315 | Plus   | 157315-157950   |
| 401708 | 2951946 | Plus   | 154511-155298   |
| 401866 | 8018106 | Plus   | 73126-73623   |
| 402075 | 8117407 | Plus   | 121907-122035,122804-122921,124019-124161,124455-124510,125672-126076 |
| 403055 | 8748904 | Minus  | 109532-110225   |
| 403208 | 7630829 | Minus  | 147706-147903,148667-148804   |
| 403422 | 9665041 | Minus  | 151169-151561   |
| 403485 | 9966528 | Plus   | 2888-3001,3198-3532,3655-4117   |
| 403776 | 7770611 | Minus  | 1414-1513,1624-1756   |
| 404171 | 9930793 | Plus   | 173667-173783,176876-177055   |
| 404253 | 9367202 | Minus  | 55675-56055   |
| 404519 | 8152000 | Plus   | 12817-13000   |
| 404567 | 7249169 | Minus  | 101320-101501   |
| 405484 | 5922025 | Plus   | 199214-199579,199672-199920,200262-200495                             |
| 405545 | 1054740 | Plus   | 118677-118807,119091-119296,121626-121823                             |
| 405818 | 4071056 | Plus   | 29055-29196   |
| 406399 | 9256288 | Minus  | 63448-63554   |

TABLE 42A: ABOUT 561 GENES UP-REGULATED IN STOMACH CANCER

Table 42A lists about 561 genes up-regulated in stomach cancer compared to normal stomach. These were selected as for Table 40A except using various non-malignant stomach specimens in determining the denominator value.

Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 R1: Ratio of tumor to normal tissue

| Pkey   | ExAccn    | UnigenelD | Unigene Title                            | R1   |
|--------|-----------|-----------|--|------|
| 428368 | BE440042  | Hs.83326  | matrix metalloproteinase 3 (stromelysin  | 50.4 |
| 448693 | AW004854  | Hs.228320 | Homo sapiens cDNA: FLJ23537 fis, clone L | 28.6 |
| 428664 | AK001666  | Hs.189095 | similar to SALL1 (sal (Drosophila)-like  | 26.8 |
| 422330 | D30783    | Hs.115263 | epiregulin                               | 22.0 |
| 415989 | AI267700  | Hs.111128 | ESTs                                     | 21.2 |
| 439979 | AW600291  | Hs.6823   | hypothetical protein FLJ10430            | 19.0 |
| 451099 | R52795    | Hs.25954  | interleukin 13 receptor, alpha 2         | 17.1 |
| 403776 |           |           |  | 14.9 |
| 424905 | NM_002497 | Hs.153704 | NIMA (never in mitosis gene a)-related k | 14.8 |
| 414132 | AI801235  | Hs.48480  | ESTs                                     | 14.2 |
| 450375 | AA009647  | Hs.8850   | a disintegrin and metalloproteinase doma | 14.0 |
| 453922 | AF053306  | Hs.36708  | budding uninhibited by benzimidazoles 1  | 13.8 |
| 436032 | AA150797  | Hs.109276 | lactenin protein                         | 13.1 |
| 427585 | D31152    | Hs.179729 | collagen, type X, alpha 1 (Schmid metaph | 12.5 |
| 416661 | AA634543  | Hs.79440  | IGF-II mRNA-binding protein 3            | 12.2 |
| 414972 | BE263782  | Hs.77695  | KIAA0008 gene product                    | 10.6 |
| 445900 | AF070526  | Hs.13429  | Homo sapiens clone 24787 mRNA sequence   | 10.5 |
| 446619 | AU076643  | Hs.313    | secreted phosphoprotein 1 (osteopontin,  | 10.5 |
| 441377 | BE218239  | Hs.202656 | ESTs                                     | 10.2 |
| 419423 | D26488    | Hs.90315  | KIAA0007 protein                         | 9.8  |
| 415138 | C18356    | Hs.78045  | tissue factor pathway inhibitor 2        | 9.6  |
| 424639 | AI917494  | Hs.131329 | ESTs                                     | 9.4  |
| 412472 | AW975398  | Hs.293836 | ESTs                                     | 9.2  |
| 447048 | AW383080  | Hs.228320 | Homo sapiens cDNA: FLJ23537 fis, clone L | 8.9  |
| 418379 | AA218940  | Hs.137516 | fidgetin-like 1                          | 8.8  |
| 423020 | AA383092  | Hs.1608   | replication protein A3 (14kD)            | 8.6  |
| 408908 | BE296227  | Hs.48915  | serine/threonine kinase 15               | 8.5  |
| 419948 | AB041035  | Hs.93847  | NADPH oxidase 4                          | 8.3  |
| 411750 | BE562298  | Hs.71827  | KIAA0112 protein; homolog of yeast ribos | 8.3  |
| 411479 | AW848047  |           | gb:IL3-CT0214-291299-052-A12 CT0214 Homo | 8.1  |
| 420900 | AL045633  | Hs.44269  | ESTs                                     | 8.0  |
| 449347 | AV649748  | Hs.295901 | ESTs                                     | 8.0  |

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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
|    | 409041 | AB033025  | Hs.50081  | KIAA1199 protein                         | 8.0 |
|    | 450480 | X82125    | Hs.25040  | zinc finger protein 239                  | 7.6 |
|    | 417655 | AA780791  | Hs.14014  | ESTs, Weakly similar to KIAA0973 protein | 7.6 |
|    | 453878 | AW964440  | Hs.19025  | ESTs                                     | 7.6 |
| 5  | 430403 | AF039390  | Hs.241382 | tumor necrosis factor (ligand) superfam  | 7.5 |
|    | 427961 | AW293165  | Hs.143134 | ESTs                                     | 7.4 |
|    | 428330 | L22524    | Hs.2256   | matrix metalloproteinase 7 (matrilysin,  | 7.3 |
|    | 426235 | AI631964  | Hs.34447  | ESTs                                     | 7.1 |
| 10 | 452291 | AF015592  | Hs.28853  | CDC7 (cell division cycle 7, S. cerevisi | 7.0 |
|    | 418205 | L21715    | Hs.83760  | troponin I, skeletal, fast               | 7.0 |
|    | 409757 | NM_001898 | Hs.123114 | cystatin SN                              | 6.9 |
|    | 430044 | AA464510  | Hs.152812 | ESTs                                     | 6.6 |
|    | 444783 | AK001468  | Hs.62180  | anilin (Drosophila Scraps homolog), act  | 6.5 |
|    | 416209 | AA236776  | Hs.79078  | MAD2 (mitotic arrest deficient, yeast, h | 6.5 |
| 15 | 449020 | AI621170  | Hs.192699 | ESTs                                     | 6.3 |
|    | 431958 | X63629    | Hs.2877   | cadherin 3, type 1, P-cadherin (placenta | 5.8 |
|    | 434699 | AA643687  | Hs.149425 | Homo sapiens cDNA FLJ11960 fis, clone HE | 5.7 |
|    | 424345 | AK001380  | Hs.145479 | Homo sapiens cDNA FLJ10518 fis, clone NT | 5.6 |
| 20 | 428227 | AA321649  | Hs.2248   | small inducible cytokine subfamily B (Cy | 5.4 |
|    | 434551 | BE387162  | Hs.280858 | ESTs, Highly similar to XPB_HUMAN DNA-RE | 5.3 |
|    | 427660 | AI741320  | Hs.114121 | Homo sapiens cDNA: FLJ23228 fis, clone C | 5.0 |
|    | 424960 | BE245380  | Hs.153952 | 5' nucleotidase (CD73)                   | 4.9 |
|    | 400268 |           |           |  | 4.8 |
| 25 | 408427 | AW194270  | Hs.177236 | ESTs                                     | 4.7 |
|    | 453785 | AI368236  | Hs.283732 | ESTs                                     | 4.7 |
|    | 411274 | NM_002776 | Hs.69423  | kallikrein 10                            | 4.7 |
|    | 424717 | H03754    | Hs.152213 | wingless-type MMTV integration site fami | 4.7 |
|    | 415752 | BE314524  | Hs.78776  | putative transmembrane protein           | 4.6 |
| 30 | 434370 | AF130988  | Hs.58346  | downless (mouse) homolog                 | 4.6 |
|    | 431806 | AF186114  | Hs.270737 | tumor necrosis factor (ligand) superfam  | 4.6 |
|    | 400205 |           |           |  | 4.6 |
|    | 422938 | NM_001809 | Hs.1594   | centromere protein A (17kD)              | 4.5 |
| 35 | 406687 | M31126    | Hs.272620 | pregnancy specific beta-1-glycoprotein 9 | 4.4 |
|    | 453160 | AI263307  | Hs.146228 | ESTs                                     | 4.4 |
|    | 423871 | AA331906  |           | gb:EST35805 Embryo, 8 week I Homo sapien | 4.4 |
|    | 431211 | M86849    | Hs.5566   | gap junction protein, beta 2, 26kD (conn | 4.4 |
|    | 446638 | AL133063  | Hs.15783  | Homo sapiens mRNA; cDNA DKFZp434P1115 (f | 4.3 |
|    | 406741 | AA058357  | Hs.74466  | carcinoembryonic antigen-related cell ad | 4.3 |
| 40 | 411560 | AW851186  |           | gb:IL3-CT0220-150200-071-H05 CT0220 Homo | 4.1 |
|    | 433159 | AB035898  | Hs.150587 | kinesin-like protein 2                   | 4.1 |
|    | 446142 | AI754693  | Hs.145968 | ESTs                                     | 4.1 |
|    | 414727 | BE466904  |           | gb:h28f03.x1 NCI_CGAP_GC6 Homo sapiens   | 4.1 |
|    | 422285 | AI803103  |           | gb:lc14e06.x1 Soares_NhHMPu_S1 Homo sapi | 4.1 |
| 45 | 451807 | W52854    | Hs.27099  | DKFZP564J0863 protein                    | 4.1 |
|    | 411558 | AA102670  | Hs.70725  | gamma-aminobutyric acid (GABA) A recepto | 4.0 |
|    | 415701 | NM_003878 | Hs.78619  | gamma-glutamyl hydrolase (conjugase, fol | 4.0 |
|    | 409420 | Z15008    | Hs.54451  | taminin, gamma 2 (nicein (100kD), kalini | 3.9 |
|    | 452909 | NM_015368 | Hs.30985  | pannexin 1                               | 3.9 |
| 50 | 443211 | AI128388  | Hs.143655 | ESTs                                     | 3.9 |
|    | 442896 | R37725    | Hs.261108 | ESTs                                     | 3.8 |
|    | 407788 | BE514982  | Hs.38991  | S100 calcium-binding protein A2          | 3.8 |
|    | 406671 | AA129547  | Hs.285754 | met proto-oncogene (hepatocyte growth fa | 3.8 |
|    | 421155 | H87879    | Hs.102267 | lysyl oxidase                            | 3.8 |
| 55 | 420552 | AK000492  | Hs.98806  | hypothetical protein                     | 3.8 |
|    | 420727 | H75701    | Hs.99886  | complement component 4-binding protein,  | 3.7 |
|    | 422665 | AJ011812  | Hs.119018 | transcription factor NFRF                | 3.7 |
|    | 447425 | AI963747  | Hs.18573  | acylphosphatase 1, erythrocyte (common)  | 3.7 |
|    | 417715 | AW969587  | Hs.86366  | ESTs                                     | 3.7 |
| 60 | 406076 | AL390179  | Hs.137011 | Homo sapiens mRNA; cDNA DKFZp547P134 (fr | 3.6 |
|    | 452281 | T93500    | Hs.28792  | Homo sapiens cDNA FLJ11041 fis, clone PL | 3.6 |
|    | 412723 | AA648459  | Hs.179912 | ESTs                                     | 3.6 |
|    | 452461 | N78223    | Hs.108106 | transcription factor                     | 3.6 |
|    | 453331 | AI240665  | Hs.8895   | ESTs                                     | 3.6 |
| 65 | 406434 |           |           |  | 3.6 |
|    | 417956 | AA210704  | Hs.190465 | ESTs                                     | 3.6 |
|    | 410102 | AW248508  | Hs.279727 | Homo sapiens cDNA FLJ14035 fis, clone HE | 3.6 |
|    | 426471 | M22440    | Hs.170009 | transforming growth factor, alpha        | 3.5 |
|    | 425782 | U66468    | Hs.159525 | cell growth regulatory with EF-hand doma | 3.5 |
| 70 | 442556 | AL137761  | Hs.8379   | Homo sapiens mRNA; cDNA DKFZp586L2424 (f | 3.5 |
|    | 426957 | AA393676  | Hs.97459  | ESTs, Weakly similar to KIAA0819 protein | 3.5 |
|    | 448105 | AW591433  | Hs.170675 | ESTs, Weakly similar to TMS2_HUMAN TRANS | 3.5 |
|    | 414998 | NM_002543 | Hs.77729  | oxidised low density lipoprotein (lectin | 3.5 |
|    | 442942 | AW167087  | Hs.131562 | ESTs                                     | 3.4 |
| 75 | 416391 | AI878927  | Hs.79284  | mesoderm specific transcript (mouse) hom | 3.4 |
|    | 420230 | AL034344  | Hs.298020 | Homo sapiens cDNA FLJ11796 fis, clone HE | 3.4 |
|    | 408243 | Y00787    | Hs.624    | interleukin 8                            | 3.4 |
|    | 412978 | AI431708  | Hs.820    | homeo box CG                             | 3.4 |
|    | 412851 | AI826502  | Hs.106149 | ESTs                                     | 3.4 |
| 80 | 417720 | AA205625  | Hs.208067 | ESTs                                     | 3.4 |
|    | 414812 | X72755    | Hs.77367  | monokine induced by gamma interferon     | 3.4 |
|    | 453884 | AA355925  | Hs.36232  | KIAA0186 gene product                    | 3.4 |
|    | 436396 | AI683487  | Hs.299112 | Homo sapiens cDNA FLJ11441 fis, clone HE | 3.4 |
|    | 425921 | NM_007231 | Hs.162211 | solute carrier family 6 (neurotransmitte | 3.4 |

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|----|--------|-----------|-----------|---|-----|
|    | 420092 | AA814043  | Hs.88045  | ESTs                                      | 3.3 |
|    | 423441 | R68649    | Hs.278359 | absent in melanoma 1 like                 | 3.3 |
|    | 421787 | AA227068  | Hs.108301 | nuclear receptor subfamily 2, group C, m  | 3.3 |
|    | 447342 | AI199268  | Hs.19322  | ESTs                                      | 3.3 |
| 5  | 430178 | AW449612  | Hs.152475 | ESTs                                      | 3.3 |
|    | 452826 | BE245286  | Hs.301636 | ESTs, Moderately similar to PEX6_HUMAN P  | 3.3 |
|    | 414821 | M63835    | Hs.77424  | Fc fragment of IgG, high affinity Ia, re  | 3.3 |
|    | 413339 | AI818080  | Hs.194290 | ESTs                                      | 3.3 |
|    | 448756 | AI739241  | Hs.171480 | ESTs                                      | 3.3 |
| 10 | 421948 | L42583    | Hs.111758 | keratin 6A                                | 3.3 |
|    | 431453 | AW753917  |           | gb:RC0-CT0299-291199-031-F02 CT0299 Homo  | 3.3 |
|    | 438538 | AA832203  | Hs.291955 | ESTs                                      | 3.3 |
|    | 439759 | AL359055  | Hs.67709  | Homo sapiens mRNA full length insert cDN  | 3.3 |
|    | 431721 | AB032996  | Hs.268044 | KIAA1170 protein                          | 3.3 |
| 15 | 436391 | AJ227892  | Hs.146274 | ESTs                                      | 3.3 |
|    | 442025 | AW887434  | Hs.11810  | ESTs, Weakly similar to CD4.2 [C.elegans  | 3.3 |
|    | 418007 | M13509    | Hs.83169  | matrix metalloproteinase 1 (interstitial  | 3.2 |
|    | 411678 | AI907114  | Hs.71465  | squalene epoxidase                        | 3.2 |
|    | 422956 | BE545072  | Hs.122579 | hypothetical protein FLJ10461             | 3.2 |
| 20 | 450400 | AI694722  | Hs.279744 | ESTs                                      | 3.2 |
|    | 453857 | AL080235  | Hs.35861  | DKFZP586E1621 protein                     | 3.2 |
|    | 423528 | AB011137  | Hs.129740 | KIAA0565 gene product                     | 3.2 |
|    | 440659 | AF134160  | Hs.7327   | claudin 1                                 | 3.2 |
|    | 441085 | AW136551  | Hs.181245 | Homo sapiens cDNA FLJ12532 fis, clone NT  | 3.2 |
| 25 | 412022 | AI005043  | Hs.24143  | ESTs                                      | 3.2 |
|    | 418203 | X54942    | Hs.83758  | CDC28 protein kinase 2                    | 3.1 |
|    | 416111 | AA033813  | Hs.79018  | chromatin assembly factor 1, subunit A (  | 3.1 |
|    | 408633 | AW963372  | Hs.46677  | PRO2000 protein                           | 3.1 |
| 30 | 445808 | AV655234  | Hs.298083 | ESTs                                      | 3.1 |
|    | 414618 | AI204600  | Hs.96978  | ESTs                                      | 3.1 |
|    | 421340 | F07783    | Hs.1369   | decay accelerating factor for complement  | 3.1 |
|    | 422689 | AW856665  |           | gb:RC3-CT0297-290100-013-d03 CT0297 Homo  | 3.1 |
|    | 456508 | AA502764  | Hs.123469 | ESTs, Weakly similar to AF208855 1 BM-01  | 3.1 |
| 35 | 420759 | T11832    | Hs.127797 | ESTs                                      | 3.1 |
|    | 452637 | AW971231  | Hs.291020 | ESTs                                      | 3.1 |
|    | 415857 | AA866115  | Hs.301646 | Homo sapiens cDNA FLJ11381 fis, clone HE  | 3.1 |
|    | 439451 | AF086270  | Hs.278554 | heterochromatin-like protein 1            | 3.1 |
|    | 424051 | AL110203  | Hs.138411 | Homo sapiens mRNA; cDNA DKFZp586J1922 (f  | 3.1 |
| 40 | 440138 | AB033023  | Hs.6982   | hypothetical protein FLJ10201             | 3.1 |
|    | 454456 | AW850984  |           | gb:IL3-CT0220-150200-068-H08 CT0220 Homo  | 3.0 |
|    | 429125 | AA446854  | Hs.271004 | ESTs                                      | 3.0 |
|    | 408031 | AA081395  | Hs.42173  | Homo sapiens cDNA FLJ10366 fis, clone NT  | 3.0 |
|    | 438394 | BE379623  | Hs.27693  | CGI-124 protein                           | 3.0 |
|    | 409361 | NM_005982 | Hs.54416  | sine oculis homeobox (Drosophila) homolo  | 3.0 |
| 45 | 439453 | BE264974  | Hs.65666  | thyroid hormone receptor interactor 13    | 3.0 |
|    | 414696 | AF002020  | Hs.76918  | Niemann-Pick disease, type C1             | 3.0 |
|    | 422746 | NM_004484 | Hs.119651 | glypican 3                                | 3.0 |
|    | 424947 | R77952    | Hs.239625 | integral membrane protein 2B              | 3.0 |
|    | 453775 | NM_002916 | Hs.35120  | replication factor C (activator 1) 4 (37  | 3.0 |
| 50 | 449386 | AA001308  | Hs.193213 | ESTs                                      | 3.0 |
|    | 430687 | BE274217  | Hs.249247 | heterogeneous nuclear protein similar to  | 2.9 |
|    | 428862 | NM_000346 | Hs.2316   | SRY (sex-determining region Y)-box 9 (ca  | 2.9 |
|    | 401747 |           |           |   | 2.9 |
| 55 | 429682 | NM_006306 | Hs.211602 | SMC1 (structural maintenance of chromoso  | 2.9 |
|    | 444735 | BE019923  | Hs.243122 | hypothetical protein FLJ13057 similar to  | 2.9 |
|    | 413385 | M34455    | Hs.840    | indoleamine-pyrrole 2,3 dioxygenase       | 2.9 |
|    | 436222 | AI208737  | Hs.122810 | Homo sapiens cDNA FLJ11489 fis, clone HE  | 2.9 |
|    | 442961 | BE614474  | Hs.289074 | Homo sapiens cDNA FLJ13986 fis, clone Y7  | 2.9 |
| 60 | 454798 | AW821295  |           | gb:PM3-ST0307-241299-002-g03 ST0307 Homo  | 2.9 |
|    | 421650 | AA781795  | Hs.122587 | ESTs                                      | 2.9 |
|    | 434398 | AA121098  | Hs.3838   | serum-inducible kinase                    | 2.9 |
|    | 420153 | N22120    | Hs.75277  | hypothetical protein FLJ13910             | 2.9 |
|    | 435706 | W31254    | Hs.7045   | GL004 protein                             | 2.9 |
| 65 | 416065 | BE267931  | Hs.78996  | proliferating cell nuclear antigen        | 2.9 |
|    | 423250 | BE061916  | Hs.125849 | chromosome 8 open reading frame 2         | 2.8 |
|    | 423493 | AI815965  | Hs.129683 | ubiquitin-conjugating enzyme E2D 1 (homo  | 2.8 |
|    | 430242 | U66669    | Hs.236642 | 3-hydroxyisobutyryl-Coenzyme A hydrolase  | 2.8 |
|    | 436411 | AW674352  |           | gb:ba63c07.y1 NIH_MGC_12 Homo sapiens cD  | 2.8 |
|    | 411770 | NM_014278 | Hs.71992  | heat shock protein (hsp110 family)        | 2.8 |
| 70 | 437834 | AA769294  |           | gb:bnz36g03.s1 NCI_CGAP_GCB1 Homo sapiens | 2.8 |
|    | 400440 | X83957    | Hs.83870  | nebulin                                   | 2.8 |
|    | 444743 | AA045648  | Hs.11817  | nudix (nucleoside diphosphate linked moi  | 2.8 |
|    | 428725 | AI565937  | Hs.98692  | ESTs                                      | 2.8 |
|    | 417771 | AA804698  | Hs.82547  | retinoic acid receptor responder (tazaro  | 2.8 |
| 75 | 449420 | AI654852  | Hs.196562 | ESTs, Highly similar to TS24 MOUSE PROTE  | 2.8 |
|    | 433929 | AI375499  | Hs.27379  | ESTs                                      | 2.8 |
|    | 430287 | AW182459  | Hs.125759 | ESTs, Weakly similar to tumor suppressor  | 2.8 |
|    | 423346 | AI267677  | Hs.127416 | synaptojanin 1                            | 2.8 |
| 80 | 407824 | AA147884  | Hs.9812   | ESTs                                      | 2.8 |
|    | 408482 | NM_000676 | Hs.45743  | adenosine A2b receptor                    | 2.8 |
|    | 425188 | AK002052  | Hs.155071 | hypothetical protein FLJ11190             | 2.8 |
|    | 456999 | AA319798  | Hs.172247 | eukaryotic translation elongation factor  | 2.8 |
|    | 408875 | NM_015434 | Hs.48604  | DKFZP434B168 protein                      | 2.8 |



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|    | 407839 | AA045144  | Hs.161566 | ESTs                                     | 2.7 |
|    | 409012 | AL117435  | Hs.49725  | DKFZP4341216 protein                     | 2.7 |
|    | 410762 | AF226053  | Hs.66170  | HSKM-B protein                           | 2.7 |
| 5  | 426925 | NM_001196 | Hs.172894 | BH3 interacting domain death agonist     | 2.7 |
|    | 410116 | AW630671  | Hs.58636  | squamous cell carcinoma antigen recogniz | 2.7 |
|    | 428398 | AI249368  | Hs.98558  | ESTs                                     | 2.7 |
|    | 400048 |           |           | AFFX control: YEL002c/WBP1               | 2.7 |
|    | 412140 | AA219691  | Hs.73625  | RAB6 interacting, kinesin-like (ratkines | 2.7 |
| 10 | 435664 | AI032087  | Hs.269819 | ESTs                                     | 2.7 |
|    | 405695 |           |           |  | 2.7 |
|    | 456655 | AI376736  | Hs.111779 | secreted protein, acidic, cysteine-rich  | 2.7 |
|    | 408670 | AF160967  | Hs.46784  | potassium large conductance calcium-acti | 2.7 |
|    | 422576 | BE548555  | Hs.118554 | CGI-83 protein                           | 2.7 |
| 15 | 413179 | AA504264  | Hs.182937 | peptidylprolyl isomerase A (cyclophilin  | 2.7 |
|    | 429540 | M85776    |           | gb:EST02297 Fetal brain, Stralagene (cat | 2.7 |
|    | 426874 | N67325    | Hs.247132 | ESTs                                     | 2.7 |
|    | 433183 | AF231338  | Hs.222024 | transcription factor BMAL2               | 2.7 |
|    | 409902 | AI337658  | Hs.156351 | ESTs                                     | 2.7 |
| 20 | 422336 | AI761322  | Hs.115285 | dihydroipoamide S-acetyltransferase (E2  | 2.7 |
|    | 408434 | AW195317  | Hs.107716 | Homo sapiens cDNA: FLJ22344 fis, clone H | 2.7 |
|    | 432328 | AI572739  | Hs.195471 | 6-phosphofructo-2-kinase/fructose-2,6-bi | 2.7 |
|    | 407633 | NM_007069 | Hs.37189  | similar to rat HREV107                   | 2.6 |
|    | 419216 | AU076718  | Hs.164021 | small inducible cytokine subfamily B (Cy | 2.6 |
| 25 | 422363 | T55979    | Hs.115474 | replication factor C (activator 1) 3 (38 | 2.6 |
|    | 445564 | AB028957  | Hs.12896  | KIAA1034 protein                         | 2.6 |
|    | 401644 |           |           |  | 2.6 |
|    | 417479 | AI057052  | Hs.133554 | ESTs                                     | 2.6 |
|    | 434217 | AW014795  | Hs.23349  | ESTs                                     | 2.6 |
| 30 | 426514 | BE616633  | Hs.301122 | bone morphogenetic protein 7 (osteogenic | 2.6 |
|    | 414800 | BE538690  |           | gb:601064676F1 NIH_MGC_10 Homo sapiens c | 2.6 |
|    | 400289 | X07820    | Hs.2258   | matrix metalloproteinase 10 (stromelysin | 2.6 |
|    | 418478 | U38945    | Hs.1174   | cyclin-dependent kinase inhibitor 2A (me | 2.6 |
|    | 421246 | AW582962  | Hs.300961 | ESTs, Highly similar to AF151805 1 CGI-4 | 2.6 |
| 35 | 430397 | AI924533  | Hs.105607 | ESTs                                     | 2.6 |
|    | 428048 | AA705745  | Hs.185070 | ESTs                                     | 2.6 |
|    | 452092 | BE245374  | Hs.27842  | hypothetical protein FLJ11210            | 2.6 |
|    | 440052 | AI633744  | Hs.195648 | ESTs                                     | 2.6 |
|    | 433077 | AA314262  | Hs.289008 | Homo sapiens cDNA: FLJ21814 fis, clone H | 2.6 |
| 40 | 432407 | AA221036  | Hs.285026 | HERV-H LTR-associating 1                 | 2.6 |
|    | 452401 | NM_007115 | Hs.29352  | tumor necrosis factor, alpha-induced pro | 2.6 |
|    | 451813 | NM_016117 | Hs.27182  | phospholipase A2-activating protein      | 2.6 |
|    | 410889 | X91662    | Hs.66744  | twist (Drosophila) homolog (acrocephalos | 2.6 |
|    | 440100 | BE382685  | Hs.158549 | ESTs                                     | 2.6 |
| 45 | 413746 | AA133243  | Hs.171553 | ESTs                                     | 2.6 |
|    | 414737 | AI160386  | Hs.125087 | ESTs                                     | 2.6 |
|    | 422063 | BE156476  |           | gb:QV0-HT0368-040100-082-c05 HT0368 Homo | 2.6 |
|    | 418250 | U29926    | Hs.83918  | adenosine monophosphate deaminase (isofe | 2.6 |
|    | 437641 | AA811452  | Hs.291911 | ESTs                                     | 2.6 |
| 50 | 436027 | AI864053  | Hs.39972  | ESTs, Weakly similar to I38588 reverse t | 2.6 |
|    | 444381 | BE387335  | Hs.283713 | ESTs, Weakly similar to CA54_HUMAN COLLA | 2.6 |
|    | 452571 | W31518    | Hs.34665  | ESTs                                     | 2.6 |
|    | 452862 | AW378065  | Hs.8687   | ESTs                                     | 2.6 |
|    | 411984 | NM_005419 | Hs.72988  | signal transducer and activator of trans | 2.6 |
| 55 | 446440 | AV658411  | Hs.42656  | Homo sapiens cDNA FLJ12667 fis, clone NT | 2.6 |
|    | 448663 | BE614599  | Hs.106823 | H.sapiens gene from PAC 42616, similar t | 2.6 |
|    | 426427 | M86699    | Hs.169840 | TTK protein kinase                       | 2.6 |
|    | 445848 | AA774824  | Hs.13377  | Homo sapiens clone 23649 and 23755 unkno | 2.6 |
|    | 420022 | AA256253  | Hs.120817 | ESTs                                     | 2.6 |
| 60 | 451418 | BE387790  | Hs.26369  | hypothetical protein FLJ20287            | 2.6 |
|    | 428953 | AA306610  | Hs.194676 | DKFZP434C013 protein                     | 2.6 |
|    | 424008 | R02740    | Hs.137555 | putative chemokine receptor, GTP-binding | 2.6 |
|    | 417863 | AB000450  | Hs.82771  | vaccinia related kinase 2                | 2.6 |
|    | 414987 | AA524394  | Hs.165544 | ESTs                                     | 2.6 |
| 65 | 440249 | AI246590  | Hs.125325 | ESTs                                     | 2.6 |
|    | 407966 | AA295052  | Hs.38516  | ESTs                                     | 2.5 |
|    | 406685 | M18728    |           | gb:Human nonspecific crossreacting antig | 2.5 |
|    | 403204 |           |           |  | 2.5 |
|    | 436961 | AW375974  | Hs.156704 | ESTs                                     | 2.5 |
| 70 | 422260 | AA315993  | Hs.105484 | ESTs, Weakly similar to LITB_HUMAN LITHO | 2.5 |
|    | 444471 | AB020684  | Hs.11217  | KIAA0877 protein                         | 2.5 |
|    | 430290 | AI734110  | Hs.136355 | ESTs                                     | 2.5 |
|    | 413670 | AB000115  | Hs.75470  | hypothetical protein, expressed in osteo | 2.5 |
|    | 421928 | AF013758  | Hs.109643 | polyadenylate binding protein-interactin | 2.5 |
| 75 | 439580 | AF086401  | Hs.293847 | ESTs                                     | 2.5 |
|    | 439963 | AW247529  | Hs.6793   | platelet-activating factor acetylhydrola | 2.5 |
|    | 457065 | AI476318  | Hs.192480 | ESTs                                     | 2.5 |
|    | 439521 | AI808955  | Hs.58248  | ESTs                                     | 2.5 |
|    | 426711 | AA383471  | Hs.180669 | conserved gene amplified in osteosarcoma | 2.5 |
| 80 | 422631 | BE218919  | Hs.118793 | hypothetical protein FLJ10688            | 2.5 |
|    | 417866 | AW067903  | Hs.82772  | collagen, type XI, alpha 1               | 2.5 |
|    | 416975 | NM_004131 | Hs.1051   | granzyme B (granzyme 2, cytotoxic T-lymp | 2.5 |
|    | 415947 | U04045    | Hs.78934  | mutS (E. coli) homolog 2 (colon cancer,  | 2.5 |
|    | 454678 | AW813089  |           | gb:RC3-ST0186-240400-111-b05 ST0186 Homo | 2.5 |

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|    | 424080 | AW189983  | Hs.139119 | Homo sapiens cDNA FLJ10967 fis, clone PL  | 2.5 |
|    | 426572 | AB037783  | Hs.170623 | hypothetical protein FLJ11183             | 2.5 |
|    | 440594 | AW445167  | Hs.126036 | ESTs                                      | 2.5 |
| 5  | 428264 | AA424839  | Hs.98484  | ESTs, Weakly similar to ALU1_HUMAN ALU S  | 2.5 |
|    | 408750 | BE294069  | Hs.93581  | hypothetical protein FLJ10512             | 2.5 |
|    | 451177 | AI969716  | Hs.13034  | ESTs                                      | 2.5 |
|    | 449318 | AW236021  | Hs.108788 | ESTs, Weakly similar to zeste [D.melanog  | 2.5 |
|    | 434414 | AI798376  |           | gb:tr34b07.x1 NCI_CGAP_Ov23 Homo sapiens  | 2.5 |
|    | 400240 |           |           |   | 2.5 |
| 10 | 410519 | AW612264  | Hs.131705 | ESTs                                      | 2.5 |
|    | 440953 | AI683036  | Hs.124135 | KIAA1618 protein                          | 2.5 |
|    | 421190 | U95031    | Hs.102482 | mucin 5, subtype B, tracheobronchial      | 2.5 |
|    | 444478 | W07318    | Hs.240    | M-phase phosphoprotein 1                  | 2.5 |
| 15 | 442295 | AI827248  | Hs.224398 | Homo sapiens cDNA FLJ11469 fis, clone HE  | 2.5 |
|    | 420894 | AA744597  | Hs.88854  | ESTs                                      | 2.5 |
|    | 410094 | BE147897  | Hs.58593  | general transcription factor IIF, polype  | 2.4 |
|    | 413998 | AW103807  | Hs.243933 | ESTs                                      | 2.4 |
|    | 412281 | AI810054  | Hs.14119  | ESTs                                      | 2.4 |
|    | 418105 | AW937488  | Hs.178000 | ESTs                                      | 2.4 |
| 20 | 447335 | BE617695  | Hs.286192 | protein phosphatase 1, regulatory (inhib  | 2.4 |
|    | 446852 | AW451643  | Hs.257479 | ESTs, Weakly similar to AF147747 1 BOG25  | 2.4 |
|    | 408915 | NM_016651 | Hs.48950  | hepatocellular carcinoma novel gene-3 pro | 2.4 |
|    | 442991 | BE281238  | Hs.8886   | hypothetical protein FLJ20424             | 2.4 |
|    | 410193 | AJ132592  | Hs.59757  | zinc finger protein 281                   | 2.4 |
| 25 | 410664 | NM_006033 | Hs.65370  | lipase, endothelial                       | 2.4 |
|    | 449264 | AI637649  | Hs.196105 | ESTs                                      | 2.4 |
|    | 423453 | AW450737  | Hs.128791 | CGI-09 protein                            | 2.4 |
|    | 433757 | AI949974  | Hs.152670 | ESTs                                      | 2.4 |
| 30 | 411598 | BE336654  | Hs.70937  | H3 histone family, member K               | 2.4 |
|    | 431657 | AI345227  | Hs.105448 | ESTs, Weakly similar to B34087 hypotheti  | 2.4 |
|    | 429663 | M68874    | Hs.211587 | phospholipase A2, group IVA (cytosolic,   | 2.4 |
|    | 428242 | H55709    | Hs.2250   | leukemia inhibitory factor (cholinergic   | 2.4 |
|    | 419559 | Y07828    | Hs.91096  | ring finger protein                       | 2.4 |
| 35 | 419839 | U24577    | Hs.93304  | phospholipase A2, group VII (platelet-ac  | 2.4 |
|    | 419713 | AW968058  | Hs.92381  | nudix (nucleoside diphosphate linked moi  | 2.4 |
|    | 413281 | AA861271  | Hs.34396  | ESTs                                      | 2.4 |
|    | 402819 |           |           |   | 2.4 |
|    | 431457 | NM_012211 | Hs.256297 | integrin, alpha 11                        | 2.4 |
| 40 | 422564 | AI148006  | Hs.222120 | ESTs                                      | 2.4 |
|    | 443683 | BE241717  | Hs.9676   | uncharacterized hypothalamus protein HT0  | 2.4 |
|    | 407242 | M18728    |           | gb:Human nonspecific crossreacting antig  | 2.4 |
|    | 409235 | AA188827  | Hs.7988   | ESTs, Weakly similar to endo-alpha-D-man  | 2.4 |
|    | 408938 | AA059013  | Hs.22607  | ESTs                                      | 2.4 |
| 45 | 422158 | L10343    | Hs.112341 | protease inhibitor 3, skin-derived (SKAL  | 2.4 |
|    | 423217 | NM_000094 | Hs.1640   | collagen, type VII, alpha 1 (epidermolys  | 2.4 |
|    | 408321 | AW405882  | Hs.44205  | cortistatin                               | 2.4 |
|    | 419086 | NM_000216 | Hs.89591  | Kalimann syndrome 1 sequence              | 2.4 |
|    | 452945 | AW978187  | Hs.31086  | Homo sapiens mRNA for cytochrome b5, par  | 2.4 |
| 50 | 452234 | AW084176  | Hs.223296 | ESTs                                      | 2.4 |
|    | 427722 | AK000123  | Hs.180479 | hypothetical protein FLJ20116             | 2.4 |
|    | 430399 | AI916284  | Hs.199671 | ESTs                                      | 2.4 |
|    | 450737 | AW007152  | Hs.203330 | ESTs                                      | 2.4 |
|    | 428513 | BE220806  | Hs.184697 | Homo sapiens clone 23785 mRNA sequence    | 2.4 |
|    | 405454 |           |           |   | 2.4 |
| 55 | 422168 | AA586894  | Hs.112408 | S100 calcium-binding protein A7 (psorias  | 2.3 |
|    | 421462 | AF016495  | Hs.104624 | aquaporin 9                               | 2.3 |
|    | 403416 | AI744626  | Hs.301506 | ESTs, Highly similar to KIAA0564 protein  | 2.3 |
|    | 422039 | BE567832  | Hs.82148  | hypothetical protein                      | 2.3 |
| 60 | 448988 | Y09763    | Hs.22785  | gamma-aminobutyric acid (GABA) A recepto  | 2.3 |
|    | 429145 | AI694923  | Hs.49031  | ESTs                                      | 2.3 |
|    | 423198 | M81933    | Hs.1634   | cell division cycle 25A                   | 2.3 |
|    | 442914 | AW188551  | Hs.99519  | Homo sapiens cDNA FLJ14007 fis, clone Y7  | 2.3 |
|    | 449042 | AW294985  | Hs.301148 | potassium voltage-gated channel, Isk-rel  | 2.3 |
| 65 | 421308 | AA687322  | Hs.192843 | ESTs                                      | 2.3 |
|    | 419926 | AW900992  | Hs.93796  | DKFZP586D2223 protein                     | 2.3 |
|    | 429992 | AL050053  | Hs.227397 | Homo sapiens mRNA; cDNA DKFZp566E103 (fr  | 2.3 |
|    | 440601 | N62409    | Hs.126588 | ESTs                                      | 2.3 |
|    | 446232 | AI281848  | Hs.165547 | ESTs                                      | 2.3 |
| 70 | 410174 | AA306007  | Hs.59461  | DKFZP434C245 protein                      | 2.3 |
|    | 452110 | T47657    | Hs.28005  | Homo sapiens mRNA; cDNA DKFZp564G2463 (f  | 2.3 |
|    | 422493 | AW474183  | Hs.233816 | ESTs                                      | 2.3 |
|    | 407047 | X65965    |           | gb:H.sapiens SOD-2 gene for manganese su  | 2.3 |
|    | 411096 | U80034    | Hs.68583  | mitochondrial intermediate peptidase      | 2.3 |
| 75 | 426457 | AW894667  | Hs.169965 | chimerin (chimaerin) 1                    | 2.3 |
|    | 442029 | AW956698  | Hs.14456  | neural precursor cell expressed, develop  | 2.3 |
|    | 446545 | AI431798  | Hs.164192 | ESTs, Weakly similar to Y161_HUMAN HYPOT  | 2.3 |
|    | 422094 | AF129535  | Hs.272027 | F-box only protein 5                      | 2.3 |
|    | 421933 | R98881    | Hs.109655 | sex comb on midleg (Drosophila)-like 1    | 2.3 |
| 80 | 430001 | AI580056  | Hs.98992  | ESTs                                      | 2.3 |
|    | 420802 | U22376    | Hs.1334   | v-myb avian myeloblastosis viral oncogen  | 2.3 |
|    | 402053 |           |           |   | 2.3 |
|    | 415666 | H72693    |           | gb:yu03c11.1 Soares fetal liver spleen    | 2.3 |
|    | 432743 | AI146966  | Hs.101656 | ESTs                                      | 2.3 |

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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
|    | 433409 | AI278802  | Hs.25661  | ESTs                                     | 2.3 |
|    | 408330 | AW182602  | Hs.249954 | ESTs                                     | 2.3 |
|    | 407807 | AL031427  | Hs.40094  | Human DNA sequence from clone 167A19 on  | 2.3 |
|    | 436972 | AA284679  | Hs.25640  | claudin 3                                | 2.3 |
| 5  | 436747 | AW977192  | Hs.291343 | ESTs                                     | 2.3 |
|    | 433730 | AK002135  | Hs.3542   | hypothetical protein FLJ11273            | 2.3 |
|    | 414839 | X63692    | Hs.77462  | DNA (cytosine-5-)-methyltransferase 1    | 2.3 |
|    | 438192 | AI859065  | Hs.16808  | ESTs, Weakly similar to paraplegin-like  | 2.3 |
| 10 | 415339 | NM_015156 | Hs.78398  | KIAA0071 protein                         | 2.3 |
|    | 449539 | W80363    | Hs.58446  | ESTs                                     | 2.2 |
|    | 412651 | AA115333  | Hs.107968 | ESTs                                     | 2.2 |
|    | 450956 | AW193531  | Hs.205647 | ESTs, Moderately similar to ALU1_HUMAN A | 2.2 |
|    | 430335 | D80007    | Hs.239499 | KIAA0185 protein                         | 2.2 |
|    | 417849 | AW291587  | Hs.82733  | nidogen 2                                | 2.2 |
| 15 | 454946 | AW846376  |           | gb:QV0-CT0179-090200-090-R09 CT0179 Homo | 2.2 |
|    | 412326 | R07566    | Hs.73817  | small inducible cytokine A3 (homologous  | 2.2 |
|    | 408349 | BE546947  | Hs.44276  | homeo box C10                            | 2.2 |
|    | 424704 | AI263293  | Hs.152096 | cytochrome P450, subfamily IIJ (arachido | 2.2 |
| 20 | 419433 | AA814807  | Hs.7395   | hypothetical protein FLJ23182            | 2.2 |
|    | 409632 | W74001    | Hs.55279  | serine (or cysteine) proteinase inhibito | 2.2 |
|    | 415323 | BE269352  | Hs.949    | neutrophil cytosolic factor 2 (65kD, chr | 2.2 |
|    | 417531 | NM_003157 | Hs.1087   | serine/threonine kinase 2                | 2.2 |
|    | 403137 |           |           |  | 2.2 |
| 25 | 428479 | Y00272    | Hs.184572 | cell division cycle 2, G1 to S and G2 to | 2.2 |
|    | 430200 | BE613337  | Hs.234896 | geminin                                  | 2.2 |
|    | 433745 | AF075320  | Hs.28980  | Homo sapiens clone HQ0270                | 2.2 |
|    | 425390 | AI092634  | Hs.156114 | protein tyrosine phosphatase, non-recept | 2.2 |
|    | 408380 | AF123050  | Hs.44532  | diubiquitin                              | 2.2 |
| 30 | 422424 | AI186431  | Hs.116577 | prostate differentiation factor          | 2.2 |
|    | 431548 | AI834273  | Hs.9711   | Homo sapiens cDNA FLJ13018 fis, clone NT | 2.2 |
|    | 400298 | AA032279  | Hs.61635  | six transmembrane epithelial antigen of  | 2.2 |
|    | 428771 | AB028992  | Hs.193143 | KIAA1069 protein                         | 2.2 |
|    | 411571 | AA122393  | Hs.70811  | hypothetical protein FLJ20516            | 2.2 |
| 35 | 442573 | H93366    | Hs.7567   | Homo sapiens cDNA: FLJ21962 fis, clone H | 2.2 |
|    | 412802 | U41518    | Hs.74602  | aquaporin 1 (channel-forming integral pr | 2.2 |
|    | 412530 | AA766268  | Hs.266273 | Homo sapiens cDNA FLJ13346 fis, clone OV | 2.2 |
|    | 414761 | AU077228  | Hs.77256  | enhancer of zeste (Drosophila) homolog 2 | 2.2 |
|    | 408432 | AW195262  |           | gb:xn67b05.x1 NCI_CGAP_CML1 Homo sapiens | 2.2 |
| 40 | 440283 | AI732892  | Hs.190489 | ESTs                                     | 2.2 |
|    | 429568 | AI088691  | Hs.208414 | Homo sapiens mRNA; cDNA DKFZp564D0472 (f | 2.2 |
|    | 424003 | BE274717  | Hs.137506 | Homo sapiens BAC clone RP11-120J2 from 7 | 2.2 |
|    | 425300 | AW601773  | Hs.270259 | ESTs                                     | 2.2 |
|    | 448568 | AA149121  | Hs.71947  | ESTs                                     | 2.2 |
| 45 | 419229 | AI827237  | Hs.282884 | ESTs                                     | 2.2 |
|    | 420982 | AW576160  | Hs.100729 | KIAA0692 protein                         | 2.2 |
|    | 403258 |           |           |  | 2.2 |
|    | 439653 | AW021103  | Hs.6631   | hypothetical protein FLJ20373            | 2.2 |
|    | 426827 | AW067805  | Hs.172665 | methylenetetrahydrofolate dehydrogenase  | 2.2 |
| 50 | 444514 | AI682905  | Hs.270431 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 2.2 |
|    | 426298 | AW965058  | Hs.111583 | ESTs                                     | 2.2 |
|    | 425322 | U63630    | Hs.155637 | protein kinase, DNA-activated, catalytic | 2.2 |
|    | 421662 | NM_014141 | Hs.106552 | cell recognition molecule Caspr2         | 2.2 |
|    | 412505 | AA974491  | Hs.21734  | ESTs                                     | 2.2 |
| 55 | 438788 | AA825716  |           | gb:od29e10.s1 NCI_CGAP_GCB1 Homo sapiens | 2.2 |
|    | 429058 | AF138863  | Hs.194827 | hypothetical protein FLB6421             | 2.2 |
|    | 423104 | AJ005273  | Hs.123547 | antigenic determinant of recA protein (m | 2.2 |
|    | 410406 | AI969703  | Hs.301842 | ESTs                                     | 2.2 |
|    | 443180 | R15875    | Hs.70945  | ESTs                                     | 2.2 |
| 60 | 419235 | AW470411  | Hs.288433 | neurotrimin                              | 2.2 |
|    | 421379 | Y15221    | Hs.103982 | small inducible cytokine subfamily B (Cy | 2.2 |
|    | 422809 | AK001379  | Hs.121028 | hypothetical protein FLJ10549            | 2.2 |
|    | 415058 | AW902848  | Hs.273829 | ESTs                                     | 2.2 |
|    | 418049 | AA211467  | Hs.190488 | hypothetical protein FLJ10120            | 2.2 |
|    | 436209 | AW850417  | Hs.254020 | ESTs, Moderately similar to unnamed prot | 2.2 |
| 65 | 408042 | AL049233  | Hs.42244  | Homo sapiens mRNA; cDNA DKFZp564A023 (fr | 2.2 |
|    | 425692 | D90041    | Hs.155956 | N-acetyltransferase 1 (arylamine N-acety | 2.2 |
|    | 409665 | NM_006731 | Hs.55777  | Fukuyama type congenital muscular dystro | 2.2 |
|    | 428157 | AI738719  | Hs.298668 | ESTs                                     | 2.2 |
| 70 | 410480 | R97457    | Hs.63984  | cadherin 13, H-cadherin (heart)          | 2.2 |
|    | 429732 | U20158    | Hs.2488   | lymphocyte cytosolic protein 2 (SH2 doma | 2.2 |
|    | 414747 | U30872    | Hs.77204  | centromere protein F (350/400kD, mitosi  | 2.2 |
|    | 425843 | BE313280  | Hs.159627 | death associated protein 3               | 2.2 |
|    | 445299 | AI910382  | Hs.118727 | Homo sapiens cDNA FLJ13692 fis, clone PL | 2.1 |
| 75 | 436251 | BE515065  | Hs.5092   | nucleolar protein (KKE/D repeat)         | 2.1 |
|    | 430066 | AI929659  | Hs.237825 | signal recognition particle 72kD         | 2.1 |
|    | 422516 | BE258862  | Hs.117950 | multifunctional polypeptide similar to S | 2.1 |
|    | 407870 | AB032990  | Hs.40719  | hypothetical protein KIAA1164            | 2.1 |
|    | 416109 | AI420311  | Hs.126550 | suppressor of K+ transport defect 1      | 2.1 |
| 80 | 427528 | AU077143  | Hs.179565 | minichromosome maintenance deficient (S  | 2.1 |
|    | 448089 | AI467945  | Hs.173696 | ESTs                                     | 2.1 |
|    | 441790 | AW294909  | Hs.132208 | ESTs                                     | 2.1 |
|    | 400022 |           |           | AFFX control: STAT1                      | 2.1 |
|    | 428728 | NM_016625 | Hs.191381 | hypothetical protein                     | 2.1 |

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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
|    | 414366 | BE549143  |           | gb:601076456F1 NIH_MGC_12 Homo sapiens c   | 2.1 |
|    | 409929 | R38772    | Hs.172619 | KIAA1106 protein                           | 2.1 |
|    | 405264 |           |           |  | 2.1 |
| 5  | 445625 | BE246743  | Hs.288529 | Homo sapiens cDNA: FLJ22635 fis, clone H   | 2.1 |
|    | 408949 | AF189011  | Hs.49163  | putative ribonuclease III                  | 2.1 |
|    | 424513 | BE385864  | Hs.149894 | mitochondrial translational initiation f   | 2.1 |
|    | 433683 | AI817723  | Hs.22678  | hypothetical protein FLJ21832              | 2.1 |
|    | 442952 | AI743261  | Hs.131860 | ESTs                                       | 2.1 |
|    | 441020 | W79283    | Hs.35962  | ESTs                                       | 2.1 |
| 10 | 446770 | AV660309  | Hs.154986 | ESTs, Weakly similar to AF137386 1 plasm   | 2.1 |
|    | 432378 | AI493046  | Hs.146133 | ESTs                                       | 2.1 |
|    | 447769 | AW873704  | Hs.48764  | ESTs                                       | 2.1 |
|    | 412654 | AI093480  | Hs.29263  | Homo sapiens cDNA FLJ11896 fis, clone HE   | 2.1 |
|    | 445669 | AI570830  | Hs.174870 | ESTs                                       | 2.1 |
| 15 | 417979 | AU077284  | Hs.83081  | GTP cyclohydrolase I feedback regulatory   | 2.1 |
|    | 433849 | BE465884  | Hs.280728 | ESTs                                       | 2.1 |
|    | 437928 | NM_005476 | Hs.5920   | UDP-N-acetylglucosamine-2-epimerase/N-ac   | 2.1 |
|    | 457341 | BE181716  |           | gb:QV1-HT0639-150500-198-e03 HT0639 Homo   | 2.1 |
| 20 | 452833 | BE559681  | Hs.30736  | KIAA0124 protein                           | 2.1 |
|    | 403055 |           |           |  | 2.1 |
|    | 414581 | AA256213  | Hs.72010  | ESTs                                       | 2.1 |
|    | 432840 | AK001403  | Hs.279521 | hypothetical protein FLJ20530              | 2.1 |
|    | 418994 | AA296520  | Hs.89546  | selectin E (endothelial adhesion molecucl  | 2.1 |
|    | 440908 | AI915225  | Hs.126735 | ESTs                                       | 2.1 |
| 25 | 417621 | AV654694  | Hs.82316  | interferon-induced, hepatitis C-associated | 2.1 |
|    | 436895 | AF037335  | Hs.5338   | carbonic anhydrase XII                     | 2.1 |
|    | 455716 | BE070263  |           | gb:QV4-BT0407-280100-090-e07 BT0407 Homo   | 2.1 |
|    | 408420 | NM_006915 | Hs.299481 | Homo sapiens mRNA; cDNA DKFZp586B0118 (f   | 2.1 |
|    | 435849 | BE305242  | Hs.112442 | ESTs, Weakly similar to CLDE_HUMAN CLAUD   | 2.1 |
| 30 | 424308 | AW975531  | Hs.154443 | minichromosome maintenance deficient (S.   | 2.1 |
|    | 433644 | AW342028  | Hs.256112 | ESTs                                       | 2.1 |
|    | 400020 |           |           | AFFX control: STAT1                        | 2.1 |
|    | 434064 | AL049045  | Hs.180758 | hypothetical protein PRO0082               | 2.1 |
| 35 | 410660 | AI061118  | Hs.65328  | Fanconi anemia, complementation group F    | 2.1 |
|    | 404076 |           |           |  | 2.1 |
|    | 441362 | BE614410  | Hs.23044  | RAD51 (S. cerevisiae) homolog (E coli Re   | 2.1 |
|    | 422515 | AW500470  | Hs.117950 | multifunctional polypeptide similar to S   | 2.1 |
|    | 444863 | AW384082  | Hs.301323 | ESTs                                       | 2.1 |
| 40 | 445867 | AF272663  | Hs.13405  | gephyrin                                   | 2.1 |
|    | 441021 | AW578716  | Hs.7644   | H1 histone family, member 2                | 2.1 |
|    | 446595 | T57448    | Hs.15467  | hypothetical protein FLJ20725              | 2.1 |
|    | 417515 | L24203    | Hs.82237  | ataxia-telangiectasia group D-associated   | 2.1 |
|    | 412429 | AV650262  | Hs.75765  | GRO2 oncogene                              | 2.1 |
| 45 | 449207 | AL044222  | Hs.23255  | nucleoporin 155kD                          | 2.1 |
|    | 412095 | AI624707  | Hs.5921   | Homo sapiens cDNA: FLJ21592 fis, clone C   | 2.1 |
|    | 400861 |           |           |  | 2.1 |
|    | 448826 | AI580252  | Hs.293246 | ESTs, Weakly similar to putative p150 [H   | 2.1 |
|    | 440591 | AA431599  | Hs.132799 | Homo sapiens cDNA: FLJ23451 fis, clone H   | 2.1 |
| 50 | 426181 | AA371422  | Hs.69844  | ESTs, Weakly similar to dJ191N21.1 [H.sa   | 2.1 |
|    | 452880 | AA029332  | Hs.87549  | ESTs                                       | 2.1 |
|    | 421878 | AA299652  | Hs.111496 | Homo sapiens cDNA FLJ11643 fis, clone HE   | 2.1 |
|    | 442104 | L20971    | Hs.188    | phosphodiesterase 4B, cAMP-specific (dun   | 2.1 |
|    | 427224 | AL135554  | Hs.101937 | sine oculis homeobox (Drosophila) homolo   | 2.1 |
| 55 | 446921 | AB012113  | Hs.16530  | small inducible cytokine subfamily A (Cy   | 2.1 |
|    | 432487 | AA550988  | Hs.221472 | ESTs                                       | 2.1 |
|    | 429534 | AW976987  | Hs.163327 | ESTs                                       | 2.1 |
|    | 446051 | BE048061  | Hs.153315 | ESTs                                       | 2.1 |
|    | 447760 | AI431328  | Hs.291179 | ESTs, Weakly similar to topoisomerase I    | 2.1 |
| 60 | 422675 | BE018517  | Hs.119140 | eukaryotic translation initiation factor   | 2.1 |
|    | 415173 | AW501735  | Hs.253015 | ESTs                                       | 2.1 |
|    | 425170 | AU077315  | Hs.154970 | transcription factor CP2                   | 2.1 |
|    | 453751 | R36762    | Hs.101282 | Homo sapiens mRNA; cDNA DKFZp434B102 (fr   | 2.1 |
|    | 426283 | NM_003937 | Hs.169139 | kynureninase (L-kynurenine hydrolase)      | 2.1 |
| 65 | 417874 | BE616160  | Hs.82829  | protein tyrosine phosphatase, non-recept   | 2.1 |
|    | 449555 | AW450288  | Hs.195390 | ESTs                                       | 2.1 |
|    | 439699 | AF086534  | Hs.187561 | ESTs, Moderately similar to ALU1_HUMAN A   | 2.1 |
|    | 427413 | BE547647  | Hs.177781 | superoxide dismutase 2, mitochondrial      | 2.1 |
|    | 424673 | AA345051  | Hs.294092 | ESTs                                       | 2.1 |
| 70 | 407802 | D84145    | Hs.39913  | novel RGD-containing protein               | 2.0 |
|    | 452834 | AI638627  | Hs.105685 | ESTs                                       | 2.0 |
|    | 438895 | AW007021  | Hs.82894  | ESTs                                       | 2.0 |
|    | 446035 | NM_006558 | Hs.13565  | Sam68-like phosphotyrosine protein, T-ST   | 2.0 |
|    | 406981 | S71129    | Hs.296844 | Acetylcholinesterase (I4-E5 domain) [huma  | 2.0 |
| 75 | 427001 | NM_006482 | Hs.173135 | dual-specificity tyrosine-(Y)-phosphoryl   | 2.0 |
|    | 439223 | AW238299  | Hs.23945  | ESTs                                       | 2.0 |
|    | 432343 | NM_002960 | Hs.2961   | S100 calcium-binding protein A3            | 2.0 |
|    | 414890 | BE281095  | Hs.77573  | uridine phosphorylase                      | 2.0 |
|    | 423019 | AI640185  | Hs.225816 | ESTs                                       | 2.0 |
| 80 | 435905 | AW997484  | Hs.5003   | KIAA0456 protein                           | 2.0 |
|    | 422278 | AF072873  | Hs.114218 | frizzled (Drosophila) homolog 6            | 2.0 |
|    | 439608 | AW864696  | Hs.26198  | Homo sapiens cDNA: FLJ23363 fis, clone H   | 2.0 |
|    | 432114 | AL036021  | Hs.225597 | ESTs                                       | 2.0 |
|    | 405545 |           |           |  | 2.0 |

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|    |        |           |           |  |     |
|----|--------|-----------|-----------|--|-----|
| 5  | 418201 | AA214345  | Hs.98445  | Homo sapiens cDNA: FLJ21652 fis, clone C | 2.0 |
|    | 442528 | AF150317  | Hs.134217 | ESTs                                     | 2.0 |
|    | 446237 | AW270515  | Hs.149596 | ESTs                                     | 2.0 |
|    | 428074 | BE387770  | Hs.182378 | colony stimulating factor 2 receptor, al | 2.0 |
|    | 423430 | AF112481  | Hs.128501 | RAD54, S. cerevisiae, homolog of, B      | 2.0 |
| 10 | 435767 | H73505    | Hs.117874 | ESTs                                     | 2.0 |
|    | 432945 | AL043683  | Hs.271357 | ESTs, Weakly similar to unnamed protein  | 2.0 |
|    | 428792 | BE535955  | Hs.193602 | chromosome condensation protein G        | 2.0 |
|    | 404170 |           |           |  | 2.0 |
|    | 410286 | AI739159  | Hs.61898  | DKFZP586N2124 protein                    | 2.0 |
| 15 | 434565 | T52172    |           | gb:yb22d01.s1 Stratagene fetal spleen (9 | 2.0 |
|    | 422610 | AF153820  | Hs.1547   | potassium inwardly-rectifying channel, s | 2.0 |
|    | 417933 | X02308    | Hs.82962  | thymidylate synthase                     | 2.0 |
|    | 441384 | AA447849  | Hs.288660 | protease, serine, 23                     | 2.0 |
|    | 437403 | AI208149  | Hs.121196 | ESTs                                     | 2.0 |
| 20 | 412673 | AL042957  | Hs.31845  | ESTs                                     | 2.0 |
|    | 414020 | NM_002984 | Hs.75703  | small inducible cytokine A4 (homologous  | 2.0 |
|    | 438426 | AA835936  | Hs.269763 | ESTs                                     | 2.0 |
|    | 413943 | AW294416  | Hs.144687 | ESTs                                     | 2.0 |
|    | 449001 | AI619957  | Hs.189854 | ESTs                                     | 2.0 |
| 25 | 427674 | NM_003528 | Hs.2178   | H2B histone family, member Q             | 2.0 |
|    | 435425 | H16263    | Hs.31416  | ESTs                                     | 2.0 |
|    | 433364 | AI075407  | Hs.296083 | ESTs                                     | 2.0 |
|    | 429782 | NM_005754 | Hs.220689 | Ras-GTPase-activating protein SH3-domain | 2.0 |
|    | 417366 | BE185289  | Hs.1076   | small proline-rich protein 1B (comifin)  | 2.0 |
| 30 | 426746 | J03626    | Hs.2057   | uridine monophosphate synthetase (orotat | 2.0 |
|    | 411943 | BE502436  | Hs.7962   | ESTs, Weakly similar to putative [C.eleg | 2.0 |
|    | 414266 | BE267834  |           | gb:601124428F1 NIH_MGC_8 Homo sapiens cD | 2.0 |
|    | 432677 | NM_004482 | Hs.278611 | UDP-N-acetyl-alpha-D-galactosamine:polyp | 2.0 |
|    | 450534 | AI570189  | Hs.25132  | KIAA0470 gene product                    | 2.0 |
|    | 446715 | AI337735  | Hs.173919 | ESTs                                     | 2.0 |

TABLE 42B:

|             |                                       |
|-------------|---------------------------------------|
| Pkey:       | Unique Eos probeset identifier number |
| CAT number: | Gene cluster number                   |
| Accession:  | Genbank accession numbers             |

|    |        |            |   |
|----|--------|------------|---|
| 40 | Pkey   | CAT number | Accession   |
|    | 408432 | 1058657_1  | AW195262 R27868 AW811262  |
|    | 411479 | 1247077_1  | AW848047 AW848202 AW848631 AW848142 AW848702 AW848121 AW848632 AW848140 AW848571 AW848009 AW848067 AW848069 AW848905      |
|    |        |            | AW848214  |
|    | 411560 | 1249443_1  | AW851186 AW996967 BE143456  |
| 45 | 414266 | 1430984_1  | BE267834 BE514180 BE514096  |
|    | 414366 | 1438636_1  | BE549143 BE390613 BE277344  |
|    | 414727 | 1481204_1  | BE466904 W28721   |
|    | 414800 | 1491863_1  | BE538690 T40217   |
|    | 415666 | 1543492_1  | H72693 R08673 H72694 F20990 R08580  |
| 50 | 422063 | 210852_1   | BE156476 BE156473 BE156474 BE156475 AA302839  |
|    | 422285 | 214669_1   | AI803103 AI885143 AW470793 AW450703 AI090784 AW271587 AW236950 AW242783   |
|    | 422689 | 219896_1   | AW856665 AA315006 AW954733  |
|    | 423871 | 232749_1   | AA331906 AA332484   |
|    | 429540 | 305828_1   | M85776 AA454535 AA456208 H90189   |
| 55 | 431453 | 333457_1   | AW753917 BE152926 AA505333 BE155673   |
|    | 434414 | 38585_1    | AI798376 S46400 AW811617 AW811616 W00557 BE142245 AW858232 AW861851 AW858362 AA232351 AA218567 AA055556 AW858231          |
|    |        |            | AW857541 AW814172 H66214 AW814398 AF134164 AA243093 AA173345 AA199942 AA223384 AA227092 AA227080 T12379 AA092174 T61139   |
|    |        |            | AA149776 AA699829 AW879188 AW813567 AW813538 AI267168 AA157718 AA157719 AA100472 AA100774 AA130756 AA157705 AA157730      |
|    |        |            | AA157715 AA053524 AW849581 AW854566 C05254 AW882836 T92637 AW812621 AA206583 AA209204 BE156909 AA226824 AI829309 AW991957 |
| 60 |        |            | N66951 AA527374 H66215 AA045564 AI694265 H60808 AA149726 AW195620 BE081333 BE073424 AW817662 AW817705 AW817703 AW817659   |
|    |        |            | BE081531 H59570   |
|    | 434565 | 38898_1    | T52172 AF147324 T52248  |
|    | 436411 | 419334_1   | AW674352 AA715374 Z25205  |
|    | 437834 | 443674_1   | AA769294 AW749299 AW749302 AW749295 AW749304 AW749293 AW749298 AW749294 AW749288 AW749291 AW749297 AW749292 AW749296      |
| 65 |        |            | AW749289 AW749287 BE535498  |
|    | 438788 | 465159_1   | AA825716 AW978859 AA828841  |
|    | 454456 | 1207088_1  | AW850984 AW752836 M86124  |
|    | 454678 | 1228915_1  | AW813089 W28102   |
|    | 454798 | 1235104_1  | AW821295 AW821272 AW821282  |
| 70 | 454946 | 1245753_1  | AW846376 AW846375 AW846434 AW846287 AW846365 AW846554 AW846384 AW846290 AW846356 AW846474                                 |
|    | 455716 | 1352695_1  | BE070263 BE070195 BE070265 BE070202 BE070233 BE070399 BE070203  |
|    | 457341 | 322221_1   | BE181716 AW948314 AW801848 AW948320 AW983981 AA484444   |

TABLE 42C:

|              |   |
|--------------|---|
| Pkey:        | Unique number corresponding to an Eos probeset  |
| Ref:         | Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <u>Nature</u> 402:489-495. |
| Strand:      | Indicates DNA strand from which exons were predicted.   |
| Nt_position: | Indicates nucleotide positions of predicted exons.  |

|    |        |         |        |   |
|----|--------|---------|--------|---|
| 80 | Pkey   | Ref     | Strand | Nt_position   |
|    | 400861 | 9757506 | Plus   | 163855-164016   |
|    | 401644 | 8576138 | Plus   | 82655-83959   |
|    | 401747 | 9789672 | Minus  | 118596-118816, 119119-119244, 119609-119761, 120422-120990, 130161-130381, 130468-130593, 131097-131258, 131866-31932, 132451-132575, 133580-134011 |

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|    |        |         |       |   |
|----|--------|---------|-------|---|
| 5  | 402053 | 8083229 | Plus  | 62703-63179   |
|    | 402819 | 6729581 | Plus  | 29217-29422   |
|    | 403055 | 8748904 | Minus | 109532-110225   |
|    | 403137 | 9211494 | Minus | 92349-92572,92958-93084,93579-93712,93949-94072,94591-94748,95214-95337 |
|    | 403204 | 7622392 | Plus  | 16214-16439   |
| 10 | 403258 | 7770439 | Minus | 156251-156619   |
|    | 403776 | 7770611 | Minus | 1414-1513,1624-1756   |
|    | 404076 | 9931752 | Minus | 3848-3967   |
|    | 404170 | 9930793 | Plus  | 168836-169248   |
|    | 405264 | 7329374 | Plus  | 28556-28684   |
| 15 | 405454 | 7656675 | Plus  | 133807-134053   |
|    | 405545 | 1054740 | Plus  | 118677-118807,119091-119296,121626-121823                               |
|    | 405695 | 4309958 | Plus  | 51860-52162   |
|    | 406434 | 9256651 | Minus | 17803-17931   |
|    |        |         |       |   |

TABLE 43A: ABOUT 339 GENES UP-REGULATED IN STOMACH CANCER

Table 43A lists about 339 genes up-regulated in stomach cancer compared to normal stomach that are likely to be extracellular or cell-surface proteins. These were selected as for Table 42A and the predicted protein contained a structural domain that is indicative of surface or extracellular localization (e.g. ig, fn3, egf, 7tm domains). Predicted protein domains are noted.

Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 PSDomain: Protein Structural Domain  
 R1: Ratio of tumor to normal tissue

| Pkey   | ExAccn    | UnigenelD | Unigene Title   | PSDomain                       | R1   |
|--------|-----------|-----------|-----------------|--------------------------------|------|
| 428368 | BE440042  | Hs.83326  | matrix metallo  | hemopexin,Peptidase_M10,,SS    | 60.4 |
| 428664 | AK001666  | Hs.189095 | similar to SALL | zf-C2H2,TM,SS                  | 26.8 |
| 422330 | D30783    | Hs.115263 | epiregulin      | EGF,TM,SS                      | 22.0 |
| 439979 | AW600291  | Hs.6823   | hypothetical pr | TM                             | 19.0 |
| 451099 | R52795    | Hs.25954  | interleukin 13  | fn3,TM,SS                      | 17.1 |
| 403776 |           |           |                 | IL8,TM,SS                      | 14.9 |
| 424905 | NM_002497 | Hs.153704 | NIMA (never in  | pkinese,TM,                    | 14.8 |
| 453922 | AF053306  | Hs.36708  | budding uninhib | TM                             | 13.8 |
| 436032 | AA150797  | Hs.109276 | latexin protein | TM                             | 13.1 |
| 427585 | D31152    | Hs.179729 | collagen, type  | C1q,Collagen,TM,SS             | 12.5 |
| 416661 | AA634543  | Hs.79440  | IGF-II mRNA-bin | KH-domain,TM,                  | 12.2 |
| 414972 | BE263782  | Hs.77695  | KIAA0008 gene p | TM                             | 10.6 |
| 446619 | AU076643  | Hs.313    | secreted phosph | Osteopontin,TM,SS              | 10.5 |
| 415138 | C18356    | Hs.78045  | tissue factor p | Kunitz_BPT1,G-gamma,TM,SS      | 9.6  |
| 423020 | AA383092  | Hs.1608   | replication pro | TM                             | 8.6  |
| 408908 | BE296227  | Hs.48915  | serine/threonin | pkinese,TM,SS                  | 8.5  |
| 419948 | AB041035  | Hs.93847  | NADPH oxidase 4 | Ferric_reduct,TM,SS            | 8.3  |
| 411750 | BE562298  | Hs.71827  | KIAA0112 protei | SS                             | 8.3  |
| 420900 | AL045633  | Hs.44269  | ESTs            | Ald_Xan_dh_C,FAD_binding_5,TM, | 8.0  |
| 450480 | X82125    | Hs.25040  | zinc finger gro | zf-C2H2,TM,SS                  | 7.6  |
| 417655 | AA780791  | Hs.14014  | ESTs, Weakly si | TM                             | 7.6  |
| 430403 | AF039390  | Hs.241382 | tumor necrosis  | TM,SS                          | 7.5  |
| 428330 | L22524    | Hs.2256   | matrix metallo  | Peptidase_M10,,SS              | 7.3  |
| 452291 | AF015592  | Hs.28853  | CDC7 (cell divi | pkinese,TM,                    | 7.0  |
| 418205 | L21715    | Hs.83760  | troponin I, ske | Troponin,,SS                   | 7.0  |
| 409757 | NM_001898 | Hs.123114 | cystatin SN     | cystatin,,SS                   | 6.9  |
| 444783 | AK001468  | Hs.62180  | anillin (Drosop | PH,TM,                         | 6.5  |
| 416209 | AA236776  | Hs.79078  | MAD2 (mitotic a | HORMA,,SS                      | 6.5  |
| 431958 | X63629    | Hs.2877   | cadherin 3, typ | cadherin,Cadherin_C_tern,TM,SS | 5.8  |
| 424345 | AK001380  | Hs.145479 | Homo sapiens cD | TM,SS                          | 5.6  |
| 428227 | AA321649  | Hs.2248   | small inducible | IL8,TM,SS                      | 5.4  |
| 424960 | BE245380  | Hs.153952 | 5' nucleotidase | 5_nucleotidase,TM,SS           | 4.9  |
| 400268 |           |           |                 | Myosin_tail,,SS                | 4.8  |
| 411274 | NM_002776 | Hs.69423  | kallikrein 10   | trypsin,TM,                    | 4.7  |
| 415752 | BE314524  | Hs.78776  | putative transm | TM                             | 4.6  |
| 431806 | AF186114  | Hs.270737 | tumor necrosis  | TM,SS                          | 4.6  |
| 400205 |           |           |                 | SS                             | 4.6  |
| 422938 | NM_001809 | Hs.1594   | centromere prot | histone,TM,                    | 4.5  |
| 406687 | M31126    | Hs.272620 | pregnancy speci | hemopexin,TM,                  | 4.4  |
| 423871 | AA331906  |           | gb:EST35805 Emb | TM                             | 4.4  |
| 431211 | M86849    | Hs.5566   | gap junction pr | connexin,TM,                   | 4.4  |
| 446638 | AL133063  | Hs.15783  | Homo sapiens mR | TM                             | 4.3  |
| 406741 | AA058357  | Hs.74466  | carcinoembryoni | ig,TM,SS                       | 4.3  |
| 411560 | AW851186  |           | gb:IL3-CT0220-1 | TM                             | 4.1  |
| 433159 | AB035898  | Hs.150587 | kinesin-like pr | kinesin,Myosin_tail,TM,SS      | 4.1  |
| 422285 | AI803103  |           | gb:tc14e06.x1.S | TM,SS                          | 4.1  |
| 451807 | W52854    | Hs.27099  | DKFZP564J0863 p | TM                             | 4.1  |
| 411558 | AA102670  | Hs.70725  | gamma-aminobuty | neur_chan,TM,SS                | 4.0  |
| 415701 | NM_003878 | Hs.78619  | gamma-glutamyl  | TM,SS                          | 4.0  |
| 409420 | Z15008    | Hs.54451  | laminin, gamma  | laminin_EGF,laminin_B,,SS      | 3.9  |
| 452909 | NM_015368 | Hs.30985  | pannexin 1      | TM                             | 3.9  |
| 407788 | BE514982  | Hs.38991  | S100 calcium-bi | efhand_S_100,TM,SS             | 3.8  |
| 421155 | H87879    | Hs.102267 | lysyl oxidase   | Lysyl_oxidase,,SS              | 3.8  |
| 420552 | AK000492  | Hs.98806  | hypothetical pr | SS                             | 3.8  |
| 420727 | H75701    | Hs.99886  | complement comp | sushi,,                        | 3.7  |

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|    |        |           |           |                 |                             |     |
|----|--------|-----------|-----------|-----------------|-----------------------------|-----|
|    | 422665 | AJ011812  | Hs.119018 | transcription f | R3H,G-patch,GTP_CDC.TM,SS   | 3.7 |
|    | 447425 | AI963747  | Hs.18573  | acylphosphatase | Acylphosphatase,TM,         | 3.7 |
|    | 406076 | AL390179  | Hs.137011 | Homo sapiens mR | TM                          | 3.6 |
|    | 406434 |           |           |                 | heme_1,TM,                  | 3.6 |
| 5  | 417956 | AA210704  | Hs.190455 | ESTs            | sushi,,SS                   | 3.6 |
|    | 410102 | AW248508  | Hs.279727 | Homo sapiens cD | TM,SS                       | 3.6 |
|    | 426471 | M22440    | Hs.170009 | transforming gr | EGF,TM,SS                   | 3.5 |
|    | 425782 | U66468    | Hs.159525 | cell growth reg | SS                          | 3.5 |
|    | 426957 | AA393676  | Hs.97459  | ESTs, Weakly si | SS                          | 3.5 |
| 10 | 448105 | AW591433  | Hs.170675 | ESTs, Weakly si | trypsin,TM,                 | 3.5 |
|    | 414998 | NM_002543 | Hs.77729  | oxidised low de | TM                          | 3.5 |
|    | 442942 | AW167087  | Hs.131562 | ESTs            | pkinese,TM,SS               | 3.4 |
|    | 416391 | AI878927  | Hs.79284  | mesoderm specif | abhydrolase,TM,SS           | 3.4 |
|    | 420230 | AL034344  | Hs.298020 | Homo sapiens cD | Fork_head,TM,               | 3.4 |
| 15 | 408243 | Y00787    | Hs.624    | interleukin 8   | IL8,TM,SS                   | 3.4 |
|    | 412978 | AI431708  | Hs.820    | homeo box C6    | homeobox,TM,                | 3.4 |
|    | 412851 | AI826502  | Hs.106149 | ESTs            | TM,SS                       | 3.4 |
|    | 414812 | X72755    | Hs.77367  | monokine induce | IL8,,SS                     | 3.4 |
|    | 453884 | AA355925  | Hs.36232  | KIAA0186 gene p | TM                          | 3.4 |
| 20 | 425921 | NM_007231 | Hs.162211 | solute carrier  | SNF,TM,                     | 3.4 |
|    | 421787 | AA227068  | Hs.108301 | nuclear recepto | TM                          | 3.3 |
|    | 447342 | AI199268  | Hs.19322  | ESTs            | TM,SS                       | 3.3 |
|    | 452826 | BE245286  | Hs.301636 | ESTs, Moderatel | AAA,TM,                     | 3.3 |
|    | 414821 | M63835    | Hs.77424  | Fc fragment of  | ig,TM,SS                    | 3.3 |
| 25 | 448756 | AI739241  | Hs.171480 | ESTs            | TM                          | 3.3 |
|    | 421948 | L42583    | Hs.111758 | keratin 6A      | filament,TM,                | 3.3 |
|    | 438538 | AA832203  | Hs.291955 | ESTs            | TM                          | 3.3 |
|    | 436391 | AJ227892  | Hs.146274 | ESTs            | SS                          | 3.3 |
|    | 418007 | M13509    | Hs.83169  | matrix metallop | hemopexin,Peplidase_M10,,SS | 3.2 |
| 30 | 411678 | AI907114  | Hs.71465  | squalene epoxid | Monooxygenase,TM,           | 3.2 |
|    | 422956 | BE545072  | Hs.122579 | hypothetical pr | TM                          | 3.2 |
|    | 450400 | AI694722  | Hs.279744 | ESTs            | TM                          | 3.2 |
|    | 440659 | AF134160  | Hs.7327   | claudin 1       | PMP22_Claudin,TM,SS         | 3.2 |
|    | 418203 | X54942    | Hs.83758  | CDC28 protein k | CKS,TM,                     | 3.1 |
| 35 | 416111 | AA033813  | Hs.79018  | chromatin assem | TM,SS                       | 3.1 |
|    | 445808 | AV655234  | Hs.298083 | ESTs            | sushi,TM,SS                 | 3.1 |
|    | 421340 | F07783    | Hs.1369   | decay accelerat | sushi,,SS                   | 3.1 |
|    | 422689 | AW856665  |           | gb:RC3-CT0297-2 | SNF2_N,TM,                  | 3.1 |
| 40 | 439451 | AF086270  | Hs.278554 | heterochromatin | chromo,Chromo_shadow,,SS    | 3.1 |
|    | 454456 | AW850984  |           | gb:IL3-CT0220-1 | fn3,TM,SS                   | 3.0 |
|    | 429125 | AA446854  | Hs.271004 | ESTs            | TM                          | 3.0 |
|    | 409361 | NM_005982 | Hs.54416  | sine oculis hom | homeobox,,SS                | 3.0 |
|    | 439453 | BE264974  | Hs.6566   | thyroid hormone | AAA,TM,                     | 3.0 |
| 45 | 414696 | AF002020  | Hs.76918  | Niemann-Pick di | Patched,TM,SS               | 3.0 |
|    | 422746 | NM_004484 | Hs.119651 | glypican 3      | Glypican,TM,SS              | 3.0 |
|    | 453775 | NM_002916 | Hs.35120  | replication fac | AAA,TM,SS                   | 3.0 |
|    | 428862 | NM_000346 | Hs.2316   | SRY (sex-determ | HMG_box,TM,                 | 2.9 |
|    | 401747 |           |           |                 | filament,TM,                | 2.9 |
| 50 | 429682 | NM_006306 | Hs.211602 | SMC1 (structura | SMC_C.SMC_N,TM,             | 2.9 |
|    | 413385 | M34455    | Hs.840    | indoleamine-pyr | IDO,TM,                     | 2.9 |
|    | 442961 | BE614474  | Hs.289074 | Homo sapiens cD | TM                          | 2.9 |
|    | 421650 | AA781795  | Hs.122587 | ESTs            | TM                          | 2.9 |
|    | 434398 | AA121098  | Hs.3838   | serum-inducible | pkinese,POLO_box,TM,        | 2.9 |
| 55 | 435705 | W31254    | Hs.7045   | GL004 protein   | PDEase,TM,                  | 2.9 |
|    | 416065 | BE267931  | Hs.78996  | proliferating c | TM                          | 2.9 |
|    | 423493 | AI815965  | Hs.129683 | ubiquitin-conju | UQ_con,,SS                  | 2.8 |
|    | 430242 | U66669    | Hs.236642 | 3-hydroxyisobut | TM                          | 2.8 |
|    | 411770 | NM_014278 | Hs.71992  | heat shock prot | HSP70,TM,                   | 2.8 |
| 60 | 400440 | X83957    | Hs.83870  | nebulin         | TM                          | 2.8 |
|    | 444743 | AA045648  | Hs.11817  | nudix (nucleosi | mutT,TM,                    | 2.8 |
|    | 417771 | AA804698  | Hs.82547  | retinoic acid r | TM                          | 2.8 |
|    | 430287 | AW182459  | Hs.125759 | ESTs, Weakly si | TM,SS                       | 2.8 |
|    | 408482 | NM_000676 | Hs.45743  | adenosine A2b r | 7tm_1,TM,SS                 | 2.8 |
| 65 | 425188 | AK002052  | Hs.155071 | hypothetical pr | TM                          | 2.8 |
|    | 456999 | AA319798  | Hs.172247 | eukaryotic tran | SS                          | 2.8 |
|    | 408875 | NM_015434 | Hs.48604  | DKFZP434B168 pr | TM                          | 2.8 |
|    | 409012 | AL117435  | Hs.49725  | DKFZP434I216 pr | RhoGEF,TM,                  | 2.7 |
|    | 410762 | AF226053  | Hs.66170  | HSKM-B protein  | zf-MYND,,SS                 | 2.7 |
| 70 | 426925 | NM_001196 | Hs.172894 | BH3 interacting | TM                          | 2.7 |
|    | 410116 | AW630671  | Hs.58636  | squamous cell c | TM,SS                       | 2.7 |
|    | 428398 | AI249368  | Hs.98558  | ESTs            | SS                          | 2.7 |
|    | 412140 | AA219691  | Hs.73625  | RAB6 interactin | kinesin,TM,SS               | 2.7 |
|    | 456655 | AI376736  | Hs.111779 | secreted protei | kazal,,SS                   | 2.7 |
| 75 | 408670 | AF160967  | Hs.46784  | potassium large | TM,SS                       | 2.7 |
|    | 422576 | BE548555  | Hs.118554 | CGI-83 protein  | lactamase_B,,SS             | 2.7 |
|    | 431379 | AA504264  | Hs.182937 | peptidylprolyl  | TM                          | 2.7 |
|    | 433183 | AF231338  | Hs.222024 | transcription f | HLH,PAS,TM,SS               | 2.7 |
|    | 432328 | AI572739  | Hs.195471 | 6-phosphofructo | PGAM6PF2K,TM,               | 2.7 |
| 80 | 407633 | NM_007069 | Hs.37189  | similar to rat  | TM,SS                       | 2.6 |
|    | 419216 | AU076718  | Hs.164021 | small inducible | IL8,TM,SS                   | 2.6 |
|    | 422363 | T55979    | Hs.115474 | replication fac | TM                          | 2.6 |
|    | 401644 |           |           |                 | zf-C2H2,TM,                 | 2.6 |
|    | 417479 | AI057052  | Hs.133554 | ESTs            | CARD,TM,                    | 2.6 |

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|    |        |           |           |                 |                                  |     |
|----|--------|-----------|-----------|-----------------|----------------------------------|-----|
| 5  | 426514 | BE616633  | Hs.301122 | bone morphogene | TGF-beta,TGFb_propeptide,TM,SS   | 2.6 |
|    | 400289 | X07820    | Hs.2258   | matrix metallo  | hemopexin,,SS                    | 2.6 |
|    | 418478 | U38945    | Hs.1174   | cyclin-dependen | ank,TM,SS                        | 2.6 |
|    | 421246 | AW582962  | Hs.300961 | ESTs, Highly si | PolyA_pol,TM,                    | 2.6 |
|    | 428048 | AA705745  | Hs.185070 | ESTs            | AMP-binding,TM,                  | 2.6 |
| 10 | 452092 | BE245374  | Hs.27842  | hypothetical pr | Acyltransferase,TM,SS            | 2.6 |
|    | 440052 | AI633744  | Hs.195648 | ESTs            | PAC,TM,SS                        | 2.6 |
|    | 452401 | NM_007115 | Hs.29352  | tumor necrosis  | Xiink,CUB,TM,SS                  | 2.6 |
|    | 451813 | NM_016117 | Hs.27182  | phospholipase A | WD40,,SS                         | 2.6 |
|    | 410889 | X91662    | Hs.56744  | twist (Drosophi | HLH,TM,                          | 2.6 |
| 15 | 422063 | BE156476  |           | gb:QV0-HT0368-0 | SS                               | 2.6 |
|    | 418250 | U29925    | Hs.83918  | adenosine monop | A_deaminase,TM,                  | 2.6 |
|    | 437641 | AA811452  | Hs.291911 | ESTs            | TM                               | 2.6 |
|    | 452571 | W31518    | Hs.34665  | ESTs            | TM                               | 2.6 |
|    | 411984 | NM_005419 | Hs.72988  | signal transduc | SH2,STAT,,SS                     | 2.6 |
| 20 | 426427 | M86699    | Hs.169840 | TTK protein kin | pkinese,TM,                      | 2.6 |
|    | 445848 | AA774824  | Hs.13377  | Homo sapiens cl | TM                               | 2.6 |
|    | 420022 | AA256253  | Hs.120817 | ESTs            | SS                               | 2.6 |
|    | 451418 | BE387790  | Hs.26369  | hypothetical pr | TM                               | 2.6 |
|    | 428953 | AA306610  | Hs.194676 | DKFZP434C013 pr | arf,TNFR_c6,DEAD,Stathmin,TM,SS  | 2.6 |
| 25 | 424008 | R02740    | Hs.137555 | putative chemok | 7tm_1,TM,                        | 2.6 |
|    | 417863 | AB000450  | Hs.82771  | vaccinia relate | pkinese,TM,SS                    | 2.6 |
|    | 436961 | AW375974  | Hs.156704 | ESTs            | TM                               | 2.5 |
|    | 413670 | AB000115  | Hs.75470  | hypothetical pr | TM                               | 2.5 |
|    | 421928 | AF013758  | Hs.109643 | polyadenylate b | SS                               | 2.5 |
| 30 | 439963 | AW247529  | Hs.6793   | platelet-activa | PAF-AH,HMG_box,pkinese,TM,       | 2.5 |
|    | 426711 | AA383471  | Hs.180669 | conserved gene  | TM                               | 2.5 |
|    | 422631 | BE218919  | Hs.118793 | hypothetical pr | TM                               | 2.5 |
|    | 417866 | AW067903  | Hs.82772  | collagen, type  | TSPN,Collagen,COLFI,,SS          | 2.5 |
|    | 416975 | NM_004131 | Hs.1051   | granzyme B (gra | trypsin,,SS                      | 2.5 |
| 35 | 415947 | U04045    | Hs.78934  | mutS (E. coli)  | MutS_C,MutS_N,TM,                | 2.5 |
|    | 454678 | AW813089  |           | gb:RC3-ST0186-2 | TPR,Ribosomal_SS,TM,SS           | 2.5 |
|    | 426572 | AB037783  | Hs.170623 | hypothetical pr | PH,FYVE,TM,                      | 2.5 |
|    | 428264 | AA424839  | Hs.98484  | ESTs, Weakly si | TM                               | 2.5 |
|    | 444478 | W07318    | Hs.240    | M-phase phospho | kinesin,,SS                      | 2.5 |
| 40 | 442295 | AI827248  | Hs.224398 | Homo sapiens cD | Collagen,COLFI,vwc,TM,SS         | 2.5 |
|    | 410094 | BE147897  | Hs.58593  | general transcr | TFIIF_bela,TM,                   | 2.4 |
|    | 413998 | AW103807  | Hs.243933 | ESTs            | TPR,TM,SS                        | 2.4 |
|    | 412281 | AI810054  | Hs.14119  | ESTs            | Ribosomal_S7e,TM,                | 2.4 |
|    | 446852 | AW451643  | Hs.257479 | ESTs, Weakly si | TM                               | 2.4 |
| 45 | 408915 | NM_016651 | Hs.48950  | heptacellular c | TM,SS                            | 2.4 |
|    | 442991 | BE281238  | Hs.8886   | hypothetical pr | TM                               | 2.4 |
|    | 410193 | AJ132592  | Hs.59757  | zinc finger pro | zf-C2H2,TM,                      | 2.4 |
|    | 410664 | NM_006033 | Hs.65370  | lipase, endothe | Ribosomal_L22,lipase,PLAT,TM,SS  | 2.4 |
|    | 423453 | AW450737  | Hs.128791 | CGI-09 protein  | Granin,CDP-OH_P_transf,TM,       | 2.4 |
| 50 | 411598 | BE336654  | Hs.70937  | H3 histone fami | histone,,SS                      | 2.4 |
|    | 429663 | M68874    | Hs.211587 | phospholipase A | C2,PLA2_B,TM,                    | 2.4 |
|    | 428242 | H55709    | Hs.2250   | leukemia inhibi | LIF_OSM,,SS                      | 2.4 |
|    | 419559 | Y07828    | Hs.91096  | ring finger pro | zf-C3HC4,zf-B_box,TM,            | 2.4 |
|    | 419839 | U24577    | Hs.93304  | phospholipase A | SS                               | 2.4 |
| 55 | 402819 |           |           |                 | IBR,TM,                          | 2.4 |
|    | 431457 | NM_012211 | Hs.256297 | integrin, alpha | FG-GAP,vwa,TM,SS                 | 2.4 |
|    | 443683 | BE241717  | Hs.9676   | uncharacterized | DUF157,TM,                       | 2.4 |
|    | 422158 | L10343    | Hs.112341 | protease inhibi | wap,,SS                          | 2.4 |
|    | 423217 | NM_000094 | Hs.1640   | collagen, type  | fn3,Collagen,Kunitz_BPTI,vwa,,SS | 2.4 |
| 60 | 408321 | AW405882  | Hs.44205  | corbistatin     | TM                               | 2.4 |
|    | 419086 | NM_000216 | Hs.89591  | Kallmann syndro | fn3,wap,,SS                      | 2.4 |
|    | 427722 | AK000123  | Hs.180479 | hypothetical pr | PH,,SS                           | 2.4 |
|    | 405454 |           |           |                 | TM                               | 2.4 |
|    | 422168 | AA586894  | Hs.112408 | S100 calcium-bi | efhand,TM,                       | 2.3 |
| 65 | 421462 | AF016495  | Hs.104624 | aquaporin 9     | MIP,TM,                          | 2.3 |
|    | 403416 | AJ744626  | Hs.301506 | ESTs, Highly si | SS                               | 2.3 |
|    | 448988 | Y09763    | Hs.22785  | gamma-aminobuty | neur_chan,TM,SS                  | 2.3 |
|    | 423198 | M81933    | Hs.1634   | cell division c | Rhodanese,,SS                    | 2.3 |
|    | 419926 | AW900992  | Hs.93796  | DKFZP586D2223 p | SS                               | 2.3 |
| 70 | 429992 | AL050053  | Hs.227397 | Homo sapiens mR | fn3,TM,SS                        | 2.3 |
|    | 446232 | AI281848  | Hs.165547 | ESTs            | 7tm_3,TM,                        | 2.3 |
|    | 422493 | AW474183  | Hs.233816 | ESTs            | TM                               | 2.3 |
|    | 407047 | X65965    |           | gb:H.sapiens SO | sodfe,TM,                        | 2.3 |
|    | 411096 | U80034    | Hs.68583  | mitochondrial i | Peptidase_M3,,                   | 2.3 |
| 75 | 426457 | AW894667  | Hs.169965 | chimerin (chima | DAG_PE-bind,RhoGAP,TM,           | 2.3 |
|    | 446545 | AI431798  | Hs.164192 | ESTs, Weakly si | TM                               | 2.3 |
|    | 422094 | AF129535  | Hs.272027 | F-box only prot | TM                               | 2.3 |
|    | 421933 | R98881    | Hs.109655 | sex comb on mid | SAM,TM,                          | 2.3 |
|    | 430001 | AI580056  | Hs.98992  | ESTs            | TM                               | 2.3 |
| 80 | 420802 | U22376    | Hs.1334   | v-myb avian mye | TM                               | 2.3 |
|    | 402053 |           |           |                 | gpdh,,SS                         | 2.3 |
|    | 432743 | AI146966  | Hs.101656 | ESTs            | SS                               | 2.3 |
|    | 433409 | AI278802  | Hs.25661  | ESTs            | PWWP,PHD,bromodomain,TM,         | 2.3 |
|    | 408330 | AW182602  | Hs.249954 | ESTs            | TM,SS                            | 2.3 |
| 80 | 407807 | AL031427  | Hs.40094  | Human DNA seque | T4_deiodinase,TM,                | 2.3 |
|    | 436972 | AA284679  | Hs.25640  | claudin 3       | PMP22_Claudin,TM,SS              | 2.3 |
|    | 433730 | AK002135  | Hs.3542   | hypothetical pr | TM,SS                            | 2.3 |



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|    |        |           |           |                  |  |     |
|----|--------|-----------|-----------|------------------|--|-----|
|    | 414839 | X63692    | Hs.77462  | DNA (cytosine-5  | zf-CXXC,BAH,TM,SS                            | 2.3 |
|    | 438192 | AI859065  | Hs.16808  | ESTs, Weakly si  | TM,SS  | 2.3 |
|    | 415339 | NM_015156 | Hs.78398  | KIAA0071 protei  | ELM2,TM,                                     | 2.3 |
| 5  | 449539 | W80363    | Hs.58446  | ESTs             | pkinae,Furin-like,Recep_L_domain,TM,SS       | 2.2 |
|    | 450956 | AW193531  | Hs.205647 | ESTs, Moderatel  | pkinae,TM,SS                                 | 2.2 |
|    | 430335 | D80007    | Hs.239499 | KIAA0185 protei  | S1,TM,                                       | 2.2 |
|    | 417849 | AW291587  | Hs.82733  | nidogen 2        | EGF,Igf1_recept_b,thyroglobulin_1,TM,SS      | 2.2 |
|    | 412326 | R07566    | Hs.73817  | small inducible  | IL8,,SS                                      | 2.2 |
| 10 | 408349 | BE546947  | Hs.44276  | homeo box C10    | homeobox,TM,                                 | 2.2 |
|    | 424704 | AI263293  | Hs.152096 | cytochrome P450  | p450,,SS                                     | 2.2 |
|    | 409632 | W74001    | Hs.55279  | serine (or cyst  | serpin,TM,                                   | 2.2 |
|    | 415323 | BE269352  | Hs.949    | neutrophil cyto  | SH3,TPR,TM,                                  | 2.2 |
|    | 417531 | NM_003157 | Hs.1087   | serine/threonin  | pkinae,TM,                                   | 2.2 |
|    | 403137 |           |           |                  | rmn,TM,SS                                    | 2.2 |
| 15 | 426479 | Y00272    | Hs.184572 | cell division c  | pkinae,TM,SS                                 | 2.2 |
|    | 430200 | BE513337  | Hs.234896 | geminin          | TM,SS  | 2.2 |
|    | 425390 | AI092634  | Hs.156114 | protein tyrosin  | ig_Opioids_neuropep,TM,SS                    | 2.2 |
|    | 408380 | AF123050  | Hs.44532  | diubiquitin      | ubiquitin,7tm_3,ANF_receptor,sushi,7tm_1,TM, | 2.2 |
| 20 | 424244 | AI186431  | Hs.116577 | prostate differ  | TGF-beta,SS                                  | 2.2 |
|    | 400298 | AA032279  | Hs.61635  | six transmembra  | TM   | 2.2 |
|    | 411571 | AA122393  | Hs.70811  | hypothetical pr  | SS   | 2.2 |
|    | 412802 | AA1518    | Hs.74602  | aquaporin 1 (ch  | MIP,TM,                                      | 2.2 |
|    | 414761 | AU077228  | Hs.77256  | enhancer of zes  | SET,TM,                                      | 2.2 |
| 25 | 408432 | AW195262  |           | gb:xn67b05.x1 N  | TM,SS  | 2.2 |
|    | 429568 | AI088691  | Hs.208414 | Homo sapiens mR  | mito_carr,TM,                                | 2.2 |
|    | 425300 | AW601773  | Hs.270259 | ESTs             | TM   | 2.2 |
|    | 439653 | AW021103  | Hs.6631   | hypothetical pr  | TM,SS  | 2.2 |
|    | 426827 | AW067805  | Hs.172665 | methylenetetrah  | THF_DHG_CYH,FTHS,TM,                         | 2.2 |
| 30 | 444514 | AI682905  | Hs.270431 | ESTs, Weakly si  | cNMP_binding,TM,SS                           | 2.2 |
|    | 425322 | U63630    | Hs.155637 | protein kinase,  | MCM,TM,                                      | 2.2 |
|    | 421662 | NM_014141 | Hs.106552 | cell recognitio  | laminin_G,TM,SS                              | 2.2 |
|    | 438788 | AA825716  |           | gb:od29e10.s1 N  | ank,death,RHD,TM,                            | 2.2 |
|    | 429058 | AF138863  | Hs.194827 | hypothetical pr  | TM   | 2.2 |
| 35 | 423104 | AJ005273  | Hs.123647 | antigenic deter  | TM   | 2.2 |
|    | 410406 | AI969703  | Hs.301842 | ESTs             | FGGY,TM,                                     | 2.2 |
|    | 421379 | Y15221    | Hs.103982 | small inducible  | IL8,TM,SS                                    | 2.2 |
|    | 422809 | AK001379  | Hs.121028 | hypothetical pr  | IQ,TM,                                       | 2.2 |
|    | 418049 | AA211467  | Hs.190488 | hypothetical pr  | TM   | 2.2 |
| 40 | 436209 | AW850417  | Hs.254020 | ESTs, Moderatel  | TM,SS  | 2.2 |
|    | 408042 | AL049233  | Hs.42244  | Homo sapiens mR  | TM   | 2.2 |
|    | 425692 | D90041    | Hs.155956 | N-acetyltransfe  | Acetyltransf2,TM,                            | 2.2 |
|    | 409665 | NM_006731 | Hs.55777  | Fukuyama type c  | SS   | 2.2 |
|    | 428157 | AI738719  | Hs.298658 | ESTs             | hexokinase,TM,                               | 2.2 |
| 45 | 410480 | R97457    | Hs.63984  | cadherin 13, H-  | cadherin,TM,SS                               | 2.2 |
|    | 429732 | U20158    | Hs.2488   | lymphocyte cyto  | SH2,TM,                                      | 2.2 |
|    | 414747 | U30872    | Hs.77204  | centromere prot  | SS   | 2.2 |
|    | 425843 | BE313280  | Hs.159627 | death associate  | TM   | 2.2 |
|    | 445299 | AI910382  | Hs.118727 | Homo sapiens cD  | HLH,TM,                                      | 2.1 |
| 50 | 436251 | BE515065  | Hs.5092   | nucleolar prote  | Nop,TM,SS                                    | 2.1 |
|    | 430066 | AI929659  | Hs.237825 | signal recogniti | TPR,,SS                                      | 2.1 |
|    | 427528 | AU077143  | Hs.179565 | minichromosome   | MCM,TM,SS                                    | 2.1 |
|    | 448089 | AI467945  | Hs.173696 | ESTs             | TM,SS  | 2.1 |
|    | 428728 | NM_016625 | Hs.191381 | hypothetical pr  | TM   | 2.1 |
| 55 | 409929 | R38772    | Hs.172619 | KIAA1106 protei  | TM   | 2.1 |
|    | 405264 |           |           |                  | SS   | 2.1 |
|    | 445625 | BE246743  | Hs.288529 | Homo sapiens cD  | TM   | 2.1 |
|    | 408949 | AF189011  | Hs.49163  | putative ribonu  | Ribonuclease_3,TM,SS                         | 2.1 |
|    | 424513 | BE385864  | Hs.149894 | mitochondrial t  | GTP_EFTU,IF2,TM,                             | 2.1 |
| 60 | 433683 | AI817723  | Hs.22678  | hypothetical pr  | SS   | 2.1 |
|    | 442952 | AI743261  | Hs.131860 | ESTs             | TM   | 2.1 |
|    | 432378 | AI493046  | Hs.146133 | ESTs             | TM   | 2.1 |
|    | 417979 | AU077284  | Hs.83081  | GTP cyclohydrol  | TM,SS  | 2.1 |
|    | 433849 | BE465884  | Hs.280728 | ESTs             | SS   | 2.1 |
| 65 | 437928 | NM_005476 | Hs.5920   | UDP-N-acetylglu  | ROK,Epimerase_2,TM,                          | 2.1 |
|    | 403055 |           |           |                  | filament,TM,SS                               | 2.1 |
|    | 432840 | AK001403  | Hs.279521 | hypothetical pr  | TM   | 2.1 |
|    | 418994 | AA296520  | Hs.89546  | selectin E (end  | EGF,lectin_c,sushi,TM,SS                     | 2.1 |
|    | 440908 | AI915225  | Hs.126735 | ESTs             | TM   | 2.1 |
| 70 | 417621 | AV654694  | Hs.82316  | interferon-indu  | TM   | 2.1 |
|    | 436895 | AF037335  | Hs.5338   | carbonic anhydr  | carb_anhydrase,TM,SS                         | 2.1 |
|    | 408420 | NM_006915 | Hs.299481 | Homo sapiens mR  | TM   | 2.1 |
|    | 434064 | AL049045  | Hs.180758 | hypothetical pr  | cadherin,TM,SS                               | 2.1 |
|    | 404076 |           |           |                  | RmaAD,TM,                                    | 2.1 |
| 75 | 422515 | AW500470  | Hs.117950 | multifunctional  | AIRC,SAICAR_synt,TM,                         | 2.1 |
|    | 445867 | AF272663  | Hs.13405  | gephyrin         | MoCF_biosynth,TM,                            | 2.1 |
|    | 441021 | AW578716  | Hs.7644   | H1 histone fami  | linker_histone,TM,                           | 2.1 |
|    | 446595 | T57448    | Hs.15467  | hypothetical pr  | TM,SS  | 2.1 |
|    | 417515 | L24203    | Hs.82237  | ataxia-telangie  | zf-B_box,,SS                                 | 2.1 |
| 80 | 412429 | AV650262  | Hs.75765  | GRO2 oncogene    | IL8,TM,SS                                    | 2.1 |
|    | 449207 | AL044222  | Hs.23255  | nucleoporin 155  | TM,SS  | 2.1 |
|    | 412095 | AI624707  | Hs.5921   | Homo sapiens cD  | TM,SS  | 2.1 |
|    | 400861 |           |           |                  | pkinae,TM,                                   | 2.1 |
|    | 440591 | AA431599  | Hs.132799 | Homo sapiens cD  | TM   | 2.1 |

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|    |        |           |           |                   |                                    |     |
|----|--------|-----------|-----------|-------------------|------------------------------------|-----|
|    | 442104 | L20971    | Hs.188    | phosphodiesterase | PDEase,TM,                         | 2.1 |
|    | 446921 | AB012113  | Hs.16530  | small inducible   | IL8,,SS                            | 2.1 |
|    | 446051 | BE048061  | Hs.153315 | ESTs              | Reprolysin,Pep_M12B_propep,TM,SS   | 2.1 |
|    | 422675 | BE018517  | Hs.119140 | eukaryotic tran   | elF-5a,TM,                         | 2.1 |
| 5  | 425170 | AU077315  | Hs.154970 | transcription f   | TM                                 | 2.1 |
|    | 453751 | R36762    | Hs.101282 | Homo sapiens mR   | TM                                 | 2.1 |
|    | 426283 | NM_003937 | Hs.169139 | kynureninase (L   | TM                                 | 2.1 |
|    | 417874 | BE616160  | Hs.82829  | protein tyrosin   | Y_phosphatase,TM,                  | 2.1 |
|    | 449555 | AW450288  | Hs.195390 | ESTs              | TM                                 | 2.1 |
| 10 | 439699 | AF086534  | Hs.187561 | ESTs, Moderate    | TM                                 | 2.1 |
|    | 427413 | BE547647  | Hs.177781 | superoxide dism   | sodfe,TM,                          | 2.1 |
|    | 407802 | D84145    | Hs.39913  | novel RGD-conta   | hexapep,TM,SS                      | 2.0 |
|    | 446035 | NM_006558 | Hs.13565  | Sam68-like phos   | TM                                 | 2.0 |
|    | 406981 | S71129    | Hs.296844 | Acetylcholinest   | COesterase,TM,SS                   | 2.0 |
| 15 | 432343 | NM_002960 | Hs.2961   | S100 calcium-bi   | S_100,efhand,TM,SS                 | 2.0 |
|    | 414890 | BE281095  | Hs.77573  | uridine phospho   | PNP_UDP_1,TM,SS                    | 2.0 |
|    | 423019 | AI640185  | Hs.225816 | ESTs              | SS                                 | 2.0 |
|    | 422278 | AF072873  | Hs.114218 | frizzled (Droso   | Fz,Frizzled,TM,SS                  | 2.0 |
|    | 405545 |           |           |                   | ABC_tran,ABC_membrane,TM,SS        | 2.0 |
| 20 | 446237 | AW270515  | Hs.149596 | ESTs              | bZIP,TM,                           | 2.0 |
|    | 428074 | BE387770  | Hs.182378 | colony stimulat   | SS                                 | 2.0 |
|    | 423430 | AF112481  | Hs.128501 | RAD54, S. cerev   | SNF2_N,helicase_C,TM,              | 2.0 |
|    | 435767 | H73505    | Hs.117874 | ESTs              | Peptidase_S8,P,TM,                 | 2.0 |
|    | 432945 | AL043683  | Hs.271357 | ESTs, Weakly si   | PK,,SS                             | 2.0 |
| 25 | 404170 |           |           |                   | sodfe,TM,                          | 2.0 |
|    | 422610 | AF153820  | Hs.1547   | potassium inwar   | IRK,TM,                            | 2.0 |
|    | 417533 | X02308    | Hs.82962  | thymidylate syn   | thymidylat_synt,SS                 | 2.0 |
|    | 441384 | AA447849  | Hs.288660 | protease, serin   | TM                                 | 2.0 |
|    | 414020 | NM_002984 | Hs.75703  | small inducible   | IL8,,SS                            | 2.0 |
| 30 | 427674 | NM_003528 | Hs.2178   | H2B histone fam   | histone,TM,SS                      | 2.0 |
|    | 435425 | H16263    | Hs.31416  | ESTs              | TM                                 | 2.0 |
|    | 429782 | NM_005754 | Hs.220689 | Ras-GTPase-acti   | rm,NTF2,,SS                        | 2.0 |
|    | 417366 | BE185289  | Hs.1076   | small proline-r   | Cornifin,TM,                       | 2.0 |
|    | 426746 | J03626    | Hs.2057   | uridine monopho   | Pribosyltran,OMPdecase,TM,         | 2.0 |
| 35 | 432677 | NM_004482 | Hs.278611 | UDP-N-acetyl-al   | Glycos_transf_2,Ricin_B_lectin,TM, | 2.0 |

TABLE 43B:

Pkey: Unique Eos probeset identifier number  
 CAT number: Gene cluster number  
 Accession: Genbank accession numbers

|    |        |            |   |
|----|--------|------------|---|
|    | Pkey   | CAT number | Accession   |
|    | 408432 | 1058667_1  | AW195262 R27868 AW811262  |
|    | 411560 | 1249443_1  | AW851186 AW996967 BE143456  |
| 45 | 422063 | 210852_1   | BE156476 BE156473 BE156474 BE156475 AA302839                            |
|    | 422285 | 214669_1   | AI803103 AI885143 AW470793 AW450703 AI090784 AW271587 AW236950 AW242783 |
|    | 422689 | 219896_1   | AW856665 AA315006 AW954733  |
|    | 423871 | 232749_1   | AA331906 AA332484   |
|    | 438788 | 465159_1   | AA825716 AW978859 AA828841  |
| 50 | 454456 | 1207088_1  | AW850984 AW752836 M86124  |
|    | 454678 | 1228915_1  | AW813089 W28102   |

TABLE 43C:

Pkey: Unique number corresponding to an Eos probeset  
 Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.  
 Strand: Indicates DNA strand from which exons were predicted.  
 NT\_position: Indicates nucleotide positions of predicted exons.

|    |        |         |        |   |
|----|--------|---------|--------|---|
|    | Pkey   | Ref     | Strand | NT_position   |
|    | 400861 | 9757506 | Plus   | 163855-164016   |
|    | 401644 | 8576138 | Plus   | 82655-83959   |
|    | 401747 | 9789672 | Minus  | 118596-118816,119119-119244,119609-119761,120422-120990,130161-130381,130468-130593,131097-131258,131866-131932,132451-132575,133580-134011 |
| 65 | 402053 | 8083229 | Plus   | 62703-63179   |
|    | 402819 | 6729581 | Plus   | 29217-29422   |
|    | 403055 | 8748904 | Minus  | 109532-110225   |
|    | 403137 | 9211494 | Minus  | 92349-92572,92958-93084,93579-93712,93949-94072,94591-94748,95214-95337   |
|    | 403776 | 7770611 | Minus  | 1414-1513,1624-1756   |
| 70 | 404076 | 9931752 | Minus  | 3848-3967   |
|    | 404170 | 9930793 | Plus   | 168836-169248   |
|    | 405264 | 7329374 | Plus   | 28556-28684   |
|    | 405454 | 7656675 | Plus   | 133807-134053   |
|    | 405545 | 1054740 | Plus   | 118677-118807,119091-119296,121626-121823   |
| 75 | 406434 | 9256651 | Minus  | 17803-17931   |

TABLE 44A: ABOUT 314 GENES DOWN-REGULATED IN STOMACH CANCER

Table 44A lists about 314 genes significantly down-regulated in stomach cancer compared to normal stomach. These were selected as for Table 42A, except that the numerator and denominator were switched.

Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number

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|    | Unigene Title:<br>R1: | Unigene gene title<br>Ratio of tumor to normal tissue |           |  |      |
|----|-----------------------|---|-----------|--|------|
|    | Pkey                  | ExAccn  | UnigeneID | Unigene Title                            | R1   |
| 5  | 412859                | NM_000705   | Hs.813    | ATPase, H+/K+ exchanging, beta polypepti | 0.01 |
|    | 415447                | Z97171  | Hs.78454  | myocilin, trabecular meshwork inducible  | 0.05 |
|    | 427469                | AA403084  | Hs.269347 | ESTs                                     | 0.05 |
|    | 407486                | S69741  |           | gb:hSCG-3=stomach cancer gene-3 (oncogen | 0.06 |
|    | 428602                | AL137479  | Hs.186655 | Homo sapiens mRNA; cDNA DKFZp434M0223 (f | 0.06 |
| 10 | 402761                | BE387621  | Hs.108809 | chaperonin containing TCP1, subunit 7 (e | 0.07 |
|    | 443547                | AW271273  | Hs.23767  | Homo sapiens cDNA FLJ12666 fis, clone NT | 0.07 |
|    | 430130                | AL137311  | Hs.234074 | Homo sapiens mRNA; cDNA DKFZp761G02121 ( | 0.07 |
|    | 435473                | N53550  | Hs.260881 | ESTs                                     | 0.07 |
|    | 455826                | BE144228  |           | gb:MR0-HT0165-140200-009-d04 HT0165 Homo | 0.07 |
| 15 | 402015                |   |           |  | 0.08 |
|    | 430664                | AW969834  |           | gb:EST381912 MAGE resequences, MAGK Homo | 0.09 |
|    | 444515                | AW204908  | Hs.169979 | ESTs                                     | 0.09 |
|    | 429201                | X03178  | Hs.198246 | group-specific component (vitamin D bind | 0.10 |
|    | 434424                | A1811202  | Hs.125365 | Homo sapiens cDNA: FLJ23523 fis, clone L | 0.10 |
| 20 | 450940                | A1744943  | Hs.300744 | ESTs, Moderately similar to ALU7_HUMAN A | 0.10 |
|    | 400811                | AF219139  | Hs.87726  | KIAA0154 protein; ADP-ribosylation facto | 0.10 |
|    | 424596                | AB020639  | Hs.151017 | estrogen-related receptor gamma          | 0.11 |
|    | 403670                |   |           |  | 0.11 |
|    | 410234                | NM_003837   | Hs.61255  | fructose-1,6-bisphosphatase 2            | 0.12 |
| 25 | 407462                | AJ252011  |           | gb:Homo sapiens partial mRNA for amilori | 0.13 |
|    | 405110                |   |           |  | 0.13 |
|    | 402760                |   |           |  | 0.13 |
|    | 408947                | AL080093  | Hs.49117  | Homo sapiens mRNA; cDNA DKFZp564N1662 (f | 0.13 |
|    | 413724                | AA131466  | Hs.23767  | Homo sapiens cDNA FLJ12666 fis, clone NT | 0.14 |
| 30 | 431514                | AW972363  |           | gb:EST384454 MAGE resequences, MAGL Homo | 0.14 |
|    | 451103                | R52804  | Hs.25956  | DKFZP564D206 protein                     | 0.14 |
|    | 452033                | AW273741  | Hs.246977 | ESTs                                     | 0.16 |
|    | 440058                | A1932662  | Hs.164073 | ESTs                                     | 0.16 |
|    | 405645                |   |           |  | 0.17 |
| 35 | 429093                | NM_000253   | Hs.195799 | microsomal triglyceride transfer protein | 0.17 |
|    | 445627                | AW818475  | Hs.7363   | ESTs                                     | 0.19 |
|    | 425679                | X05997  | Hs.159177 | lipase, gastric                          | 0.19 |
|    | 417296                | L36196  | Hs.81884  | sulfotransferase family, cytosolic, 2A,  | 0.19 |
|    | 443537                | D13305  | Hs.203    | cholecystokinin B receptor               | 0.20 |
| 40 | 435654                | AW139612  | Hs.131041 | ESTs                                     | 0.20 |
|    | 406326                |   |           |  | 0.20 |
|    | 454120                | AB032990  | Hs.40719  | hypothetical protein KIAA1164            | 0.20 |
|    | 455541                | AW993005  |           | gb:RC2-BN0032-160200-013-d04 BN0032 Homo | 0.21 |
|    | 453989                | M63962  | Hs.36992  | ATPase, H+/K+ exchanging, alpha polypept | 0.23 |
| 45 | 407261                | L03172  |           | gb:Homo sapiens cell-type T-cell immunog | 0.23 |
|    | 451062                | AL110125  | Hs.25910  | Homo sapiens mRNA; cDNA DKFZp564C1416 (f | 0.23 |
|    | 429350                | A1754634  | Hs.131987 | ESTs                                     | 0.23 |
|    | 411021                | F00055  | Hs.172004 | titin                                    | 0.24 |
|    | 441212                | AW242447  | Hs.146182 | ESTs, Weakly similar to lactase phlorizi | 0.24 |
| 50 | 450572                | A1700863  | Hs.202494 | Homo sapiens cDNA FLJ13245 fis, clone OV | 0.25 |
|    | 444922                | A1921750  | Hs.144871 | Homo sapiens cDNA FLJ13752 fis, clone PL | 0.26 |
|    | 421562                | AA530994  | Hs.105803 | ghrelin precursor                        | 0.26 |
|    | 457432                | NM_005136   | Hs.268538 | potassium voltage-gated channel, Isk-rel | 0.26 |
|    | 418421                | R58620  | Hs.85050  | phospholamban                            | 0.26 |
| 55 | 424104                | AA669515  | Hs.144950 | ESTs                                     | 0.26 |
|    | 422582                | AA312660  |           | gb:EST183335 Jurkat T-cells VI Homo sapi | 0.26 |
|    | 417332                | AW972717  | Hs.288462 | Homo sapiens cDNA: FLJ21511 fis, clone C | 0.27 |
|    | 432440                | X63597  | Hs.2996   | sucrase-isomaltase                       | 0.27 |
|    | 448520                | AB002367  | Hs.21355  | doublecortin and CaM kinase-like 1       | 0.28 |
| 60 | 401989                |   |           |  | 0.28 |
|    | 452528                | AA742457  | Hs.291479 | ESTs                                     | 0.28 |
|    | 412569                | H63789  | Hs.296288 | ESTs, Weakly similar to KIAA0638 protein | 0.28 |
|    | 434779                | AF153815  | Hs.50151  | potassium inwardly-rectifying channel, s | 0.28 |
|    | 406255                |   |           |  | 0.29 |
| 65 | 419293                | AA746282  | Hs.255659 | ESTs                                     | 0.29 |
|    | 428649                | AL045716  | Hs.188228 | Homo sapiens cDNA FLJ11003 fis, clone PL | 0.29 |
|    | 410036                | R57171  | Hs.57975  | calsequestrin 2, cardiac muscle          | 0.29 |
|    | 414502                | AL133721  | Hs.224680 | ESTs                                     | 0.29 |
|    | 432113                | AA935065  | Hs.152385 | ESTs                                     | 0.29 |
| 70 | 413808                | J00287  | Hs.182183 | caldesmon 1                              | 0.29 |
|    | 451406                | A1694320  | Hs.6295   | ESTs, Weakly similar to T17248 hypotheti | 0.29 |
|    | 434745                | AW974445  | Hs.185155 | ESTs, Weakly similar to HuEMAP (H sapien | 0.30 |
|    | 420444                | A1905985  | Hs.111805 | ESTs                                     | 0.30 |
|    | 445200                | AA084460  | Hs.12409  | somatostatin                             | 0.30 |
| 75 | 415314                | N88802  | Hs.5422   | glycoprotein M6B                         | 0.30 |
|    | 427019                | AA001732  | Hs.173233 | hypothetical protein FLJ10970            | 0.30 |
|    | 431152                | AW970998  |           | gb:EST383083 MAGE resequences, MAGK Homo | 0.30 |
|    | 432306                | Y18207  | Hs.274315 | protein phosphatase 1, regulatory (inhib | 0.31 |
|    | 401775                |   |           |  | 0.31 |
| 80 | 440059                | AW467335  | Hs.257676 | ESTs                                     | 0.31 |
|    | 436089                | AA804957  | Hs.119840 | ESTs                                     | 0.31 |
|    | 447071                | AW236867  | Hs.244376 | ESTs                                     | 0.32 |
|    | 435604                | AA625279  | Hs.26892  | uncharacterized bone marrow protein BM04 | 0.32 |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
| 5  | 423968 | AF098277  | Hs.136529 | solute carrier family 23 (nucleobase tra | 0.32 |
|    | 445487 | AI806287  | Hs.201217 | ESTs                                     | 0.32 |
|    | 421296 | NM_002666 | Hs.103253 | perilipin                                | 0.32 |
|    | 427138 | N77624    | Hs.173717 | phosphatidic acid phosphatase type 2B    | 0.33 |
|    | 449916 | T60525    | Hs.299221 | ESTs                                     | 0.33 |
| 10 | 446393 | AW014174  | Hs.151707 | ESTs                                     | 0.33 |
|    | 446632 | AI333565  | Hs.159073 | diacylglycerol kinase, eta               | 0.33 |
|    | 428070 | T63918    | Hs.182313 | retinol-binding protein 2, cellular      | 0.33 |
|    | 421451 | AA291377  | Hs.50831  | ESTs                                     | 0.33 |
|    | 405817 |           |           |  | 0.33 |
| 15 | 454790 | AW820852  |           | gb:RC2-ST0301-120200-011-f12 ST0301 Homo | 0.33 |
|    | 413679 | BE156765  |           | gb:RC1-HT0370-120100-012-c09 HT0370 Homo | 0.34 |
|    | 404121 |           |           |  | 0.34 |
|    | 433084 | M18079    | Hs.282265 | fatty acid binding protein 2, intestinal | 0.34 |
|    | 413079 | BE064382  |           | gb:RC4-BT0310-110300-015-c12 BT0310 Homo | 0.34 |
| 20 | 403059 |           |           |  | 0.35 |
|    | 458987 | AW750067  | Hs.205386 | ESTs                                     | 0.35 |
|    | 429609 | AF002245  | Hs.210863 | cell adhesion molecule with homology to  | 0.35 |
|    | 423371 | AU076819  | Hs.1650   | solute carrier family 26, member 3       | 0.35 |
|    | 424765 | AA428211  | Hs.284256 | hypothetical protein FLJ14033 similar to | 0.35 |
| 25 | 451818 | AI819018  |           | gb:ts54f01.x1 NCI_CGAP_Kid8 Homo sapiens | 0.35 |
|    | 438380 | T06430    | Hs.6194   | chondroitin sulfate proteoglycan BEHAB/b | 0.35 |
|    | 405742 |           |           |  | 0.35 |
|    | 403429 |           |           |  | 0.35 |
|    | 443622 | AI911527  | Hs.11805  | ESTs                                     | 0.36 |
| 30 | 404973 |           |           |  | 0.36 |
|    | 444567 | AV654020  | Hs.184261 | ESTs, Weakly similar to putative type II | 0.36 |
|    | 412228 | AW503785  | Hs.73792  | complement component (3d/Epstein Barr vi | 0.36 |
|    | 407110 | AA018042  | Hs.95078  | ESTs                                     | 0.36 |
|    | 411671 | BE049094  | Hs.278567 | ESTs                                     | 0.36 |
| 35 | 430800 | NM_000805 | Hs.2681   | gastrin                                  | 0.36 |
|    | 454560 | AW807281  |           | gb:MR4-ST0062-240300-003-g01 ST0062 Homo | 0.36 |
|    | 444536 | AI161068  | Hs.14780  | ESTs                                     | 0.36 |
|    | 454042 | H22570    | Hs.172572 | hypothetical protein FLJ20093            | 0.37 |
|    | 444102 | AV647953  | Hs.282379 | ESTs                                     | 0.37 |
| 40 | 424122 | AA335593  | Hs.116147 | ESTs                                     | 0.37 |
|    | 452093 | AA447453  | Hs.27860  | Homo sapiens mRNA; cDNA DKFZp586M0723 (f | 0.37 |
|    | 436277 | R88520    | Hs.120917 | ESTs                                     | 0.37 |
|    | 456350 | BE246762  | Hs.89499  | arachidonate 5-lipoxygenase              | 0.37 |
|    | 451027 | AW519204  | Hs.40808  | ESTs                                     | 0.37 |
| 45 | 426784 | U03749    | Hs.172216 | chromogranin A (parathyroid secretory pr | 0.38 |
|    | 410023 | AB017169  | Hs.57929  | slit (Drosophila) homolog 3              | 0.38 |
|    | 436802 | N34486    | Hs.170504 | ESTs                                     | 0.38 |
|    | 448142 | AI521768  | Hs.164586 | ESTs                                     | 0.38 |
|    | 442378 | R54033    | Hs.21245  | ESTs                                     | 0.38 |
| 50 | 446406 | AI553681  | Hs.25248  | ESTs                                     | 0.38 |
|    | 455753 | BE075124  |           | gb:PM1-BT0585-110200-003-h02 BT0585 Homo | 0.38 |
|    | 424903 | T26477    | Hs.22883  | ESTs, Weakly similar to ALU8_HUMAN ALU S | 0.38 |
|    | 406714 | AI219304  | Hs.283108 | hemoglobin, gamma G                      | 0.39 |
|    | 434340 | AI193043  | Hs.128685 | ESTs                                     | 0.39 |
| 55 | 406036 |           |           |  | 0.39 |
|    | 431078 | U82827    | Hs.249195 | homeo box A13                            | 0.39 |
|    | 457663 | AW371946  | Hs.116119 | ESTs                                     | 0.39 |
|    | 451880 | AI821032  | Hs.209387 | ESTs                                     | 0.39 |
|    | 419219 | AW583139  | Hs.89717  | carboxypeptidase A2 (pancreatic)         | 0.39 |
| 60 | 446414 | W93246    | Hs.59187  | ESTs                                     | 0.39 |
|    | 442317 | AI915599  | Hs.129225 | ESTs                                     | 0.39 |
|    | 447261 | NM_006691 | Hs.17917  | lymphatic vessel endothelial hyaluronan  | 0.39 |
|    | 439569 | AW602166  | Hs.222399 | CEGP1 protein                            | 0.39 |
|    | 433485 | AI493076  | Hs.78183  | aldo-keto reductase family 1, member C1  | 0.40 |
| 65 | 432753 | NM_014075 | Hs.278915 | PRO0593 protein                          | 0.40 |
|    | 420200 | AI271429  | Hs.88142  | ESTs                                     | 0.40 |
|    | 421863 | AI952677  | Hs.108972 | Homo sapiens mRNA; cDNA DKFZp434P228 (fr | 0.40 |
|    | 453950 | AA156998  | Hs.211568 | eukaryotic translation initiation factor | 0.40 |
|    | 407408 | AF054830  |           | gb:Homo sapiens interleukin-1 type I rec | 0.40 |
| 70 | 410732 | AW984328  |           | gb:PM3-HN0010-050400-001-h12 HN0010 Homo | 0.40 |
|    | 458272 | AI797360  | Hs.264899 | ESTs, Weakly similar to ALU3_HUMAN ALU S | 0.40 |
|    | 401514 | AF147186  |           | gb:AF147186 Homo sapiens library (Schere | 0.40 |
|    | 436363 | AA843926  | Hs.124434 | ESTs                                     | 0.40 |
|    | 434445 | AI349306  | Hs.11782  | ESTs                                     | 0.40 |
| 75 | 413272 | AA127923  | Hs.293256 | ESTs                                     | 0.40 |
|    | 409681 | N51508    | Hs.143718 | ESTs                                     | 0.40 |
|    | 454554 | AW847505  |           | gb:RC0-CT0210-280999-021-c10 CT0210 Homo | 0.40 |
|    | 450891 | AI743118  | Hs.238914 | ESTs, Weakly similar to neuregulin-4 sho | 0.40 |
|    | 452078 | AA022620  | Hs.52170  | ESTs                                     | 0.41 |
| 80 | 419278 | AU076799  | Hs.1247   | apolipoprotein A-IV                      | 0.41 |
|    | 433637 | AW024214  | Hs.135405 | ESTs                                     | 0.41 |
|    | 449923 | BE258051  |           | gb:601111034F1 NIH_MGC_16 Homo sapiens c | 0.41 |
|    | 416982 | J05401    | Hs.80691  | creatine kinase, mitochondrial 2 (sarcom | 0.41 |
|    | 453139 | AA330620  | Hs.240559 | ESTs                                     | 0.41 |
|    | 408614 | AL137698  | Hs.46531  | Homo sapiens mRNA; cDNA DKFZp434C1915 (f | 0.41 |
|    | 437931 | AI249468  | Hs.145274 | ESTs                                     | 0.41 |
|    | 402759 |           |           |  | 0.41 |

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|    | 450888 | AW021446  | Hs.80714  | ESTs                                     | 0.41 |
|    | 417318 | AW953937  | Hs.12891  | ESTs                                     | 0.41 |
|    | 407244 | M10014    | Hs.75431  | fibrinogen, gamma polypeptide            | 0.41 |
|    | 424884 | AW299437  | Hs.225717 | ESTs                                     | 0.41 |
| 5  | 439024 | R96696    | Hs.35598  | ESTs                                     | 0.42 |
|    | 423732 | AF058056  | Hs.132183 | solute carrier family 16 (monocarboxylic | 0.42 |
|    | 409300 | AA126190  |           | gb:zm78f03.r1 Stralagene neuroepithelium | 0.42 |
|    | 444237 | AA336878  | Hs.9842   | Human DNA sequence from clone RP4-788L20 | 0.42 |
|    | 425860 | L29339    | Hs.1964   | solute carrier family 5 (sodium/glucose  | 0.42 |
| 10 | 447021 | AI356564  | Hs.161406 | ESTs                                     | 0.42 |
|    | 422270 | AF114494  | Hs.114062 | protein tyrosine phosphatase-like (proli | 0.42 |
|    | 407850 | AW086230  | Hs.244912 | ESTs                                     | 0.42 |
|    | 449884 | AI673110  | Hs.222195 | ESTs                                     | 0.42 |
|    | 436327 | AA813075  | Hs.120181 | ESTs                                     | 0.42 |
| 15 | 415972 | H11436    | Hs.260201 | ESTs                                     | 0.42 |
|    | 400917 |           |           |  | 0.43 |
|    | 435309 | AW089050  | Hs.187993 | ESTs                                     | 0.43 |
|    | 424410 | W79027    | Hs.271762 | ESTs                                     | 0.43 |
|    | 445577 | N40696    | Hs.146077 | ESTs                                     | 0.43 |
| 20 | 411069 | AL133092  | Hs.68055  | hypothetical protein DKFZp434I0428       | 0.43 |
|    | 440286 | U29589    | Hs.7138   | cholinergic receptor, muscarinic 3       | 0.43 |
|    | 451123 | AI927224  | Hs.213480 | ESTs                                     | 0.43 |
|    | 457151 | AW206116  | Hs.253538 | ESTs                                     | 0.43 |
| 25 | 459185 | AI908222  |           | gb:RC-BT165-300399-020 BT165 Homo sapien | 0.43 |
|    | 411607 | AW853498  |           | gb:RC1-CT0252-170200-025-h02 CT0252 Homo | 0.43 |
|    | 424815 | AA347287  | Hs.104573 | ESTs                                     | 0.43 |
|    | 429704 | AA584440  | Hs.185812 | ESTs                                     | 0.43 |
|    | 411067 | AI681006  | Hs.301543 | ESTs                                     | 0.43 |
| 30 | 430172 | AA468591  | Hs.161889 | ESTs                                     | 0.43 |
|    | 435124 | AA725362  | Hs.120456 | ESTs                                     | 0.43 |
|    | 445966 | L17330    | Hs.280    | pre-TiNK cell associated protein         | 0.43 |
|    | 443741 | AW451759  | Hs.145420 | ESTs                                     | 0.43 |
|    | 416275 | H42823    | Hs.155742 | glyoxylate reductase/hydroxypyruvate red | 0.44 |
| 35 | 451138 | W92287    | Hs.40268  | ESTs                                     | 0.44 |
|    | 409038 | T97490    | Hs.50002  | small inducible cytokine subfamily A (Cy | 0.44 |
|    | 426730 | AL040738  |           | gb:DKFZp434B1615_r1 434 (synonym: htes3) | 0.44 |
|    | 410066 | AL117664  | Hs.58419  | DKFZP586L2024 protein                    | 0.44 |
|    | 427965 | D00306    | Hs.183864 | elastase 3B                              | 0.44 |
|    | 418026 | BE379727  | Hs.83213  | fatty acid binding protein 4, adipocyte  | 0.44 |
| 40 | 408479 | BE047329  | Hs.144483 | ESTs                                     | 0.44 |
|    | 457994 | AW136239  | Hs.132922 | ESTs                                     | 0.44 |
|    | 435564 | AF210652  | Hs.16614  | 5(3)-deoxynucleotidase (dNT-2); nucl     | 0.45 |
|    | 435869 | AF255910  | Hs.54650  | vascular endothelial junction-associated | 0.45 |
|    | 434399 | AA878845  | Hs.125769 | ESTs                                     | 0.45 |
| 45 | 415797 | AI291896  | Hs.72800  | ESTs                                     | 0.45 |
|    | 430264 | AA470519  |           | gb:nc71f10.s1 NCI_CGAP_P1 Homo sapiens   | 0.45 |
|    | 409435 | AI810721  | Hs.95424  | ESTs                                     | 0.45 |
|    | 433542 | AA598869  | Hs.173770 | ESTs                                     | 0.45 |
| 50 | 455400 | AW936342  |           | gb:QV4-DT0021-281299-070-h12 DT0021 Homo | 0.45 |
|    | 412047 | AA934589  | Hs.49696  | ESTs                                     | 0.45 |
|    | 443948 | T56148    | Hs.9997   | Homo sapiens mRNA full length insert cDN | 0.45 |
|    | 450307 | AW450336  | Hs.201783 | ESTs                                     | 0.45 |
|    | 434500 | AF143877  | Hs.215047 | Homo sapiens clone IMAGE:113431 mRNA seq | 0.45 |
| 55 | 420460 | AA262331  | Hs.135503 | ESTs                                     | 0.45 |
|    | 450752 | AA012986  | Hs.60466  | ESTs                                     | 0.45 |
|    | 418138 | AA213626  | Hs.136204 | EST                                      | 0.45 |
|    | 441088 | AA916546  | Hs.126546 | ESTs                                     | 0.46 |
|    | 410990 | AW812929  |           | gb:RC3-ST0186-250200-018-c05 ST0186 Homo | 0.46 |
| 60 | 438211 | T08401    |           | gb:EST06292 Infant Brain, Bento Soares H | 0.46 |
|    | 434349 | NM_015678 | Hs.3821   | neurobeachin                             | 0.46 |
|    | 409824 | AW501063  |           | gb:U1-HF-BP0p-aiz-c-01-0-U1.r1 NIH_MGC_5 | 0.46 |
|    | 403279 |           |           |  | 0.46 |
|    | 434882 | AW974752  | Hs.269497 | ESTs                                     | 0.46 |
|    | 404629 |           |           |  | 0.46 |
| 65 | 427393 | AB029018  | Hs.177635 | KIAA1095 protein                         | 0.46 |
|    | 454651 | AW812091  |           | gb:RC4-ST0173-191099-032-b04 ST0173 Homo | 0.46 |
|    | 401992 |           |           |  | 0.46 |
|    | 457275 | AA463422  | Hs.209431 | ESTs                                     | 0.46 |
|    | 403710 |           |           |  | 0.46 |
| 70 | 419728 | L36861    | Hs.92858  | guanylate cyclase activator 1A (retina)  | 0.46 |
|    | 401075 |           |           |  | 0.46 |
|    | 421387 | AF059566  | Hs.103983 | solute carrier family 5 (sodium iodide s | 0.46 |
|    | 453404 | AA035446  | Hs.261224 | ESTs                                     | 0.46 |
|    | 407208 | T10695    | Hs.102948 | enigma (LIM domain protein)              | 0.46 |
| 75 | 440681 | AW449696  | Hs.166547 | ESTs                                     | 0.46 |
|    | 454206 | AW810279  |           | gb:MR4-ST0125-151299-029-a09 ST0125 Homo | 0.47 |
|    | 402466 |           |           |  | 0.47 |
|    | 429396 | N90822    | Hs.48969  | ESTs                                     | 0.47 |
|    | 403680 |           |           |  | 0.47 |
| 80 | 428151 | AA422028  |           | gb:zv26g06 r1 Soares_NhHMPu_S1 Homo sapi | 0.47 |
|    | 410495 | N95428    |           | gb:zb80d09.s1 Soares_senescent_fibroblas | 0.47 |
|    | 402851 |           |           |  | 0.47 |
|    | 438421 | AA806907  | Hs.194451 | ESTs                                     | 0.47 |

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|----|-------------|---------------------------------------|---|--|------|
| 5  | 454661      | BE244138                              |   | gb:TCBAP1E1218 Pediatric pre-B cell acut | 0.47 |
|    | 408753      | AI337192                              | Hs.47438  | SH3 domain binding glutamic acid-rich pr | 0.47 |
|    | 409106      | AW337854                              | Hs.177386   | ESTs                                     | 0.47 |
|    | 413199      | M62843                                | Hs.75236  | ELAV (embryonic lethal, abnormal vision, | 0.47 |
|    | 442799      | AI564739                              | Hs.68505  | ESTs                                     | 0.47 |
| 10 | 457955      | AI208986                              | Hs.143945   | ESTs                                     | 0.47 |
|    | 458147      | AW752597                              |   | gb:IL3-CT0214-161299-045-B06 CT0214 Homo | 0.47 |
|    | 407938      | AA905097                              | Hs.85050  | phospholamban                            | 0.47 |
|    | 414141      | BE255083                              |   | gb:601111390F1 NIH_MGC_16 Homo sapiens c | 0.47 |
|    | 448869      | AI792798                              | Hs.12496  | ESTs                                     | 0.47 |
| 15 | 400749      |                                       |   |  | 0.47 |
|    | 458745      | AW207347                              | Hs.211101   | ESTs                                     | 0.48 |
|    | 418437      | AA771738                              | Hs.295351   | ESTs                                     | 0.48 |
|    | 452286      | AI358570                              | Hs.123933   | ESTs                                     | 0.48 |
|    | 430369      | AA477631                              | Hs.119484   | ESTs                                     | 0.48 |
| 20 | 453572      | AA382590                              | Hs.31848  | ESTs, Weakly similar to hypothetical pro | 0.48 |
|    | 455175      | AW993247                              |   | gb:RC2-BN0033-180200-014-h09 BN0033 Homo | 0.48 |
|    | 445765      | AV655102                              | Hs.117266   | ESTs                                     | 0.48 |
|    | 400322      | AF045576                              | Hs.247758   | olfactory receptor, family 5, subfamily  | 0.48 |
|    | 412526      | M90366                                | Hs.73982  | zona pellucida glycoprotein 2 (sperm rec | 0.48 |
| 25 | 407986      | U32659                                | Hs.41724  | interleukin 17 (cytotoxic T-lymphocyte-a | 0.48 |
|    | 455479      | AW948312                              |   | gb:RC0-MT0015-280300-021-h04 MT0015 Homo | 0.48 |
|    | 450308      | AI692571                              | Hs.201681   | ESTs                                     | 0.48 |
|    | 411149      | N68715                                | Hs.269128   | ESTs                                     | 0.48 |
|    | 453982      | AW014252                              | Hs.252837   | ESTs                                     | 0.48 |
| 30 | 410971      | AW812258                              |   | gb:RC0-ST0174-191099-031-b02 ST0174 Homo | 0.48 |
|    | 410839      | NM_006849                             | Hs.66581  | protein disulfide isomerase              | 0.48 |
|    | 421553      | AA536080                              | Hs.97302  | ESTs                                     | 0.48 |
|    | 442376      | W95588                                | Hs.129982   | Homo sapiens cDNA FLJ12228 fis, clone MA | 0.48 |
|    | 454754      | AW819191                              |   | gb:CM1-ST0283-071299-061-d08 ST0283 Homo | 0.48 |
| 35 | 447858      | AW080339                              | Hs.211911   | ESTs                                     | 0.49 |
|    | 422639      | AI929377                              | Hs.173724   | creatine kinase, brain                   | 0.49 |
|    | 402449      |                                       |   |  | 0.49 |
|    | 420440      | NM_002407                             | Hs.97644  | mammaglobin 2                            | 0.49 |
|    | 435056      | AW023337                              | Hs.5422   | glycoprotein M6B                         | 0.49 |
| 40 | 419543      | AA244170                              | Hs.188719   | ESTs                                     | 0.49 |
|    | 407033      | U78628                                |   | gb:Human leukemia inhibitory factor rece | 0.49 |
|    | 437468      | AA457619                              |   | gb:aa89d11.r1 Stratagene fetal retina 93 | 0.49 |
|    | 412639      | AW961284                              | Hs.296235   | ESTs                                     | 0.49 |
|    | 406109      |                                       |   |  | 0.49 |
| 45 | 404519      |                                       |   |  | 0.49 |
|    | 410285      | AA083609                              |   | gb:zm63d05.r1 Stratagene fibroblast (937 | 0.49 |
|    | 406014      |                                       |   |  | 0.49 |
|    | 400938      |                                       |   |  | 0.49 |
|    | 414290      | AI568801                              | Hs.71721  | ESTs                                     | 0.49 |
| 50 | 432433      | AW014734                              | Hs.157969   | ESTs                                     | 0.49 |
|    | 405273      |                                       |   |  | 0.49 |
|    | 454738      | BE072139                              |   | gb:PM1-BT0533-291299-002-b06 BT0533 Homo | 0.49 |
|    | 414383      | BE279406                              |   | gb:601157981F1 NIH_MGC_21 Homo sapiens c | 0.49 |
|    | 445911      | AI985987                              | Hs.145645   | ESTs, Moderately similar to ALU1_HUMAN A | 0.49 |
| 55 | 451241      | AI767545                              | Hs.209572   | ESTs                                     | 0.49 |
|    | 428336      | AA503115                              | Hs.183752   | microseminoprotein, beta-                | 0.49 |
|    | 418310      | AA814100                              | Hs.86693  | ESTs                                     | 0.49 |
|    | 452152      | AL046755                              | Hs.28219  | protein phosphatase 2 (formerly 2A), reg | 0.49 |
|    | 454869      | AW836004                              |   | gb:PM0-LT0019-170200-001-d11 LT0019 Homo | 0.49 |
| 60 | 400332      | S65407                                | Hs.248032   | FLT4                                     | 0.49 |
|    | 425280      | U31519                                | Hs.1872   | phosphoenolpyruvate carboxykinase 1 (sol | 0.49 |
|    | 408221      | AA912183                              | Hs.47447  | ESTs                                     | 0.49 |
|    | 440179      | AI990151                              | Hs.125904   | ESTs                                     | 0.50 |
|    | 425360      | BE547704                              |   | gb:601076309F1 NIH_MGC_12 Homo sapiens c | 0.50 |
| 65 | 405600      |                                       |   |  | 0.50 |
|    | 418594      | AI732083                              | Hs.187619   | ESTs                                     | 0.50 |
|    | 432128      | AA127221                              | Hs.117037   | ESTs                                     | 0.50 |
|    | 458611      | AI268407                              | Hs.211458   | ESTs                                     | 0.50 |
|    | 426495      | NM_0011151                            | Hs.2043   | solute carrier family 25 (mitochondrial  | 0.50 |
| 70 | 441068      | AA913897                              | Hs.233559   | ESTs                                     | 0.50 |
|    | 428108      | AA421452                              | Hs.164851   | ESTs                                     | 0.50 |
|    | 400803      |                                       |   |  | 0.50 |
|    | 439996      | AA916565                              | Hs.221675   | ESTs                                     | 0.50 |
|    |             |                                       |   |  | 0.50 |
| 75 | TABLE 44B:  |                                       |   |  |      |
|    | Pkey:       | Unique Eos probeset identifier number |   |  |      |
|    | CAT number: | Gene cluster number                   |   |  |      |
|    | Accession:  | Genbank accession numbers             |   |  |      |
|    |             |                                       |   |  |      |
| 80 | Pkey        | CAT number                            | Accession   |  |      |
|    | 409300      | 111676_1                              | AA126190 AA074486 AA074707 AA070059 AA084886                          |  |      |
|    | 409824      | 1155499_1                             | AW501063 AW503034 AW501523  |  |      |
|    | 410285      | 119128_1                              | AA083609 AA083790 AA112048  |  |      |
|    | 410495      | 1205826_1                             | N95428 W24040 AW751366 H81987   |  |      |
|    | 410732      | 1218556_1                             | AW984328 AW984322 AW984318 AW984330 R58427 AW984332 AW799807 AW984321 |  |      |
|    | 410971      | 1228216_1                             | AW812258 AW812252 AW812261 AW812263 AW812285 AW812277 AW812264        |  |      |
|    | 410990      | 1228649_1                             | AW812929 AW812779 AW813088  |  |      |
|    |             |                                       |   |  |      |
|    |             |                                       |   |  |      |

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|    |        |           |  |
|----|--------|-----------|--|
|    | 411607 | 1251251_1 | AW853498 AW853442 AW853590 AW853433 AW853592   |
|    | 413079 | 1348528_1 | BE064382 BE064387 BE064385 BE064381 BE153367 BE153366 BE153401 BE153385 BE064372                                     |
|    | 413679 | 1382784_1 | BE156765 BE156770 BE156767 BE156769 BE156803 BE156802 BE156847 BE156853 BE156780 BE156836 BE156792 BE156834 BE156779 |
| 5  |        |           | BE156789 BE156833 BE156844 BE156831 BE156849 BE156797 BE156784 BE156801 BE156843 BE156793 BE156852                   |
|    | 414141 | 1420715_1 | BE255083 BE257634  |
|    | 414383 | 1440279_1 | BE279406 BE280100  |
|    | 422582 | 218132_1  | AA312660 A1474863  |
|    | 425350 | 250631_1  | BE547704 AA355909  |
| 10 | 426730 | 271055_1  | AL040738 AA383683  |
|    | 428151 | 287658_1  | AA422028 W79191  |
|    | 430264 | 315008_1  | AA470519 BE303010 BE302954 BE384120  |
|    | 430664 | 321423_1  | AW969834 AA528493 AA483165 AW969842  |
|    | 431152 | 328675_1  | AW970998 AW971004 AA574217 AA493538  |
|    | 431514 | 334213_1  | AW972363 AA506335 A1077445   |
| 15 | 437468 | 43743_1   | AA457619 AL390167  |
|    | 438211 | 45225_1   | T08401 Z83934 T16897   |
|    | 449923 | 81926_1   | BE258051 R45758 AA004732 BE255126  |
|    | 451818 | 887271_1  | A1819018 R05492 W27615   |
| 20 | 454206 | 1050848_1 | AW810279 BE146684 BE146693 BE146694 BE146679 AW810472 AW810208 AW810356 AW810193 AW178838 AW178837 AW178857 AW810515 |
|    |        |           | AW810330 AW810514 AW810441 AW810358 AW178852 AW810359 AW810322 AW810327 AW810211 AW178835 AW810635 AW810288 AW810263 |
|    |        |           | AW810325 AW810443 AW810198 AW810321 AW810265 AW810557 AW810447 AW810328 AW810513 BE146674 AW810257 AW810185 AW810281 |
|    |        |           | AW810258 BE062400 AW810323 AW810293 BE146652 AW810516 BE146689 AW810289 AW810566 AW810636 AW178842 BE062434 BE146653 |
|    |        |           | AW810536 AW846649  |
| 25 | 454554 | 1223842_1 | AW847505 AW811792 BE061442 BE061433 AW847506 AW806999 AW806996 BE061436 BE061430 BE142460 BE146499 AW806994 AW809156 |
|    |        |           | AW806991 AW814082 AW806992 BE061669 AW807002 BE146659 AW806995 AW807000 AW845743 AW845747 AW847504 BE142458 BE061431 |
|    |        |           | BE061435 AW847507 BE146650 BE142470 AW814096 AW807012 BE061438 AW807011 AW806993 BE142465 BE142459 BE142462 AW854330 |
|    |        |           | AW854331 BE061434 BE061731 BE142464 AW847501 AW807001 BE142463 AW811800 BE061437 AW811802 BE061440 AW806997 AW806998 |
|    |        |           | BE061745 BE061753  |
| 30 | 454560 | 1223940_1 | AW807281 AW807092 AW807425 AW807330 AW807174 AW807171 AW807274 AW807278 AW807367                                     |
|    | 454651 | 1228069_1 | AW812091 AW812228 AW812106 AW938581 AW812080   |
|    | 454661 | 1228527_1 | BE244138 BE244727 AW812636 AW812647  |
|    | 454738 | 1232449_1 | BE072139 BE157977 BE157974 AW857974 AW817778   |
|    | 454754 | 1233580_1 | AW819191 AW819252 AW819183 AW819175 AW819177 AW819186 AW819180 BE158470 AW819242 AW819269 AW819244 AW819190 AW819265 |
|    |        |           | AW819268 AW819246 BE152602 AW819249 AW819251 AW819263 AW819194   |
| 35 | 454790 | 1234752_1 | AW820852 AW820773 AW821088   |
|    | 454869 | 1238137_1 | AW836004 AW836087 AW836163 AW836162 AW836085 AW836084 AW836079 AW836083 AW836082 AW836086 AW836088 AW836166 AW836164 |
|    |        |           | AW836002 AW836078 AW836161 AW862135 AW835165 AW836003  |
|    | 455175 | 1257335_1 | AW993247 AW861464  |
|    | 455400 | 1288135_1 | AW936342 AW936366  |
| 40 | 455479 | 1293163_1 | AW948312 AW948286 AW948289 AW948297 AW948279 AW948295  |
|    | 455541 | 1323705_1 | AW993005 AW993285 AW993290   |
|    | 455753 | 1356070_1 | BE075124 BE075229 BE075278   |
|    | 455826 | 1373392_1 | BE144228 BE144291  |
|    | 458147 | 488021_1  | AW752597 AW848781 AW849062 AW848490 AW752699 AW752604 AW752700   |
| 45 | 459185 | 922823_1  | A1908222 A1908224 A1908217   |

TABLE 44C:

|              |   |
|--------------|---|
| Pkey:        | Unique number corresponding to an Eos probeset  |
| Ref:         | Sequence source. The 7 digit numbers in this column are Genbank identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495. |
| Strand:      | Indicates DNA strand from which exons were predicted.   |
| Nt_position: | Indicates nucleotide positions of predicted exons.  |

|    |        |         |        |   |
|----|--------|---------|--------|---|
| 55 | Pkey   | Ref     | Strand | Nt_position   |
|    | 400749 | 7331445 | Minus  | 9162-9293   |
|    | 400803 | 8567875 | Minus  | 18267-19088   |
|    | 400917 | 7283186 | Minus  | 173258-173631   |
|    | 400938 | 7652890 | Minus  | 92074-92423   |
| 60 | 401075 | 3687273 | Plus   | 81218-81395   |
|    | 401514 | 7622355 | Plus   | 93224-93292,94913-95065,95163-95334                         |
|    | 401775 | 9966311 | Minus  | 110228-110340   |
|    | 401989 | 4309964 | Minus  | 118611-118821   |
|    | 401992 | 4153858 | Plus   | 31452-31649   |
| 65 | 402015 | 7417802 | Minus  | 48791-49043,50038-50205,51530-51672,54448-54565,55933-56073 |
|    | 402449 | 9796674 | Plus   | 59867-60039,62588-62828,63465-63623,64923-65108             |
|    | 402466 | 9796919 | Plus   | 57659-57866,58839-58908                                     |
|    | 402759 | 9213869 | Plus   | 134117-134281   |
|    | 402760 | 9213869 | Plus   | 136829-136952,137336-137521                                 |
| 70 | 402851 | 9650753 | Minus  | 63022-63136,63683-63783                                     |
|    | 403059 | 8954192 | Minus  | 69553-69702   |
|    | 403279 | 8072597 | Plus   | 162569-162768,163918-164168                                 |
|    | 403429 | 9719566 | Minus  | 52789-52917   |
|    | 403670 | 7259739 | Minus  | 88377-88537   |
| 75 | 403680 | 7331517 | Minus  | 157184-157415   |
|    | 403710 | 6437516 | Plus   | 27413-28978   |
|    | 404121 | 9796219 | Plus   | 59256-59401   |
|    | 404519 | 8152000 | Plus   | 12817-13000   |
|    | 404629 | 9796665 | Plus   | 55584-55796   |
| 80 | 404973 | 3213020 | Plus   | 101602-102591   |
|    | 405110 | 8096888 | Minus  | 118940-119100   |
|    | 405273 | 4156137 | Minus  | 98141-98754   |
|    | 405645 | 4926864 | Minus  | 92231-92380,92724-92869                                     |
|    | 405742 | 7283744 | Minus  | 54424-55488   |

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|   |        |         |       |                         |
|---|--------|---------|-------|-------------------------|
| 5 | 405817 | 4071056 | Plus  | 19914-20112,25655-25810 |
|   | 406014 | 6758904 | Minus | 23738-24076             |
|   | 406036 | 6758919 | Plus  | 17942-18163             |
|   | 406109 | 9127147 | Minus | 58328-58485             |
|   | 406255 | 7417729 | Plus  | 2959-3200               |
|   | 406326 | 9212385 | Plus  | 84508-84655             |
|   | 406600 | 8248616 | Minus | 36296-36610             |

## 10 TABLE 45A: ABOUT 947 GENES UP-REGULATED IN STOMACH CANCER COMPARED TO NORMAL ADULT TISSUES

Table 45A lists about 947 genes up-regulated in stomach cancer compared to normal adult tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" stomach cancer to "average" normal adult tissues was greater than or equal to 2.5. The "average" stomach cancer level was set to the 90th percentile amongst various stomach cancers. The "average" normal adult tissue level was set to the 90th percentile amongst various non-malignant tissues. In order to remove gene-specific background levels of non-specific hybridization, the 15th percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

15 Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 20 R1: Ratio of stomach cancer compared to normal stomach

|    | Pkey   | ExAccn    | UnigenelD | Unigene Title                            | R1    |
|----|--------|-----------|-----------|--|-------|
| 25 | 418007 | M13509    | Hs.83169  | matrix metalloproteinase 1 (interstitial | 66.80 |
|    | 411243 | AB039886  | Hs.69319  | CA11                                     | 61.16 |
|    | 428368 | BE440042  | Hs.83326  | matrix metalloproteinase 3 (stromelysin  | 42.36 |
|    | 427585 | D31152    | Hs.179729 | collagen, type X, alpha 1 (Schmid metaph | 35.80 |
|    | 425679 | X05997    | Hs.159177 | lipase, gastric                          | 28.34 |
|    | 409041 | AB033025  | Hs.50081  | KIAA1199 protein                         | 26.91 |
| 30 | 452121 | NM_004081 | Hs.70936  | deleted in azoospermia                   | 26.22 |
|    | 403776 |           |           | NA                                       | 25.00 |
|    | 444783 | AK001468  | Hs.52180  | anillin (Drosophila Scraps homolog), act | 23.90 |
|    | 422956 | BE545072  | Hs.122579 | hypothetical protein FLJ10461            | 23.90 |
|    | 409187 | AF154830  | Hs.50966  | carbamoyl-phosphate synthetase 1, mitoch | 23.35 |
|    | 424252 | AK000520  | Hs.143811 | hypothetical protein FLJ20513            | 22.26 |
| 35 | 439759 | AL359055  | Hs.67709  | Homo sapiens mRNA full length insert cDN | 21.06 |
|    | 415989 | AI267700  | Hs.317584 | ESTs                                     | 20.72 |
|    | 416209 | AA236776  | Hs.79078  | MAD2 (mitotic arrest deficient, yeast, h | 19.84 |
|    | 452401 | NM_007115 | Hs.29352  | tumor necrosis factor, alpha-induced pro | 15.50 |
|    | 438639 | AI278360  | Hs.31409  | ESTs                                     | 15.16 |
|    | 426427 | M86699    | Hs.169840 | TTK protein kinase                       | 14.54 |
| 40 | 449032 | AA045573  | Hs.22900  | nuclear factor (erythroid derived 2)-lik | 14.26 |
|    | 443211 | AI128388  | Hs.143655 | ESTs                                     | 14.22 |
|    | 421470 | R27496    | Hs.1378   | annexin A3                               | 13.96 |
|    | 400792 | AA635062  | Hs.50094  | Homo sapiens mRNA; cDNA DKFZp434O0515 (f | 13.94 |
|    | 424086 | AI351010  | Hs.102267 | lysyl oxidase                            | 13.73 |
|    | 437789 | AI581344  | Hs.127812 | ESTs, Weakly similar to T17330 hypothi   | 13.38 |
| 45 | 409757 | NM_001898 | Hs.123114 | cystatin SN                              | 13.33 |
|    | 447033 | AI357412  | Hs.157601 | ESTs                                     | 13.20 |
|    | 447164 | AF026941  | Hs.17518  | Homo sapiens cig5 mRNA, partial sequence | 12.80 |
|    | 420159 | AI572490  | Hs.99785  | Homo sapiens cDNA: FLJ21245 fis, clone C | 12.66 |
|    | 432596 | AJ224741  | Hs.278461 | matrilin 3                               | 12.64 |
|    | 424905 | NM_002497 | Hs.153704 | NIMA (never in mitosis gene a)-related k | 12.46 |
| 50 | 413582 | AW295647  | Hs.71331  | hypothetical protein MGC5350             | 12.32 |
|    | 423020 | AA383092  | Hs.1608   | replication protein A3 (14kD)            | 12.18 |
|    | 448693 | AW004854  | Hs.228320 | hypothetical protein FLJ23537            | 11.74 |
|    | 442660 | AW138174  | Hs.130651 | ESTs                                     | 11.73 |
|    | 441693 | AA384673  | Hs.7943   | RPB5-mediating protein                   | 11.16 |
|    | 450221 | AA328102  | Hs.24641  | cytoskeleton associated protein 2        | 11.08 |
| 55 | 414142 | AW368397  | Hs.150042 | Homo sapiens cDNA FLJ14438 fis, clone HE | 10.90 |
|    | 424717 | H03754    | Hs.152213 | wingless-type MMTV integration site fami | 10.48 |
|    | 443715 | AI583187  | Hs.9700   | cyclin E1                                | 10.44 |
|    | 420900 | AL045633  | Hs.44269  | ESTs                                     | 10.38 |
|    | 453922 | AF053306  | Hs.36708  | budding uninhibited by benzimidazoles 1  | 10.36 |
|    | 415076 | NM_000857 | Hs.77890  | guanylate cyclase 1, soluble, beta 3     | 10.20 |
| 60 | 452291 | AF015592  | Hs.28853  | CDC7 (cell division cycle 7, S. cerevisi | 10.18 |
|    | 410566 | AA373210  | Hs.43047  | Homo sapiens cDNA FLJ13585 fis, clone PL | 10.14 |
|    | 414422 | AA147224  | Hs.337232 | ESTs                                     | 10.12 |
|    | 409269 | AA576953  | Hs.22972  | hypothetical protein FLJ13352            | 10.02 |
|    | 414972 | BE263782  | Hs.77695  | KIAA0008 gene product                    | 10.02 |
|    | 418882 | NM_004996 | Hs.89433  | ATP-binding cassette, sub-family C (CFTR | 9.80  |
| 65 | 428365 | AA295331  | Hs.183861 | Homo sapiens cDNA FLJ20042 fis, clone CO | 9.72  |
|    | 416661 | AA634543  | Hs.79440  | IGF-II mRNA-binding protein 3            | 9.68  |
|    | 400195 | NA        |           | NA                                       | 9.66  |
|    | 418738 | AW388633  | Hs.6682   | solute carrier family 7, (cationic amino | 9.64  |
|    | 420170 | U43374    | Hs.95631  | Human normal keratinocyte mRNA           | 9.60  |
|    | 414259 | W44633    | Hs.301296 | Homo sapiens cDNA: FLJ23131 fis, clone L | 9.58  |
| 70 | 417517 | AF001176  | Hs.82238  | POP4 (processing of precursor, S. cerev  | 9.34  |
|    | 446998 | N99013    | Hs.16762  | Homo sapiens mRNA; cDNA DKFZp564B2062 (f | 9.26  |
|    | 429486 | AF155827  | Hs.203963 | hypothetical protein FLJ10339            | 9.16  |
|    | 428227 | AA321649  | Hs.2248   | small inducible cytokine subfamily B (Cy | 8.95  |
|    | 431810 | X67155    | Hs.270845 | kinesin-like 5 (mitotic kinesin-like pro | 8.84  |
|    | 419261 | X07876    | Hs.89791  | wingless-type MMTV integration site fami | 8.80  |
| 75 | 425921 | NM_007231 | Hs.162211 | solute carrier family 6 (neurotransmitte | 8.78  |



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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 424834 | AK001432  | Hs.153408 | Homo sapiens cDNA FLJ10570 fis, clone NT | 8.69 |
|    | 413268 | AL039079  | Hs.75256  | regulator of G-protein signalling 1      | 8.68 |
|    | 417801 | AA417383  | Hs.82582  | integrin, beta-like 1 (with EGF-like rep | 8.68 |
|    | 452461 | N78223    | Hs.108106 | transcription factor                     | 8.68 |
| 5  | 425916 | NM_006786 | Hs.162200 | urotensin 2                              | 8.64 |
|    | 422805 | AA436989  | Hs.121017 | H2A histone family, member A             | 8.54 |
|    | 438394 | BE379623  | Hs.27693  | peptidylprolyl isomerase (cyclophilin)-I | 8.52 |
|    | 441377 | BE218239  | Hs.202656 | ESTs                                     | 8.41 |
|    | 445891 | AW391342  | Hs.199460 | ESTs                                     | 8.31 |
| 10 | 408771 | AW732573  | Hs.47584  | potassium voltage-gated channel, delayed | 8.30 |
|    | 439521 | AI808955  | Hs.58248  | ESTs                                     | 8.30 |
|    | 425087 | R62424    | Hs.126059 | ESTs                                     | 8.28 |
|    | 424653 | AW977534  | Hs.151469 | calcium/calmodulin-dependent serine prot | 8.22 |
|    | 441795 | N58115    | Hs.21137  | AD024 protein                            | 8.02 |
| 15 | 427878 | C05766    | Hs.181022 | CGI-07 protein                           | 8.00 |
|    | 413583 | AL120806  | Hs.5888   | ESTs                                     | 7.98 |
|    | 407853 | AA336797  | Hs.40499  | dickkopf (Xenopus laevis) homolog 1      | 7.98 |
|    | 426269 | H15302    | Hs.168950 | Homo sapiens mRNA; cDNA DKFZp566A1046 (f | 7.97 |
|    | 404996 |           |           | NA                                       | 7.96 |
| 20 | 400289 | X07820    | Hs.2258   | matrix metalloproteinase 10 (stromelysin | 7.96 |
|    | 410044 | BE566742  | Hs.58169  | highly expressed in cancer, rich in leuc | 7.94 |
|    | 417655 | AA780791  | Hs.14014  | hypothetical protein FLJ14813            | 7.92 |
|    | 452838 | U65011    | Hs.30743  | preferentially expressed antigen in mela | 7.91 |
|    | 418895 | AA894638  | Hs.14600  | ESTs                                     | 7.90 |
| 25 | 446155 | AI553695  | Hs.159422 | Homo sapiens cDNA FLJ13997 fis, clone Y7 | 7.86 |
|    | 423123 | NM_012247 | Hs.124027 | SELENOPHOSPHATE SYNTHETASE : Human selen | 7.82 |
|    | 434539 | AW748078  | Hs.214410 | ESTs, Weakly similar to MUC2_HUMAN MUCIN | 7.80 |
|    | 447505 | AL049266  | Hs.18724  | Homo sapiens mRNA; cDNA DKFZp564F093 (fr | 7.72 |
|    | 418763 | AK000219  | Hs.88367  | hypothetical protein FLJ20212            | 7.70 |
| 30 | 447289 | AW247017  | Hs.36978  | melanoma antigen, family A, 3            | 7.70 |
|    | 443354 | AW970672  | Hs.9247   | protein kinase, AMP-activated, alpha 1 c | 7.69 |
|    | 427718 | AI798680  | Hs.25933  | ESTs                                     | 7.66 |
|    | 434032 | AW009951  | Hs.206892 | ESTs                                     | 7.60 |
| 35 | 427738 | NM_000318 | Hs.180612 | peroxisomal membrane protein 3 (35kD, Ze | 7.58 |
|    | 450480 | X82125    | Hs.25040  | zinc finger protein 239                  | 7.51 |
|    | 418678 | NM_001327 | Hs.167379 | cancer/testis antigen                    | 7.49 |
|    | 431494 | AA991355  | Hs.298312 | hypothetical protein DKFZp434A1315       | 7.44 |
|    | 452705 | H49805    | Hs.246005 | ESTs                                     | 7.36 |
| 40 | 443646 | AI085198  | Hs.164226 | ESTs                                     | 7.32 |
|    | 425420 | BE536911  | Hs.234545 | hypothetical protein NUF2R               | 7.30 |
|    | 420617 | AK001552  | Hs.99423  | ATP-dependent RNA helicase               | 7.28 |
|    | 421155 | H87879    | Hs.102267 | lysyl oxidase                            | 7.24 |
|    | 450715 | AI266484  | Hs.31570  | ESTs, Weakly similar to KIAA1324 protein | 7.24 |
| 45 | 447254 | NM_004153 | Hs.17908  | origin recognition complex, subunit 1 (y | 7.22 |
|    | 435473 | N53550    | Hs.260881 | ESTs                                     | 7.20 |
|    | 413293 | AL047483  | Hs.302498 | GTP-binding protein homologous to Saccha | 7.14 |
|    | 449347 | AV649748  | Hs.295901 | KIAA0493 protein                         | 7.11 |
|    | 452281 | T93500    | Hs.28792  | Homo sapiens cDNA FLJ11041 fis, clone PL | 7.11 |
|    | 408908 | BE296227  | Hs.250822 | serine/threonine kinase 15               | 7.11 |
| 50 | 408660 | AA525775  | Hs.292523 | ESTs, Moderately similar to PC4259 ferri | 7.10 |
|    | 453688 | AW381270  | Hs.194110 | hypothetical protein PRO2730             | 7.02 |
|    | 426890 | AA393167  | Hs.41294  | ESTs                                     | 6.98 |
|    | 404440 |           |           | NA                                       | 6.97 |
| 55 | 426642 | AW068223  | Hs.171581 | ubiquitin C-terminal hydrolase UCH37     | 6.96 |
|    | 431723 | AW058350  | Hs.16762  | Homo sapiens mRNA; cDNA DKFZp564B2062 (f | 6.95 |
|    | 413833 | Z15005    | Hs.75573  | centromere protein E (312kD)             | 6.94 |
|    | 426249 | F05422    | Hs.168352 | nucleoponn-like protein 1                | 6.94 |
|    | 441421 | AA356792  | Hs.334824 | hypothetical protein FLJ14825            | 6.92 |
|    | 400298 | AA032279  | Hs.61635  | six transmembrane epithelial antigen of  | 6.85 |
| 60 | 423903 | M57765    | Hs.1721   | interleukin 11                           | 6.84 |
|    | 431041 | AA490967  | Hs.197955 | KIAA0704 protein                         | 6.74 |
|    | 417256 | U94332    | Hs.81791  | tumor necrosis factor receptor superfam  | 6.74 |
|    | 426921 | AA037145  | Hs.172865 | cleavage stimulation factor, 3' pre-RNA, | 6.70 |
|    | 407771 | AL138272  | Hs.62713  | ESTs                                     | 6.69 |
| 65 | 433393 | AF038564  | Hs.98074  | ilchy (mouse homolog) E3 ubiquitin prote | 6.66 |
|    | 407162 | N63855    | Hs.142634 | zinc finger protein                      | 6.64 |
|    | 411343 | U77949    | Hs.69563  | CDC6 (cell division cycle 6, S. cerevisi | 6.64 |
|    | 427920 | Z11502    | Hs.181107 | annexin A13                              | 6.59 |
| 70 | 450159 | AI702416  | Hs.200771 | ESTs, Moderately similar to A Chain A, T | 6.58 |
|    | 427401 | U20582    | Hs.2149   | actin like protein                       | 6.55 |
|    | 447102 | BE167434  | Hs.98471  | ESTs, Weakly similar to T18712 hypotheri | 6.54 |
|    | 431806 | AF186114  | Hs.270737 | tumor necrosis factor (ligand) superfam  | 6.54 |
|    | 435159 | AA668879  | Hs.116649 | ESTs                                     | 6.54 |
|    | 440209 | H05049    | Hs.22269  | neurexin 3                               | 6.54 |
| 75 | 418134 | AA397769  | Hs.86617  | ESTs                                     | 6.50 |
|    | 451807 | W52854    | Hs.27099  | hypothetical protein FLJ23293 similar to | 6.47 |
|    | 434894 | AW977850  | Hs.23856  | hypothetical protein MGC5297             | 6.40 |
|    | 422505 | AL120862  | Hs.124165 | ESTs                                     | 6.34 |
|    | 426010 | AA136563  | Hs.1975   | hypothetical protein FLJ21007            | 6.32 |
| 80 | 414696 | AF002020  | Hs.76918  | Niemann-Pick disease, type C1            | 6.31 |
|    | 408380 | AF123050  | Hs.44532  | diubiquitin                              | 6.31 |
|    | 420218 | AW958037  | Hs.286    | ribosomal protein L4                     | 6.29 |
|    | 405817 | NA        |           | NA                                       | 6.28 |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 406747 | AI925153  | Hs.217493 | annexin A2                               | 6.24 |
|    | 448743 | AB032952  | Hs.21896  | KIAA1136 protein                         | 6.24 |
|    | 434636 | AA083764  | Hs.6101   | hypothetical protein MGC3178             | 6.20 |
|    | 424602 | AK002055  | Hs.151046 | hypothetical protein FLJ11193            | 6.17 |
| 5  | 412661 | N32860    | Hs.24611  | ESTs, Weakly similar to I54374 gene NF2  | 6.17 |
|    | 401644 |           |           | NA                                       | 6.16 |
|    | 423248 | AA380177  | Hs.125845 | ribulose-5-phosphate-3-epimerase         | 6.13 |
|    | 427335 | AA448542  | Hs.251677 | G antigen 7B                             | 6.12 |
|    | 450375 | AA009647  | Hs.8850   | a disintegrin and metalloproteinase doma | 6.07 |
| 10 | 422420 | U03398    | Hs.1524   | tumor necrosis factor (ligand) superfam  | 6.06 |
|    | 419752 | AA249573  | Hs.152618 | ESTs, Moderately similar to ZN91_HUMAN Z | 6.06 |
|    | 413573 | AI733859  | Hs.149089 | ESTs                                     | 6.06 |
|    | 408758 | NM_003686 | Hs.47504  | exonuclease 1                            | 6.02 |
|    | 444188 | AI393165  | Hs.699    | peptidyl:prolyl isomerase B (cyclophilin | 6.02 |
| 15 | 407746 | AK001962  | Hs.38114  | hypothetical protein FLJ11100            | 6.00 |
|    | 446364 | AB006624  | Hs.14912  | KIAA0286 protein                         | 5.98 |
|    | 418939 | AW630803  | Hs.89497  | lamin B1                                 | 5.90 |
|    | 424639 | AI917494  | Hs.9812   | Homo sapiens cDNA FLJ14388 fis, clone HE | 5.88 |
|    | 434377 | AW137148  | Hs.306593 | Homo sapiens cDNA FLJ11382 fis, clone HE | 5.86 |
| 20 | 419863 | AW952691  | Hs.93485  | Homo sapiens mRNA; cDNA DKFZp761D191 (fr | 5.84 |
|    | 430849 | AI940727  | Hs.270556 | ESTs, Highly similar to AF156779 1 ASB-4 | 5.82 |
|    | 428822 | W28418    | Hs.30715  | potassium voltage-gated channel, Isk-rel | 5.80 |
|    | 448776 | BE302464  | Hs.30057  | MRS2 (S. cerevisiae)-like, magnesium hom | 5.74 |
| 25 | 442957 | AI949952  | Hs.49397  | ESTs                                     | 5.72 |
|    | 444577 | AI207721  | Hs.11393  | RAD51 (S. cerevisiae) homolog C          | 5.72 |
|    | 424565 | AW102723  | Hs.75295  | guanylate cyclase 1, soluble, alpha 3    | 5.71 |
|    | 433330 | AW207084  | Hs.132816 | hypothetical protein MGC14801            | 5.68 |
|    | 428618 | AA885360  | Hs.160199 | NADPH oxidase, EF hand calcium-binding d | 5.68 |
| 30 | 432867 | AW016936  | Hs.233364 | ESTs                                     | 5.64 |
|    | 412140 | AA219691  | Hs.73625  | RAB6 interacting, kinesin-like (rabkines | 5.63 |
|    | 433133 | AB027249  | Hs.104741 | PDZ-binding kinase; T-cell originated pr | 5.62 |
|    | 418379 | AA218940  | Hs.137516 | figetin-like 1                           | 5.57 |
|    | 434551 | BE387162  | Hs.280858 | ESTs, Highly similar to A35661 DNA excis | 5.57 |
| 35 | 442353 | BE379594  | Hs.49136  | ESTs, Moderately similar to ALU7_HUMAN A | 5.56 |
|    | 427386 | AW836261  | Hs.337717 | ESTs                                     | 5.54 |
|    | 425650 | NM_001944 | Hs.1925   | desmoglein 3 (pemphigus vulgaris antigen | 5.52 |
|    | 428479 | Y00272    | Hs.184572 | cell division cycle 2, G1 to S and G2 to | 5.51 |
|    | 449370 | AK002114  | Hs.23495  | hypothetical protein FLJ11252            | 5.50 |
| 40 | 431118 | BE264901  | Hs.250502 | carbonic anhydrase VIII                  | 5.50 |
|    | 423673 | BE003054  | Hs.1695   | matrix metalloproteinase 12 (macrophage  | 5.50 |
|    | 453931 | AL121278  | Hs.25144  | ESTs                                     | 5.49 |
|    | 409044 | AI129586  | Hs.33033  | hypothetical protein FLJ14623            | 5.48 |
|    | 436291 | BE568452  | Hs.5101   | protein regulator of cytokinesis 1       | 5.45 |
| 45 | 448336 | R53848    | Hs.44976  | ESTs                                     | 5.44 |
|    | 454018 | AW016892  | Hs.100855 | ESTs                                     | 5.42 |
|    | 457030 | AI301740  | Hs.173381 | dihydropyrimidinase-like 2               | 5.42 |
|    | 412246 | AI160873  | Hs.69233  | zinc finger protein                      | 5.40 |
|    | 432193 | AA372264  | Hs.273193 | hypothetical protein FLJ10706            | 5.40 |
| 50 | 437319 | BE410958  | Hs.56406  | Homo sapiens cDNA FLJ13549 fis, clone PL | 5.40 |
|    | 427660 | AI741320  | Hs.114121 | Homo sapiens cDNA: FLJ23228 fis, clone C | 5.40 |
|    | 452862 | AW378065  | Hs.8687   | ESTs                                     | 5.38 |
|    | 409327 | L41162    | Hs.53563  | collagen, type IX, alpha 3               | 5.36 |
|    | 412811 | H06382    | Hs.21400  | ESTs                                     | 5.34 |
| 55 | 448390 | AL035414  | Hs.21068  | hypothetical protein                     | 5.32 |
|    | 428187 | AI687303  | Hs.285529 | G protein-coupled receptor 49            | 5.30 |
|    | 450434 | AA166950  | Hs.195870 | hypothetical protein FLJ14991            | 5.29 |
|    | 434265 | AA846811  | Hs.130554 | Homo sapiens cDNA: FLJ23089 fis, clone L | 5.28 |
|    | 407811 | AW190902  | Hs.40098  | cysteine knot superfamily 1, BMP antagon | 5.27 |
| 60 | 446638 | AL133063  | Hs.15783  | Homo sapiens mRNA; cDNA DKFZp434P1115 (f | 5.26 |
|    | 444743 | AA045648  | Hs.301957 | nudix (nucleoside diphosphate linked moi | 5.25 |
|    | 424902 | NM_003866 | Hs.153687 | inositol polyphosphate-4-phosphatase, ty | 5.24 |
|    | 452150 | W42490    | Hs.260844 | ESTs                                     | 5.24 |
|    | 432865 | AI753709  | Hs.152484 | ESTs, Weakly similar to I38022 hypotheti | 5.24 |
| 65 | 453382 | AA709285  | Hs.5997   | hypothetical protein FLJ13078            | 5.22 |
|    | 447048 | AW393080  | Hs.228320 | hypothetical protein FLJ23537            | 5.22 |
|    | 426518 | Z43039    | Hs.170198 | KIAA0009 gene product                    | 5.22 |
|    | 453884 | AA355925  | Hs.36232  | KIAA0186 gene product                    | 5.20 |
|    | 429625 | AA455568  | Hs.193814 | ESTs                                     | 5.20 |
| 70 | 413472 | BE242870  | Hs.75379  | solute carrier family 1 (glial high affi | 5.20 |
|    | 449318 | AW236021  | Hs.78531  | Homo sapiens, Similar to RIKEN cDNA 5730 | 5.19 |
|    | 444059 | R69743    | Hs.116774 | integrin, alpha 1                        | 5.18 |
|    | 409432 | D49372    | Hs.54460  | small inducible cytokine subfamily A (Cy | 5.17 |
|    | 412719 | AW016610  | Hs.129911 | ESTs                                     | 5.15 |
| 75 | 444342 | NM_014398 | Hs.10887  | similar to lysosome-associated membrane  | 5.14 |
|    | 425739 | T19016    | Hs.159410 | molybdopterin synthase sulfurylase       | 5.12 |
|    | 452198 | AI097560  | Hs.61210  | ESTs, Weakly similar to I38022 hypotheti | 5.12 |
|    | 445657 | AW612141  | Hs.279575 | Homo sapiens G-protein coupled receptor  | 5.10 |
|    | 434699 | AA643687  | Hs.149425 | Homo sapiens cDNA FLJ11980 fis, clone HE | 5.09 |
|    | 424296 | AI631874  | Hs.155140 | casein kinase 2, alpha 1 polypeptide     | 5.08 |
| 80 | 441645 | AI222279  | Hs.201555 | ESTs, Weakly similar to T23405 hypotheti | 5.06 |
|    | 412723 | AA648459  | Hs.335951 | hypothetical protein AF301222            | 5.06 |
|    | 448811 | AI590371  | Hs.174759 | ESTs                                     | 5.05 |
|    | 447342 | AI199268  | Hs.19322  | Homo sapiens, Similar to RIKEN cDNA 2010 | 5.04 |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 411835 | U29343    | Hs.72550  | hyaluronan-mediated motility receptor (R | 5.04 |
|    | 421373 | AA808229  | Hs.167771 | ESTs                                     | 5.04 |
|    | 448991 | AW771565  | Hs.189594 | ESTs                                     | 5.02 |
|    | 429370 | C19097    | Hs.89709  | glutamate-cysteine ligase, modifier subu | 5.00 |
| 5  | 454036 | AA374756  | Hs.93560  | Homo sapiens mRNA for KIAA1771 protein,  | 4.98 |
|    | 405770 |           |           | NA                                       | 4.96 |
|    | 421110 | AJ250717  | Hs.1355   | cathepsin E                              | 4.96 |
|    | 452588 | AA889120  | Hs.110637 | homeo box A10                            | 4.92 |
| 10 | 433159 | AB035898  | Hs.150587 | kinesin-like protein 2                   | 4.91 |
|    | 420952 | AA282067  | Hs.88972  | ESTs, Moderately similar to A46010 X-in  | 4.88 |
|    | 408321 | AW405882  | Hs.44205  | cortistatin                              | 4.87 |
|    | 441801 | AW242799  | Hs.86366  | ESTs                                     | 4.84 |
|    | 450568 | AL050078  | Hs.25159  | Homo sapiens cDNA FLJ10784 fis, clone NT | 4.83 |
| 15 | 452909 | NM_015368 | Hs.30985  | parnexin 1                               | 4.82 |
|    | 409799 | D11928    | Hs.76645  | phosphoserine phosphatase-like           | 4.82 |
|    | 451105 | AI761324  |           | gb:wi60b11.x1 NCI_CGAP_Co16 Homo sapiens | 4.80 |
|    | 417168 | AL133117  | Hs.81376  | Homo sapiens mRNA; cDNA DKFZp586L1121 (f | 4.80 |
|    | 418203 | X54942    | Hs.83758  | CDC28 protein kinase 2                   | 4.80 |
| 20 | 418994 | AA296520  | Hs.89546  | selectin E (endothelial adhesion molecu  | 4.78 |
|    | 436982 | AB018305  | Hs.5378   | spondin 1, (f-spondin) extracellular mat | 4.78 |
|    | 432874 | W94322    | Hs.279651 | melanoma inhibitory activity             | 4.78 |
|    | 440351 | AF030933  | Hs.7179   | RAD1 (S. pombe) homolog                  | 4.78 |
|    | 431956 | AK002032  | Hs.272245 | Homo sapiens cDNA FLJ11170 fis, clone PL | 4.77 |
| 25 | 442980 | AA857025  | Hs.8878   | kinesin-like 1                           | 4.76 |
|    | 432437 | W07088    | Hs.293685 | ESTs                                     | 4.76 |
|    | 414869 | AA157291  | Hs.21479  | ubiquitin 1                              | 4.74 |
|    | 446254 | BE179829  | Hs.179852 | Homo sapiens cDNA FLJ12832 fis, clone NT | 4.74 |
|    | 418380 | AA425473  | Hs.84429  | KIAA0971 protein                         | 4.74 |
| 30 | 419343 | AA456245  | Hs.85603  | down-regulated by Clnb1, a               | 4.74 |
|    | 418478 | U38945    | Hs.1174   | cyclin-dependent kinase inhibitor 2A (me | 4.72 |
|    | 425813 | AA364136  | Hs.210553 | hypothetical protein DKFZp7611172        | 4.71 |
|    | 425071 | NM_013989 | Hs.154424 | deiodinase, iodothyronine, type II       | 4.71 |
|    | 412733 | AA984472  | Hs.74554  | KIAA0080 protein                         | 4.68 |
| 35 | 444325 | AW152618  | Hs.16757  | ESTs                                     | 4.66 |
|    | 407638 | AJ404672  | Hs.334483 | hypothetical protein FLJ23571            | 4.66 |
|    | 430345 | AK000282  | Hs.239681 | hypothetical protein FLJ20275            | 4.66 |
|    | 428330 | L22524    | Hs.2256   | matrix metalloproteinase 7 (matrilysin,  | 4.64 |
|    | 449448 | D60730    | Hs.57471  | ESTs                                     | 4.62 |
| 40 | 409732 | NM_016122 | Hs.56148  | NY-REN-58 antigen                        | 4.62 |
|    | 432415 | T16971    | Hs.289014 | ESTs, Weakly similar to A43932 mucin 2 p | 4.62 |
|    | 421987 | AI133161  | Hs.286131 | CGI-101 protein                          | 4.60 |
|    | 430217 | N47863    | Hs.336901 | ribosomal protein S24                    | 4.58 |
|    | 429597 | NM_003816 | Hs.2442   | a disintegrin and metalloproteinase doma | 4.57 |
| 45 | 425932 | M81650    | Hs.1968   | semenogelin I                            | 4.57 |
|    | 408728 | AL137379  | Hs.47125  | hypothetical protein FLJ13912            | 4.56 |
|    | 428434 | AW363590  | Hs.65551  | Homo sapiens, Similar to DNA segment, Ch | 4.55 |
|    | 451254 | AI571016  | Hs.172967 | ESTs                                     | 4.54 |
|    | 422426 | W79117    | Hs.58559  | ESTs                                     | 4.54 |
| 50 | 439483 | T69980    | Hs.58323  | Homo sapiens cDNA FLJ11613 fis, clone HE | 4.53 |
|    | 435420 | AI928513  | Hs.59203  | ESTs                                     | 4.53 |
|    | 447519 | U46258    | Hs.339665 | ESTs                                     | 4.52 |
|    | 424176 | AL137273  | Hs.142307 | hypothetical protein                     | 4.52 |
|    | 414812 | X72755    | Hs.77367  | monokine induced by gamma interferon     | 4.51 |
| 55 | 438069 | N80701    | Hs.33790  | ESTs                                     | 4.50 |
|    | 450096 | AI682088  | Hs.79375  | holocarboxylase synthetase (biotin-[prop | 4.50 |
|    | 438159 | Z83947    |           | gb:H.sapiens mRNA; clone CD 117          | 4.50 |
|    | 433925 | AI183551  | Hs.26481  | SBBI26 protein                           | 4.48 |
|    | 417866 | AW067903  | Hs.82772  | collagen, type XI, alpha 1               | 4.48 |
| 60 | 433384 | AI021992  | Hs.124244 | ESTs                                     | 4.47 |
|    | 421863 | AI952677  | Hs.108972 | Homo sapiens mRNA; cDNA DKFZp434P228 (fr | 4.47 |
|    | 453941 | U39817    | Hs.36820  | Bloom syndrome                           | 4.45 |
|    | 423401 | NM_001992 | Hs.128087 | coagulation factor II (thrombin) recepto | 4.44 |
|    | 430510 | AW162916  | Hs.241576 | hypothetical protein PRO2577             | 4.43 |
| 65 | 424084 | AI940675  | Hs.20914  | hypothetical protein FLJ23056            | 4.42 |
|    | 459587 | AA031956  |           | gb:zk15e04.s1 Soares_pregnant_uterus_NbH | 4.42 |
|    | 417956 | AA210704  | Hs.190465 | ESTs                                     | 4.42 |
|    | 449433 | AI672096  | Hs.9012   | ESTs, Weakly similar to S26550 DNA-bind  | 4.42 |
|    | 421477 | AI904743  | Hs.104650 | hypothetical protein FLJ10292            | 4.42 |
| 70 | 406687 | M31126    | Hs.272620 | pregnancy specific beta-1-glycoprotein 9 | 4.41 |
|    | 451813 | NM_016117 | Hs.27182  | phospholipase A2-activating protein      | 4.41 |
|    | 415091 | AL044872  | Hs.77910  | 3-hydroxy-3-methylglutaryl-Coenzyme A sy | 4.40 |
|    | 425142 | AW954397  | Hs.154762 | HIV-1 rev binding protein 2              | 4.40 |
|    | 441720 | AI346487  | Hs.28739  | ESTs                                     | 4.40 |
| 75 | 409683 | U33317    | Hs.711    | defensin, alpha 6, Paneth cell-specific  | 4.39 |
|    | 411571 | AA122393  | Hs.70811  | hypothetical protein FLJ20516            | 4.38 |
|    | 430044 | AA464510  | Hs.152812 | ESTs                                     | 4.37 |
|    | 436246 | AW450963  | Hs.119991 | ESTs                                     | 4.37 |
|    | 409582 | R27430    | Hs.271565 | ESTs                                     | 4.37 |
| 80 | 453652 | AW009640  | Hs.28368  | ESTs, Moderately similar to S65657 alpha | 4.35 |
|    | 425211 | M18667    | Hs.1867   | progastricsin (pepsinogen C)             | 4.34 |
|    | 448692 | AW013907  | Hs.167531 | methylcrotonoyl-Coenzyme A carboxylase 2 | 4.34 |
|    | 409459 | D86407    | Hs.54481  | low density lipoprotein receptor-related | 4.34 |
|    | 442470 | AW273860  | Hs.5759   | ESTs                                     | 4.33 |

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|----|--------|-----------|-----------|--|------|
|    | 441894 | AA134329  | Hs.24170  | Homo sapiens, clone IMAGE:3685398, mRNA, | 4.32 |
|    | 422867 | L32137    | Hs.1584   | cartilage oligomeric matrix protein (pse | 4.31 |
|    | 436396 | AI683487  | Hs.152213 | wingless-type MMTV integration site fami | 4.31 |
| 5  | 433397 | AW079766  | Hs.134880 | ESTs, Weakly similar to unnamed protein  | 4.30 |
|    | 417576 | AA339449  | Hs.82285  | phosphoribosylglycinamide formyltransfer | 4.29 |
|    | 413278 | BE563085  | Hs.833    | interferon-stimulated protein, 15 kDa    | 4.29 |
|    | 451592 | AI805416  | Hs.213897 | ESTs                                     | 4.28 |
|    | 453900 | AW003582  | Hs.226414 | ESTs, Weakly similar to ALU8_HUMAN ALU S | 4.28 |
| 10 | 422892 | AA988176  | Hs.121553 | hypothetical protein FLJ20641            | 4.26 |
|    | 431699 | NM_001173 | Hs.267831 | Rho GTPase activating protein 5          | 4.26 |
|    | 428389 | AW135714  | Hs.283127 | ESTs, Weakly similar to T19201 hypotheti | 4.24 |
|    | 410361 | BE391804  | Hs.62661  | guanylate binding protein 1, interferon- | 4.23 |
|    | 409913 | BE243842  | Hs.283077 | centrosomal P4.1-associated protein; unc | 4.22 |
|    | 445537 | AJ245671  | Hs.12844  | EGF-like-domain, multiple 6              | 4.21 |
| 15 | 445640 | AW969626  | Hs.31704  | ESTs, Weakly similar to KIAA0227 [H.sapi | 4.20 |
|    | 422232 | D43945    | Hs.113274 | transcription factor EC                  | 4.18 |
|    | 442655 | AW027457  | Hs.30323  | ESTs, Weakly similar to B34087 hypotheti | 4.18 |
|    | 444381 | BE387335  | Hs.283713 | ESTs, Weakly similar to S64054 hypotheti | 4.16 |
| 20 | 434217 | AW014795  | Hs.23349  | ESTs                                     | 4.16 |
|    | 413384 | NM_000401 | Hs.75334  | exostoses (multiple) 2                   | 4.14 |
|    | 407768 | AW002841  | Hs.29475  | ESTs                                     | 4.14 |
|    | 419168 | AI336132  | Hs.33718  | Homo sapiens cDNA FLJ12641 fis, clone NT | 4.13 |
|    | 408165 | AL137573  | Hs.43143  | Homo sapiens mRNA: cDNA DKFZp564A2463 (f | 4.12 |
| 25 | 443691 | AI081724  | Hs.17267  | ESTs                                     | 4.12 |
|    | 409640 | U78722    | Hs.55481  | zinc finger protein 165                  | 4.12 |
|    | 438176 | AW138970  | Hs.122113 | ESTs                                     | 4.10 |
|    | 435532 | AW291488  | Hs.117305 | Homo sapiens, clone IMAGE:3682908, mRNA  | 4.10 |
|    | 419606 | AW294795  | Hs.198529 | ESTs                                     | 4.08 |
| 30 | 452824 | W27643    | Hs.73965  | splicing factor, arginine/serine-rich 2  | 4.08 |
|    | 414152 | NM_003248 | Hs.75774  | thrombospondin 4                         | 4.08 |
|    | 418688 | T85017    | Hs.1192   | KIAA0074 protein                         | 4.07 |
|    | 404253 |           |           | NA                                       | 4.06 |
|    | 421741 | AK001879  | Hs.107527 | hypothetical protein FLJ11017            | 4.06 |
| 35 | 428218 | AA424266  | Hs.123642 | EphA3                                    | 4.06 |
|    | 428858 | AA436760  |           | gb:zv67d11.r1 Soares_total_fetus_Nb2HF8_ | 4.06 |
|    | 428336 | AA503115  | Hs.183752 | microseminoprotein, beta-                | 4.05 |
|    | 442875 | BE623003  | Hs.23625  | Homo sapiens clone TCCCTA00142 mRNA sequ | 4.04 |
|    | 421841 | AA908197  | Hs.108850 | MAK-related kinase                       | 4.04 |
| 40 | 451177 | AI969716  | Hs.13034  | ESTs                                     | 4.04 |
|    | 425188 | AK002052  | Hs.155071 | hypothetical protein FLJ11190            | 4.04 |
|    | 421262 | AA286746  | Hs.9343   | Homo sapiens cDNA FLJ14265 fis, clone PL | 4.03 |
|    | 424634 | NM_003613 | Hs.151407 | cartilage intermediate layer protein, nu | 4.02 |
|    | 438777 | AA825487  | Hs.142179 | ESTs                                     | 4.02 |
| 45 | 423343 | AA324643  | Hs.246106 | ESTs                                     | 4.02 |
|    | 425788 | BE466417  | Hs.231899 | ESTs, Weakly similar to rab3 effector-li | 4.02 |
|    | 409928 | AL137163  | Hs.57549  | hypothetical protein dJ473B4             | 4.01 |
|    | 406571 | AA129547  | Hs.285754 | met proto-oncogene (hepatocyte growth fa | 4.01 |
|    | 442973 | BE567665  | Hs.288550 | Homo sapiens cDNA: FLJ23156 fis, clone L | 4.00 |
| 50 | 433225 | AW816515  | Hs.173540 | ATPase, Class V, type 10D                | 4.00 |
|    | 411765 | H43346    |           | gb:yp09a04.r1 Soares breast 3NbHBst Homo | 4.00 |
|    | 452022 | AW072330  | Hs.293875 | ESTs                                     | 4.00 |
|    | 451806 | NM_003729 | Hs.27076  | RNA 3'-terminal phosphate cyclase        | 3.99 |
|    | 423641 | AA296922  | Hs.129778 | gastrointestinal peptide                 | 3.99 |
| 55 | 414132 | AI801235  | Hs.48480  | ESTs                                     | 3.99 |
|    | 452453 | AI902519  |           | gb:QV-BT009-101198-051 BT009 Homo sapien | 3.98 |
|    | 418454 | AA315308  | Hs.195870 | hypothetical protein FLJ14991            | 3.98 |
|    | 430134 | BE380149  | Hs.105223 | ESTs, Weakly similar to T33188 hypotheti | 3.98 |
|    | 453160 | AI263307  | Hs.239884 | H2B histone family, member L             | 3.97 |
| 60 | 417235 | AA810278  | Hs.24250  | ESTs                                     | 3.96 |
|    | 425398 | AL049689  | Hs.156369 | hypothetical protein similar to tenascin | 3.95 |
|    | 414136 | AA812434  | Hs.119023 | SMC2 (structural maintenance of chromoso | 3.94 |
|    | 436608 | AA628980  | Hs.192371 | down syndrome critical region protein DS | 3.94 |
|    | 431753 | X76029    | Hs.2841   | neuromedin U                             | 3.94 |
| 65 | 453161 | AA628608  | Hs.61656  | ESTs                                     | 3.94 |
|    | 454821 | AW833504  |           | gb:QV4-TT0008-091199-025-103 TT0008 Homo | 3.94 |
|    | 427961 | AW293165  | Hs.143134 | ESTs                                     | 3.94 |
|    | 439453 | BE264974  | Hs.6566   | thyroid hormone receptor interactor 13   | 3.93 |
|    | 409564 | AA045857  | Hs.54943  | fracture callus 1 (rat) homolog          | 3.93 |
| 70 | 418396 | AI765805  | Hs.26691  | ESTs                                     | 3.92 |
|    | 451411 | AA017492  | Hs.135655 | EST                                      | 3.92 |
|    | 445885 | AI734009  | Hs.127699 | KIAA1603 protein                         | 3.92 |
|    | 407698 | AA058900  | Hs.32646  | hypothetical protein FLJ21901            | 3.91 |
|    | 442896 | R37725    | Hs.261108 | ESTs                                     | 3.90 |
| 75 | 433361 | AW469373  | Hs.300141 | ribosomal protein L39                    | 3.90 |
|    | 419926 | AW900992  | Hs.93796  | DKFZP586D2223 protein                    | 3.89 |
|    | 413775 | AW409934  | Hs.75528  | nucleolar GTPase                         | 3.88 |
|    | 452943 | BE247449  | Hs.31082  | hypothetical protein FLJ10525            | 3.86 |
|    | 428549 | AA430064  | Hs.220929 | Homo sapiens cDNA FLJ14369 fis, clone HE | 3.86 |
| 80 | 456120 | AA535244  | Hs.78305  | RAB2, member RAS oncogene family         | 3.86 |
|    | 452194 | AI694413  | Hs.332649 | olfactory receptor, family 2, subfamily  | 3.85 |
|    | 421247 | BE391727  | Hs.102910 | general transcription factor IIH, polype | 3.85 |
|    | 417720 | AA205625  | Hs.208067 | ESTs                                     | 3.85 |
|    | 418811 | AK001407  | Hs.88663  | hypothetical protein FLJ10545            | 3.84 |

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|    | 430899 | BE018217  | Hs.183528 | hypothetical protein FLJ114906           | 3.84 |
|    | 421246 | AW582962  | Hs.102897 | CGI-47 protein                           | 3.83 |
|    | 407366 | AF026942  |           | gb:Homo sapiens cig33 mRNA, partial sequ | 3.83 |
|    | 428698 | AA852773  | Hs.334838 | KIAA1866 protein                         | 3.82 |
| 5  | 435202 | AI971313  | Hs.170204 | KIAA0551 protein                         | 3.82 |
|    | 454074 | R63503    | Hs.28419  | ESTs                                     | 3.82 |
|    | 448917 | AI683598  | Hs.201615 | ESTs                                     | 3.82 |
|    | 410507 | AA355288  | Hs.40834  | transitional epithelia response protein  | 3.82 |
|    | 452571 | W31518    | Hs.34665  | ESTs                                     | 3.82 |
| 10 | 445663 | AI247343  | Hs.149232 | ESTs                                     | 3.82 |
|    | 450701 | H39960    | Hs.288467 | Homo sapiens cDNA FLJ12280 fis, clone MA | 3.80 |
|    | 423025 | AA831267  | Hs.12244  | hypothetical protein FLJ20097            | 3.80 |
|    | 425656 | AB018284  | Hs.158688 | KIAA0741 gene product                    | 3.80 |
|    | 407168 | R45175    | Hs.117183 | ESTs                                     | 3.79 |
| 15 | 403422 | NA        |           | NA                                       | 3.79 |
|    | 425492 | AL021918  | Hs.158174 | zinc finger protein 184 (Kruppel-like)   | 3.79 |
|    | 432239 | X81334    | Hs.2936   | matrix metalloproteinase 13 (collagenase | 3.79 |
|    | 457325 | AA744550  | Hs.136345 | ESTs                                     | 3.78 |
| 20 | 433800 | AI034361  | Hs.135150 | lung type-I cell membrane-associated gly | 3.77 |
|    | 428865 | BE544095  | Hs.164960 | BarH-like homeobox 1                     | 3.76 |
|    | 424188 | AW954552  | Hs.142634 | zinc finger protein                      | 3.75 |
|    | 424638 | AI472106  | Hs.49303  | Homo sapiens cDNA FLJ11663 fis, clone HE | 3.75 |
|    | 451099 | R52795    | Hs.25954  | interleukin 13 receptor, alpha 2         | 3.75 |
| 25 | 448105 | AW591433  | Hs.298241 | Transmembrane protease, serine 3         | 3.74 |
|    | 452785 | AL359942  | Hs.296434 | erythroid differentiation and denucleati | 3.74 |
|    | 459000 | AA903705  | Hs.4190   | Homo sapiens cDNA: FLJ23269 fis, clone C | 3.74 |
|    | 432653 | N62096    | Hs.293185 | ESTs, Weakly similar to JC7328 amino aci | 3.73 |
|    | 409632 | W74001    | Hs.55279  | serine (or cysteine) proteinase inhibito | 3.73 |
| 30 | 414883 | AA926960  | Hs.334883 | CDC28 protein kinase 1                   | 3.73 |
|    | 415064 | AA159804  | Hs.149305 | hypothetical protein MGC2603             | 3.72 |
|    | 432198 | AI475306  | Hs.50458  | ESTs                                     | 3.72 |
|    | 458194 | AW383618  | Hs.265459 | ESTs, Moderately similar to ALU2_HUMAN A | 3.72 |
|    | 415263 | AA948033  | Hs.130853 | ESTs                                     | 3.71 |
| 35 | 408296 | AL117452  | Hs.44155  | DKFZP586G1517 protein                    | 3.71 |
|    | 408460 | AA054726  | Hs.285574 | ESTs                                     | 3.71 |
|    | 437496 | AA452378  | Hs.170144 | Homo sapiens mRNA; cDNA DKFZp547J125 (fr | 3.70 |
|    | 443486 | NM_003428 | Hs.9450   | zinc finger protein 84 (HPF2)            | 3.68 |
|    | 432021 | AA524470  | Hs.58753  | ESTs                                     | 3.68 |
| 40 | 420092 | AA814043  | Hs.88045  | ESTs                                     | 3.68 |
|    | 414923 | AW445008  | Hs.77637  | homeo box A4                             | 3.68 |
|    | 429432 | AI678059  | Hs.202676 | synaptonemal complex protein 2           | 3.68 |
|    | 435496 | AW840171  | Hs.265398 | ESTs, Weakly similar to transformation-r | 3.67 |
|    | 430544 | AA481066  | Hs.105153 | Homo sapiens, clone IMAGE:3461987, mRNA, | 3.67 |
| 45 | 432542 | AW083920  | Hs.16098  | claudin 2                                | 3.67 |
|    | 410782 | AW504860  | Hs.268836 | hypothetical protein FLJ12673            | 3.66 |
|    | 421106 | AA877124  | Hs.172844 | ESTs                                     | 3.64 |
|    | 439107 | AL046134  | Hs.13944  | adrenergic, beta, receptor kinase 2      | 3.64 |
|    | 418735 | N48769    | Hs.44609  | ESTs                                     | 3.64 |
| 50 | 411598 | BE336654  | Hs.70937  | H3 histone family, member A              | 3.63 |
|    | 424687 | J05070    | Hs.151738 | matrix metalloproteinase 9 (gelatinase B | 3.63 |
|    | 436411 | AW674352  |           | gb:ba63c07.y1 NIH_MGC_12 Homo sapiens cD | 3.63 |
|    | 429774 | AI522215  | Hs.50883  | KIAA1804 protein                         | 3.62 |
|    | 448844 | AI581519  | Hs.177164 | ESTs                                     | 3.61 |
| 55 | 402473 | AB033035  | Hs.51965  | KIAA1209 protein                         | 3.61 |
|    | 441085 | AW136551  | Hs.181245 | Homo sapiens cDNA FLJ12532 fis, clone NT | 3.61 |
|    | 429534 | AW976987  | Hs.163327 | ESTs, Weakly similar to 2109260A B cell  | 3.60 |
|    | 414706 | AW340125  | Hs.76989  | KIAA0097 gene product                    | 3.60 |
|    | 436211 | AK001581  | Hs.334828 | hypothetical protein FLJ10719; KIAA1794  | 3.59 |
| 60 | 422938 | NM_001809 | Hs.1594   | centromere protein A (17kD)              | 3.59 |
|    | 451381 | BE241831  | Hs.172330 | hypothetical protein MGC2705             | 3.58 |
|    | 428664 | AK001666  | Hs.189095 | similar to SALL1 (sal (Drosophila)-like  | 3.58 |
|    | 424345 | AK001380  | Hs.145479 | Homo sapiens cDNA FLJ10518 fis, clone NT | 3.58 |
|    | 440717 | AA904527  | Hs.42207  | ESTs                                     | 3.58 |
| 65 | 450698 | W31489    | Hs.95044  | ESTs, Weakly similar to I38022 hypotheri | 3.58 |
|    | 423675 | AI90509   | Hs.131342 | small inducible cytokine subfamily A (Cy | 3.58 |
|    | 424882 | AI379461  | Hs.153636 | far upstream element (FUSE) binding prot | 3.57 |
|    | 410784 | AW803201  |           | gb:IL2-UM0077-070500-080-E06 UM0077 Homo | 3.55 |
| 70 | 411096 | U80034    | Hs.68583  | mitochondrial intermediate peptidase     | 3.55 |
|    | 430294 | AI538226  | Hs.32976  | guanine nucleotide binding protein 4     | 3.54 |
|    | 439225 | AA192669  | Hs.45032  | ESTs                                     | 3.54 |
|    | 429183 | AB014604  | Hs.197955 | KIAA0704 protein                         | 3.54 |
|    | 419948 | AB041035  | Hs.93847  | NADPH oxidase 4                          | 3.53 |
|    | 443426 | AF098158  | Hs.9329   | chromosome 20 open reading frame 1       | 3.52 |
| 75 | 408556 | U49516    | Hs.46362  | 5-hydroxytryptamine (serotonin) receptor | 3.52 |
|    | 417048 | AI088775  | Hs.55498  | geranylgeranyl diphosphate synthase 1    | 3.52 |
|    | 432101 | AI918950  | Hs.123642 | EphA3                                    | 3.52 |
|    | 419216 | AU076718  | Hs.164021 | small inducible cytokine subfamily B (Cy | 3.51 |
|    | 444754 | T83911    | Hs.11881  | transmembrane 4 superfamily member 4     | 3.51 |
| 80 | 422093 | AF151852  | Hs.111449 | CGI-94 protein                           | 3.50 |
|    | 404766 | NA        |           | NA                                       | 3.50 |
|    | 441513 | AW014557  | Hs.112420 | ESTs                                     | 3.50 |
|    | 444301 | AK000136  | Hs.10760  | asporin (LRR class 1)                    | 3.50 |
|    | 417315 | AI080042  | Hs.336901 | ribosomal protein S24                    | 3.50 |

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|    | 407182 | AA312551  | Hs.230157 | ESTs                                     | 3.49 |
|    | 443204 | AW205878  | Hs.29643  | Homo sapiens cDNA FLJ13103 fis, clone NT | 3.49 |
|    | 432289 | AI860145  | Hs.55118  | ESTs                                     | 3.49 |
|    | 453644 | AI813444  | Hs.42197  | ESTs                                     | 3.48 |
| 5  | 427986 | N45214    | Hs.282387 | Homo sapiens cDNA: FLJ21837 fis, clone H | 3.48 |
|    | 405466 |           | NA        | NA                                       | 3.48 |
|    | 410804 | U64820    | Hs.66521  | Machado-Joseph disease (spinocerebellar  | 3.48 |
|    | 430357 | AW976789  | Hs.165607 | ESTs                                     | 3.46 |
|    | 418428 | Y12490    | Hs.85092  | thyroid hormone receptor interactor 11   | 3.46 |
| 10 | 422260 | AA315993  | Hs.105484 | regenerating gene type IV                | 3.46 |
|    | 421928 | AF013758  | Hs.109643 | polyadenylate binding protein-interactin | 3.46 |
|    | 451403 | AA885569  | Hs.40919  | Homo sapiens cDNA FLJ14511 fis, clone NT | 3.46 |
|    | 406117 |           | NA        | NA                                       | 3.46 |
|    | 458242 | BE299588  | Hs.28465  | Homo sapiens cDNA: FLJ21869 fis, clone H | 3.46 |
| 15 | 408562 | AI436323  | Hs.31141  | Homo sapiens mRNA for KIAA1568 protein,  | 3.45 |
|    | 440105 | AA694010  | Hs.6932   | Homo sapiens clone 23809 mRNA sequence   | 3.45 |
|    | 443767 | BE562136  | Hs.9736   | proteasome (prosome, macropain) 26S subu | 3.45 |
|    | 426320 | W47595    | Hs.169300 | transforming growth factor, beta 2       | 3.45 |
|    | 444478 | W07318    | Hs.240    | M-phase phosphoprotein 1                 | 3.45 |
| 20 | 425904 | AI805990  | Hs.82238  | POP4 (processing of precursor , S. cerev | 3.44 |
|    | 416702 | AA186428  | Hs.85591  | ESTs                                     | 3.44 |
|    | 448668 | AI560305  | Hs.195852 | ESTs                                     | 3.42 |
|    | 410004 | AI298027  | Hs.5057   | carboxypeptidase D                       | 3.42 |
|    | 428771 | AB028992  | Hs.193143 | KIAA1069 protein                         | 3.42 |
| 25 | 446519 | AU076643  | Hs.313    | secreted phosphoprotein 1 (osteopontin,  | 3.42 |
|    | 429628 | H09604    | Hs.13268  | ESTs                                     | 3.40 |
|    | 448816 | AB033052  | Hs.22151  | KIAA1226 protein                         | 3.40 |
|    | 456032 | AW957446  | Hs.301711 | ESTs                                     | 3.39 |
|    | 439635 | AA477288  | Hs.94891  | hypothetical protein FLJ22729            | 3.39 |
| 30 | 414275 | AW970254  | Hs.889    | Charot-Leyden crystal protein            | 3.38 |
|    | 447207 | AA442233  | Hs.17731  | hypothetical protein FLJ12892            | 3.38 |
|    | 416057 | AI927382  | Hs.29857  | ESTs                                     | 3.38 |
|    | 430704 | AW813091  | Hs.335799 | ESTs                                     | 3.38 |
| 35 | 423600 | AI633559  | Hs.310359 | ESTs                                     | 3.38 |
|    | 453891 | AB037751  | Hs.36353  | Homo sapiens mRNA full length insert cDN | 3.38 |
|    | 430178 | AW449612  | Hs.152475 | ESTs                                     | 3.37 |
|    | 417791 | AW965339  | Hs.111471 | ESTs                                     | 3.37 |
|    | 408867 | AA437199  | Hs.656    | cell division cycle 25C                  | 3.37 |
| 40 | 449802 | AW901804  | Hs.23984  | hypothetical protein FLJ20147            | 3.37 |
|    | 457003 | S78234    | Hs.172405 | cell division cycle 27                   | 3.36 |
|    | 458076 | R80061    | Hs.164478 | hypothetical protein FLJ21939 similar to | 3.36 |
|    | 436203 | BE384982  | Hs.5076   | Homo sapiens cDNA: FLJ22128 fis, clone H | 3.36 |
|    | 418782 | AI792648  | Hs.14665  | ESTs                                     | 3.34 |
|    | 449722 | BE280074  | Hs.23960  | cyclin B1                                | 3.34 |
| 45 | 447984 | AI457263  | Hs.37244  | ESTs                                     | 3.34 |
|    | 451103 | R52804    | Hs.25956  | DKFZP564D206 protein                     | 3.34 |
|    | 408812 | BE397160  | Hs.254763 | ESTs, Weakly similar to A42442 integrin  | 3.34 |
|    | 448305 | AA625207  | Hs.264915 | Homo sapiens cDNA FLJ12908 fis, clone NT | 3.34 |
|    | 418849 | AW474547  | Hs.53565  | Homo sapiens PIG-M mRNA for mannosyltran | 3.33 |
| 50 | 450531 | AW301032  | Hs.203800 | ESTs                                     | 3.32 |
|    | 411263 | BE297802  | Hs.69360  | kinesin-like 6 (mitotic centromere-assoc | 3.32 |
|    | 416530 | U62801    | Hs.79361  | kalikrein 6 (neurosin, zyme)             | 3.31 |
|    | 425746 | NM_001701 | Hs.159440 | bile acid Coenzyme A: amino acid N-acyl  | 3.30 |
|    | 421037 | AI684808  | Hs.197653 | ESTs                                     | 3.30 |
| 55 | 430388 | AA356923  | Hs.240770 | nuclear cap binding protein subunit 2, 2 | 3.30 |
|    | 433132 | AB026264  | Hs.284245 | hypothetical protein IMPACT              | 3.30 |
|    | 447078 | AW885727  | Hs.301570 | ESTs                                     | 3.30 |
|    | 402408 | NA        |           | NA                                       | 3.29 |
|    | 437044 | AL035864  | Hs.69517  | cDNA for differentially expressed CO16 g | 3.29 |
| 60 | 423126 | AA322245  | Hs.290165 | ESTs                                     | 3.28 |
|    | 446223 | BE300091  | Hs.119699 | hypothetical protein FLJ12969            | 3.27 |
|    | 451917 | AW391351  | Hs.50820  | Homo sapiens unknown mRNA                | 3.27 |
|    | 419335 | AW960146  | Hs.284137 | hypothetical protein FLJ12888            | 3.26 |
|    | 411078 | AI222020  | Hs.182364 | CocoaCrisp                               | 3.26 |
| 65 | 419790 | U79250    | Hs.93201  | glycerol-3-phosphate dehydrogenase 2 (mi | 3.26 |
|    | 427119 | AW880562  | Hs.114574 | ESTs                                     | 3.26 |
|    | 400250 | NA        |           | NA                                       | 3.26 |
|    | 429044 | AI261490  | Hs.145527 | ESTs                                     | 3.25 |
|    | 451050 | AW937420  | Hs.69662  | ESTs                                     | 3.24 |
| 70 | 447425 | AI963747  | Hs.18573  | acylphosphatase 1, erythrocyte (common)  | 3.24 |
|    | 410389 | AW954049  | Hs.8177   | ESTs, Weakly similar to PIHUB6 salivary  | 3.23 |
|    | 416565 | AW000960  | Hs.44970  | endoplasmic reticulum resident protein 5 | 3.22 |
|    | 442028 | AI239437  | Hs.48945  | ESTs                                     | 3.22 |
|    | 409110 | AA191493  | Hs.48778  | niban protein                            | 3.22 |
| 75 | 418926 | AA232658  | Hs.105794 | UDP-glucose:glycoprotein glucosyltransfe | 3.22 |
|    | 408353 | BE439838  | Hs.44298  | mitochondrial ribosomal protein S17      | 3.21 |
|    | 445417 | AK001058  | Hs.12680  | Homo sapiens cDNA FLJ10196 fis, clone HE | 3.20 |
|    | 442979 | AW440782  | Hs.174743 | ESTs                                     | 3.20 |
|    | 439292 | AA090421  | Hs.5555   | hypothetical protein MGC5347             | 3.20 |
| 80 | 440953 | AI683036  | Hs.124135 | Homo sapiens cDNA FLJ13051 fis, clone NT | 3.20 |
|    | 447020 | T27308    | Hs.16986  | hypothetical protein FLJ11046            | 3.20 |
|    | 451181 | AI796330  | Hs.207461 | ESTs                                     | 3.19 |
|    | 422809 | AK001379  | Hs.121028 | hypothetical protein FLJ10549            | 3.19 |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 411573 | AB029000  | Hs.70823  | KIAA1077 protein                         | 3.19 |
|    | 424539 | L02911    | Hs.150402 | activin A receptor, type I               | 3.18 |
|    | 443179 | AI928402  | Hs.6933   | hypothetical protein FLJ12684            | 3.18 |
| 5  | 452545 | N31940    | Hs.14434  | ESTs, Weakly similar to I38022 hypotheti | 3.18 |
|    | 433024 | AA573847  | Hs.26549  | KIAA1708 protein                         | 3.18 |
|    | 414737 | AI160386  | Hs.125087 | ESTs                                     | 3.18 |
|    | 444230 | H95537    | Hs.146067 | ESTs                                     | 3.18 |
|    | 419741 | NM_007019 | Hs.93002  | ubiquitin carrier protein E2-C           | 3.17 |
| 10 | 428945 | AW192803  | Hs.98974  | ESTs, Weakly similar to S65824 reverse t | 3.17 |
|    | 424085 | NM_002914 | Hs.139226 | replication factor C (activator 1) 2 (40 | 3.17 |
|    | 418661 | NM_001949 | Hs.1189   | E2F transcription factor 3               | 3.17 |
|    | 443598 | AW499970  | Hs.14822  | ESTs, Weakly similar to I78885 serine/th | 3.16 |
|    | 413516 | BE145907  |           | gb:MR0-HT0208-221299-204-e12 HT0208 Homo | 3.16 |
|    | 434389 | AA971235  | Hs.128098 | ESTs                                     | 3.16 |
| 15 | 431322 | AW970622  |           | gb:EST382704 MAGE resequences, MAGK Homo | 3.15 |
|    | 432158 | W33165    | Hs.22983  | UDP-glucose:glycoprotein glucosyltransfe | 3.15 |
|    | 453331 | AI240665  | Hs.8895   | ESTs                                     | 3.15 |
|    | 410286 | AI739159  | Hs.61898  | DKFZP586N2124 protein                    | 3.14 |
| 20 | 408687 | AL110280  | Hs.301152 | Homo sapiens mRNA; cDNA DKFZp434F063 (fr | 3.14 |
|    | 422789 | AK001113  | Hs.120842 | hypothetical protein FLJ10251            | 3.14 |
|    | 419078 | M93119    | Hs.89584  | insulinoma-associated 1                  | 3.14 |
|    | 414080 | AA135257  | Hs.47783  | B aggressive lymphoma gene               | 3.14 |
|    | 451525 | AW001757  | Hs.14005  | ESTs                                     | 3.13 |
| 25 | 453775 | NM_002916 | Hs.35120  | replication factor C (activator 1) 4 (37 | 3.13 |
|    | 433183 | AF231338  | Hs.222024 | transcription factor BMAL2               | 3.12 |
|    | 424783 | AA913909  | Hs.153088 | TATA box binding protein (TBP)-associate | 3.12 |
|    | 413170 | BE068819  |           | gb:MR0-BT0374-220300-001-b03 BT0374 Homo | 3.12 |
|    | 437181 | AI306615  | Hs.125343 | ESTs, Weakly similar to KIAA0758 protein | 3.12 |
| 30 | 442991 | BE261238  | Hs.8886   | hypothetical protein FLJ20424            | 3.11 |
|    | 453867 | AI929383  | Hs.33032  | hypothetical protein DKFZp434N185        | 3.11 |
|    | 437641 | AA811452  | Hs.291911 | ESTs                                     | 3.10 |
|    | 428651 | AF196478  | Hs.188401 | annexin A10                              | 3.09 |
|    | 427927 | AI879165  | Hs.2227   | CCAAT/enhancer binding protein (C/EBP),  | 3.09 |
| 35 | 419196 | AF110908  | Hs.297660 | TNF receptor-associated factor 3         | 3.09 |
|    | 414569 | AF109298  | Hs.118258 | prostate cancer associated protein 1     | 3.09 |
|    | 408633 | AW963372  | Hs.46677  | PRO2000 protein                          | 3.09 |
|    | 403381 |           |           | NA                                       | 3.08 |
|    | 444619 | BE538082  | Hs.8172   | ESTs, Moderately similar to A46010 X-lin | 3.08 |
| 40 | 422363 | T55979    | Hs.115474 | replication factor C (activator 1) 3 (38 | 3.08 |
|    | 434138 | AA625804  |           | gb:zu86h01.s1 Soares_testis_NHT Homo sap | 3.07 |
|    | 425322 | U63630    | Hs.155637 | protein kinase, DNA-activated, catalytic | 3.07 |
|    | 436556 | AI364997  | Hs.7572   | ESTs                                     | 3.07 |
|    | 427043 | AA397679  | Hs.3991   | ESTs                                     | 3.06 |
| 45 | 443055 | AV653742  | Hs.15536  | hypothetical protein DKFZp761J139        | 3.06 |
|    | 419229 | AI827237  | Hs.282884 | ESTs                                     | 3.05 |
|    | 414718 | H95348    | Hs.107987 | ESTs                                     | 3.05 |
|    | 439737 | AI751438  | Hs.41271  | Homo sapiens mRNA full length insert cDN | 3.05 |
|    | 448587 | AI539652  | Hs.28338  | KIAA1546 protein                         | 3.04 |
| 50 | 448595 | AB014544  | Hs.21572  | KIAA0644 gene product                    | 3.04 |
|    | 407201 | N31998    | Hs.164256 | hypothetical protein FLJ20657            | 3.04 |
|    | 423065 | R96158    | Hs.267130 | Homo sapiens, clone MGC:5406, mRNA, comp | 3.04 |
|    | 431980 | AA523696  | Hs.324507 | hypothetical protein FLJ20986            | 3.04 |
|    | 416198 | H27332    | Hs.99598  | hypothetical protein MGC5338             | 3.04 |
| 55 | 429410 | X98494    | Hs.201676 | M-phase phosphoprotein 10 (U3 small nucl | 3.04 |
|    | 432140 | AK000404  | Hs.272688 | hypothetical protein FLJ20397            | 3.03 |
|    | 441031 | AI110684  | Hs.7645   | fibrinogen, B beta polypeptide           | 3.03 |
|    | 446142 | AI754693  | Hs.145968 | ESTs                                     | 3.02 |
|    | 402167 |           |           | NA                                       | 3.02 |
| 60 | 402299 |           |           | NA                                       | 3.02 |
|    | 417830 | AW504786  | Hs.122579 | hypothetical protein FLJ10461            | 3.02 |
|    | 419910 | AA662913  | Hs.190173 | ESTs, Weakly similar to A46010 X-linked  | 3.02 |
|    | 424001 | W67883    | Hs.137476 | paternally expressed 10                  | 3.01 |
|    | 413930 | M86153    | Hs.75618  | RAB11A, member RAS oncogene family       | 3.01 |
| 65 | 439924 | AI985897  | Hs.125293 | ESTs                                     | 3.01 |
|    | 414343 | AL036166  | Hs.323378 | coated vesicle membrane protein          | 3.01 |
|    | 432201 | AI538613  | Hs.298241 | Transmembrane protease, serine 3         | 3.00 |
|    | 445845 | AI261870  | Hs.145555 | ESTs                                     | 3.00 |
|    | 420727 | H75701    | Hs.99886  | complement component 4-binding protein,  | 3.00 |
| 70 | 427510 | Z47542    | Hs.179312 | small nuclear RNA activating complex, po | 3.00 |
|    | 403637 | NA        |           | NA                                       | 3.00 |
|    | 410947 | AK000305  | Hs.67055  | hypothetical protein FLJ20298            | 3.00 |
|    | 413430 | R22479    | Hs.167073 | Homo sapiens cDNA FLJ13047 fis, clone NT | 3.00 |
|    | 423575 | C18863    | Hs.163443 | Homo sapiens cDNA FLJ11576 fis, clone HE | 2.99 |
| 75 | 426711 | AA383471  | Hs.180669 | conserved gene amplified in osteosarcoma | 2.99 |
|    | 442204 | AI635450  | Hs.21914  | ESTs                                     | 2.98 |
|    | 429682 | NM_006306 | Hs.211602 | SMC1 (structural maintenance of chromoso | 2.98 |
|    | 419227 | BE537383  | Hs.89739  | cholinergic receptor, nicotinic, beta po | 2.97 |
|    | 447233 | AW246333  | Hs.17901  | Homo sapiens, clone IMAGE:3937015, mRNA, | 2.97 |
| 80 | 441826 | AW503603  | Hs.129915 | phosphotriesterase related               | 2.97 |
|    | 433404 | T32982    | Hs.102720 | ESTs                                     | 2.96 |
|    | 450506 | NM_004460 | Hs.418    | fibroblast activation protein, alpha     | 2.96 |
|    | 423880 | BE278111  | Hs.134200 | DKFZP564C186 protein                     | 2.96 |
|    | 411750 | BE562298  | Hs.71827  | KIAA0112 protein; homolog of yeast ribos | 2.96 |

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|----|--------|-----------|-----------|--|------|
|    | 408155 | AB014528  | Hs.43133  | KIAA0628 gene product                    | 2.96 |
|    | 424131 | AA335714  | Hs.199665 | ESTs                                     | 2.96 |
|    | 451250 | AA491275  | Hs.236940 | hypothetical protein FLJ12542            | 2.96 |
|    | 425154 | NM_001851 | Hs.154850 | collagen, type IX, alpha 1               | 2.96 |
| 5  | 447829 | AI433029  | Hs.164104 | ESTs                                     | 2.95 |
|    | 410561 | BE540255  | Hs.6994   | Homo sapiens cDNA: FLJ22044 fis, clone H | 2.95 |
|    | 417873 | BE266659  | Hs.293659 | Homo sapiens, Similar to RIKEN cDNA A430 | 2.95 |
|    | 452693 | T79153    | Hs.48589  | zinc finger protein 228                  | 2.95 |
| 10 | 407742 | AF186252  | Hs.38084  | sulfotransferase family, cytosolic, 1C,  | 2.94 |
|    | 421430 | AW207555  | Hs.97093  | Homo sapiens cDNA: FLJ23004 fis, clone L | 2.94 |
|    | 407995 | AI094748  | Hs.100134 | hypothetical protein FLJ12787            | 2.94 |
|    | 413281 | AA861271  | Hs.222024 | transcription factor BMAL2               | 2.94 |
|    | 452381 | H23329    | Hs.290880 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 2.94 |
|    | 441020 | W79283    | Hs.35962  | ESTs                                     | 2.94 |
| 15 | 425397 | J04088    | Hs.156346 | topoisomerase (DNA) II alpha (170kD)     | 2.94 |
|    | 420005 | AW271106  | Hs.133294 | ESTs                                     | 2.93 |
|    | 412530 | AA766268  | Hs.266273 | hypothetical protein FLJ13346            | 2.93 |
|    | 435602 | AF217515  | Hs.283532 | uncharacterized bone marrow protein BM03 | 2.93 |
| 20 | 447247 | AW369351  | Hs.287955 | Homo sapiens cDNA FLJ13090 fis, clone NT | 2.93 |
|    | 443341 | AW631480  | Hs.8688   | ESTs                                     | 2.92 |
|    | 436481 | AA379597  | Hs.5199   | HSPC150 protein similar to ubiquitin-con | 2.92 |
|    | 410144 | W07189    | Hs.68185  | ESTs, Weakly similar to ARL3_HUMAN ADP-R | 2.92 |
|    | 434450 | S78664    | Hs.87     | retinoblastoma-like 1 (p107)             | 2.92 |
| 25 | 450402 | BE218027  | Hs.89969  | ESTs                                     | 2.92 |
|    | 422026 | U80736    | Hs.110826 | trinucleotide repeat containing 9        | 2.92 |
|    | 421562 | AA530994  | Hs.334471 | ghrelin precursor                        | 2.92 |
|    | 410434 | AF051152  | Hs.63668  | tol1-like receptor 2                     | 2.92 |
|    | 422665 | AJ011812  | Hs.119018 | transcription factor NRF                 | 2.91 |
| 30 | 428966 | AF059214  | Hs.194687 | cholesterol 25-hydroxylase               | 2.90 |
|    | 412416 | AI628253  | Hs.22580  | alkylglycerone phosphate synthase        | 2.90 |
|    | 446232 | AI281848  | Hs.194691 | retinoic acid induced 3                  | 2.90 |
|    | 454600 | AW810001  |           | gb:MR4-ST0124-270300-005-b11 ST0124 Homo | 2.90 |
|    | 438018 | AK001160  | Hs.5999   | hypothetical protein FLJ10298            | 2.90 |
| 35 | 433252 | AB040957  | Hs.151343 | KIAA1524 protein                         | 2.90 |
|    | 444355 | BE383686  | Hs.191621 | ESTs, Moderately similar to ALU6_HUMAN A | 2.90 |
|    | 443054 | AI745185  | Hs.8939   | yes-associated protein 65 kDa            | 2.89 |
|    | 421308 | AA687322  | Hs.192843 | leucine zipper protein FKSG14            | 2.89 |
|    | 411643 | AI924519  | Hs.192570 | hypothetical protein FLJ22028            | 2.89 |
|    | 419559 | Y07828    | Hs.91096  | ring finger protein                      | 2.89 |
| 40 | 433527 | AW235613  | Hs.133020 | ESTs                                     | 2.88 |
|    | 426274 | D38122    | Hs.2007   | tumor necrosis factor (ligand) superfam  | 2.88 |
|    | 406182 | NA        |           | NA                                       | 2.88 |
|    | 432731 | R31178    | Hs.287820 | fibronectin 1                            | 2.88 |
| 45 | 429274 | AI379772  | Hs.99206  | ESTs                                     | 2.87 |
|    | 418216 | AA662240  | Hs.283099 | AF15q14 protein                          | 2.87 |
|    | 410166 | AK001376  | Hs.59346  | hypothetical protein FLJ10514            | 2.86 |
|    | 452665 | AW839326  | Hs.330414 | ESTs, Moderately similar to S65657 alpha | 2.86 |
|    | 424696 | BE439547  | Hs.151903 | GrpE-like protein cochaperone            | 2.86 |
| 50 | 410174 | AA306007  | Hs.59461  | DKFZP434C245 protein                     | 2.85 |
|    | 443640 | AI872643  | Hs.134218 | ESTs                                     | 2.85 |
|    | 432912 | BE007371  | Hs.200313 | ESTs                                     | 2.85 |
|    | 431611 | U58766    | Hs.264428 | tissue specific transplantation antigen  | 2.85 |
|    | 446555 | D13757    | Hs.311    | phosphoryl pyrophosphate amidotransf     | 2.85 |
| 55 | 424770 | AA425562  | Hs.11065  | Homo sapiens HDCME13P mRNA, partial cds  | 2.84 |
|    | 418845 | AA852985  | Hs.89232  | chromobox homolog 5 (Drosophila HP1 alph | 2.84 |
|    | 403639 | NA        |           | NA                                       | 2.84 |
|    | 451110 | AI955040  | Hs.265398 | ESTs, Weakly similar to transformation-r | 2.84 |
|    | 416185 | AW975861  | Hs.47367  | KIAA1785 protein                         | 2.84 |
| 60 | 444665 | BE613126  | Hs.47783  | B aggressive lymphoma gene               | 2.83 |
|    | 423441 | R68649    | Hs.278359 | absent in melanoma 1 like                | 2.83 |
|    | 450584 | AA040403  | Hs.60371  | ESTs                                     | 2.83 |
|    | 420191 | AW003565  | Hs.192323 | Homo sapiens mRNA for FLJ00057 protein,  | 2.83 |
|    | 425599 | AW366745  | Hs.214140 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 2.83 |
| 65 | 424408 | AI754813  | Hs.146428 | collagen, type V, alpha 1                | 2.83 |
|    | 448769 | N66037    | Hs.38173  | ESTs                                     | 2.82 |
|    | 444946 | AW139205  | Hs.156457 | hypothetical protein FLJ22408            | 2.82 |
|    | 435347 | AW014873  | Hs.116963 | ESTs                                     | 2.82 |
|    | 438435 | AA807142  | Hs.42194  | hypothetical protein FLJ22649 similar to | 2.82 |
| 70 | 427687 | AW003867  | Hs.1570   | histamine receptor H1                    | 2.82 |
|    | 426951 | AA393636  | Hs.97454  | ESTs                                     | 2.82 |
|    | 427970 | AA418187  | Hs.330515 | ESTs                                     | 2.82 |
|    | 442577 | AA292998  | Hs.163900 | ESTs                                     | 2.82 |
|    | 441016 | AW138653  | Hs.25845  | ESTs                                     | 2.81 |
| 75 | 414774 | X02419    | Hs.77274  | plasminogen activator, urokinase         | 2.81 |
|    | 417160 | N76497    | Hs.1787   | proteolipid protein 1 (Pelizaeus-Merzbac | 2.81 |
|    | 409346 | AL162066  | Hs.54320  | hypothetical protein DKFZp762D095        | 2.81 |
|    | 410407 | X66839    | Hs.63287  | carbonic anhydrase IX                    | 2.81 |
|    | 407137 | T97307    |           | gb:ye53h05.s1 Soares fetal liver spleen  | 2.81 |
| 80 | 435849 | BE305242  | Hs.16098  | claudin 2                                | 2.80 |
|    | 426695 | AW118191  | Hs.112729 | ESTs                                     | 2.80 |
|    | 428301 | AW628666  | Hs.98440  | ESTs, Weakly similar to I38022 hypotheti | 2.80 |
|    | 420759 | T11832    | Hs.127797 | Homo sapiens cDNA FLJ11381 fis, clone HE | 2.80 |
|    | 421341 | AJ243212  | Hs.279611 | deleted in malignant brain tumors 1      | 2.80 |



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|    | 419423 | D26488    | Hs.90315  | KIAA0007 protein                          | 2.79 |
|    | 452355 | N54926    | Hs.29202  | G protein-coupled receptor 34             | 2.79 |
|    | 425826 | U97698    | Hs.159593 | mucin 6, gastric                          | 2.79 |
| 5  | 457465 | AW301344  | Hs.122908 | DNA replication factor                    | 2.79 |
|    | 426472 | BE246138  | Hs.30853  | ESTs                                      | 2.79 |
|    | 424081 | NM_006413 | Hs.139120 | ribonuclease P (30kD)                     | 2.78 |
|    | 425851 | NM_001490 | Hs.159642 | glucosaminyl (N-acetyl) transferase 1, c  | 2.78 |
|    | 419236 | AA330447  | Hs.135159 | Homo sapiens cDNA FLJ11481 fis, clone HE  | 2.78 |
| 10 | 423430 | AF112481  | Hs.128501 | RAD54, S. cerevisiae, homolog of. B       | 2.78 |
|    | 410011 | AB020641  | Hs.57856  | PFTAIRE protein kinase 1                  | 2.78 |
|    | 453700 | AB009426  | Hs.560    | apolipoprotein B mRNA editing enzyme, ca  | 2.78 |
|    | 431250 | BE264649  | Hs.251377 | taxol resistance associated gene 3        | 2.77 |
|    | 414043 | AI521210  | Hs.97977  | ESTs                                      | 2.77 |
|    | 418054 | NM_002318 | Hs.83354  | lysyl oxidase-like 2                      | 2.77 |
| 15 | 439223 | AW238299  | Hs.250618 | UL16 binding protein 2                    | 2.76 |
|    | 425956 | M60828    | Hs.164568 | fibroblast growth factor 7 (keratinocyte  | 2.76 |
|    | 437612 | AA827715  | Hs.105153 | Homo sapiens, clone IMAGE:3461987, mRNA,  | 2.76 |
|    | 426119 | W94997    | Hs.189917 | ESTs                                      | 2.76 |
| 20 | 459574 | AI741122  | Hs.101810 | Homo sapiens cDNA FLJ14232 fis, clone NT  | 2.76 |
|    | 442339 | BE299658  | Hs.227591 | ESTs, Weakly similar to 1901303A Leu zip  | 2.76 |
|    | 414334 | AA824298  | Hs.21331  | hypothetical protein FLJ10036             | 2.76 |
|    | 418217 | AI910647  | Hs.13442  | ESTs                                      | 2.76 |
|    | 420022 | AA256253  | Hs.120817 | ESTs                                      | 2.76 |
| 25 | 408243 | Y00787    | Hs.624    | interleukin 8                             | 2.75 |
|    | 421346 | Z34277    | Hs.103707 | apomucin                                  | 2.75 |
|    | 421379 | Y15221    | Hs.103982 | small inducible cytokine subfamily B (Cy  | 2.75 |
|    | 425773 | N21279    | Hs.237749 | ESTs                                      | 2.75 |
|    | 449611 | AI970394  | Hs.197075 | ESTs                                      | 2.74 |
| 30 | 424827 | AI057094  | Hs.96867  | Homo sapiens cDNA: FLJ23155 fis, clone L  | 2.74 |
|    | 448621 | AI097144  | Hs.5250   | ESTs, Weakly similar to ALU1_HUMAN ALU S  | 2.74 |
|    | 428523 | AW974540  | Hs.98626  | ESTs                                      | 2.73 |
|    | 410839 | NM_006849 | Hs.66581  | protein disulfide isomerase               | 2.73 |
|    | 437380 | AL359577  | Hs.112198 | Homo sapiens mRNA; cDNA DKFZp547M073 (fr  | 2.73 |
| 35 | 424641 | AB001106  | Hs.151413 | glia maturation factor, beta              | 2.73 |
|    | 431708 | AI698136  | Hs.108873 | ESTs                                      | 2.73 |
|    | 436209 | AW850417  | Hs.254020 | ESTs, Moderately similar to unnamed prot  | 2.73 |
|    | 441790 | AW294909  | Hs.132208 | ESTs                                      | 2.73 |
|    | 428862 | NM_000346 | Hs.2316   | SRY (sex determining region Y)-box 9 (ca  | 2.73 |
| 40 | 409506 | NM_006153 | Hs.54589  | NCK adaptor protein 1                     | 2.73 |
|    | 423482 | BE280172  | Hs.129228 | galactokinase 2                           | 2.73 |
|    | 417015 | M83772    | Hs.80876  | flavin containing monooxygenase 3         | 2.72 |
|    | 448165 | NM_005591 | Hs.202379 | meiotic recombination (S. cerevisiae) 11  | 2.72 |
|    | 448626 | AI580252  | Hs.293246 | ESTs, Weakly similar to putative p150 [H  | 2.72 |
| 45 | 447803 | BE620578  | Hs.30858  | ESTs, Weakly similar to S65657 alpha-1C-  | 2.72 |
|    | 429703 | T93154    | Hs.28705  | ESTs                                      | 2.72 |
|    | 448796 | AA147829  | Hs.301431 | endothelial zinc finger protein induced   | 2.72 |
|    | 410902 | AW809665  |           | gb:MR4-ST0124-261099-015-g07 ST0124 Homo  | 2.72 |
|    | 424745 | AA214618  | Hs.152759 | activator of S phase kinase               | 2.72 |
| 50 | 454469 | AW792775  |           | gb:CM0-UM0001-010300-258-g10 UM0001 Homo  | 2.72 |
|    | 458632 | AI744445  | Hs.167073 | Homo sapiens cDNA FLJ13047 fis, clone NT  | 2.72 |
|    | 452012 | AA307703  | Hs.279766 | kinesin family member 4A                  | 2.72 |
|    | 422109 | S73265    | Hs.1473   | gastrin-releasing peptide                 | 2.72 |
|    | 438008 | AA775026  | Hs.203802 | ESTs                                      | 2.72 |
|    | 420552 | AK000492  | Hs.98806  | hypothetical protein                      | 2.71 |
| 55 | 427038 | NM_014633 | Hs.173288 | KIAA0155 gene product                     | 2.71 |
|    | 409239 | AA740875  | Hs.44307  | ESTs, Moderately similar to I38022 hypot  | 2.71 |
|    | 425371 | D49441    | Hs.155981 | mesothelin                                | 2.71 |
|    | 439857 | AA847194  | Hs.232002 | ESTs                                      | 2.71 |
| 60 | 455309 | AW894017  |           | gb:RC4-NN0027-150400-012-g04 NN0027 Homo  | 2.71 |
|    | 439580 | AF086401  | Hs.293847 | ESTs, Moderately similar to S65657 alpha  | 2.70 |
|    | 437257 | AI283085  | Hs.290931 | ESTs, Weakly similar to YFJ7_YEAST HYPOT  | 2.70 |
|    | 435039 | AW043921  | Hs.130526 | ESTs                                      | 2.70 |
|    | 438796 | W67821    | Hs.109590 | genethonin 1                              | 2.70 |
|    | 407013 | U35637    |           | gb:Human nebulin mRNA, partial cds        | 2.70 |
| 65 | 445413 | AA151342  | Hs.12677  | CGI-147 protein                           | 2.70 |
|    | 418416 | U11700    | Hs.84999  | ATPase, Cu++ transporting, beta polypept  | 2.70 |
|    | 441362 | BE614410  | Hs.23044  | RAD51 (S. cerevisiae) homolog (E. coli Re | 2.69 |
|    | 448045 | AJ297436  | Hs.20166  | prostate stem cell antigen                | 2.69 |
| 70 | 441868 | AI400276  | Hs.183485 | ESTs                                      | 2.69 |
|    | 449076 | AI627826  | Hs.209109 | ESTs                                      | 2.69 |
|    | 427528 | AU077143  | Hs.179565 | minichromosome maintenance deficient (S.  | 2.69 |
|    | 427617 | D42063    | Hs.199179 | RAN binding protein 2                     | 2.69 |
|    | 414618 | AI204600  | Hs.96978  | hypothetical protein MGC10764             | 2.69 |
| 75 | 441350 | AB020690  | Hs.7782   | paraneoplastic antigen MA2                | 2.68 |
|    | 419310 | AA236233  | Hs.188716 | ESTs                                      | 2.68 |
|    | 445279 | R41900    | Hs.22245  | ESTs                                      | 2.68 |
|    | 439741 | BE379646  | Hs.6904   | Homo sapiens mRNA full length insert cDN  | 2.68 |
|    | 446692 | Z44514    | Hs.156829 | Homo sapiens mRNA for KIAA1763 protein,   | 2.68 |
| 80 | 449300 | AI658959  | Hs.222165 | ESTs                                      | 2.68 |
|    | 444585 | AW170015  | Hs.6594   | ESTs                                      | 2.68 |
|    | 444384 | BE174527  | Hs.11065  | Homo sapiens HDCME13P mRNA, partial cds   | 2.68 |
|    | 448104 | AI674818  | Hs.316433 | Homo sapiens cDNA FLJ11375 fis, clone HE  | 2.67 |
|    | 446839 | BE091926  | Hs.16244  | mitotic spindle coiled-coil related prot  | 2.67 |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 428361 | NM_015905 | Hs.183858 | transcriptional intermediary factor 1    | 2.67 |
|    | 418971 | AA360392  | Hs.87113  | ESTs                                     | 2.66 |
|    | 446152 | AI292036  | Hs.150028 | ESTs                                     | 2.66 |
|    | 441553 | AA281219  | Hs.121296 | ESTs                                     | 2.66 |
| 5  | 403548 |           |           | NA                                       | 2.66 |
|    | 452699 | AW295390  | Hs.213062 | ESTs                                     | 2.66 |
|    | 449532 | W74653    | Hs.271593 | ESTs, Moderately similar to A47582 B-cel | 2.66 |
|    | 453985 | N44545    | Hs.251865 | ESTs                                     | 2.65 |
|    | 409956 | AW103364  | Hs.727    | inhibin, beta A (activin A, activin AB a | 2.65 |
| 10 | 409446 | AI561173  | Hs.67688  | ESTs                                     | 2.65 |
|    | 422094 | AF129535  | Hs.272027 | F-box only protein 5                     | 2.65 |
|    | 445462 | AA378776  | Hs.288649 | hypothetical protein MGC3077             | 2.64 |
|    | 432670 | AA806536  | Hs.291841 | ESTs                                     | 2.64 |
|    | 418634 | AK000064  | Hs.86905  | ATPase, H+ transporting, lysosomal (vacu | 2.64 |
| 15 | 453628 | AW243307  | Hs.83937  | hypothetical protein                     | 2.64 |
|    | 442117 | AW664964  | Hs.128899 | ESTs                                     | 2.64 |
|    | 416248 | H99169    | Hs.23450  | mitochondrial ribosomal protein S25      | 2.64 |
|    | 414631 | AW970130  | Hs.65406  | ESTs                                     | 2.64 |
|    | 423268 | BE386898  | Hs.131162 | ESTs, Weakly similar to ALU5_HUMAN ALU S | 2.64 |
| 20 | 413597 | AW302885  | Hs.117183 | ESTs                                     | 2.63 |
|    | 446031 | AI271704  | Hs.18987  | Homo sapiens BAC clone RP11-505D17 from  | 2.63 |
|    | 450142 | AW207469  | Hs.24485  | chondroitin sulfate proteoglycan 6 (barn | 2.63 |
|    | 436304 | AA339622  | Hs.108887 | ESTs                                     | 2.63 |
|    | 439832 | T81829    | Hs.14870  | Homo sapiens, Similar to hect domain and | 2.63 |
| 25 | 449207 | AL044222  | Hs.23255  | nucleoporin 155kD                        | 2.62 |
|    | 416111 | AA033813  | Hs.79018  | chromatin assembly factor 1, subunit A { | 2.62 |
|    | 414747 | U30872    | Hs.77204  | centromere protein F (350/400kD, mitotin | 2.62 |
|    | 423811 | AW299598  | Hs.50895  | homeo box C4                             | 2.62 |
|    | 439474 | AI824060  | Hs.211501 | ESTs                                     | 2.62 |
| 30 | 417218 | AA005247  | Hs.285754 | met proto-oncogene (hepatocyte growth fa | 2.62 |
|    | 408031 | AA081395  | Hs.42173  | Homo sapiens cDNA FLJ10366 fis, clone NT | 2.62 |
|    | 442821 | BE391929  | Hs.8752   | transmembrane protein 4                  | 2.62 |
|    | 418245 | AA068767  | Hs.83883  | transmembrane, prostate androgen induced | 2.62 |
| 35 | 447917 | AL048037  | Hs.164588 | ESTs, Moderately similar to neuronal thr | 2.61 |
|    | 424840 | D79987    | Hs.153479 | extra spindle poles, S. cerevisiae, homo | 2.61 |
|    | 443268 | AI800271  | Hs.129445 | hypothetical protein FLJ12496            | 2.61 |
|    | 403056 | R58624    | Hs.2186   | eukaryotic translation elongation factor | 2.61 |
|    | 433037 | NM_014158 | Hs.279938 | HSPC067 protein                          | 2.61 |
| 40 | 410358 | AW975168  | Hs.13337  | ESTs, Weakly similar to unnamed protein  | 2.60 |
|    | 426181 | AA371422  | Hs.334371 | hypothetical protein MGC13096            | 2.60 |
|    | 414853 | U31116    | Hs.77501  | sarcoglycan, beta (43kD dystrophin-assoc | 2.60 |
|    | 457233 | AI355009  | Hs.221698 | ESTs                                     | 2.60 |
|    | 416049 | AI970536  | Hs.16603  | hypothetical protein FLJ13163            | 2.60 |
| 45 | 418946 | AI798841  | Hs.164526 | ESTs                                     | 2.60 |
|    | 441891 | AW129145  | Hs.128076 | ESTs                                     | 2.60 |
|    | 443742 | AW627805  | Hs.145421 | ESTs                                     | 2.60 |
|    | 433868 | AA612960  | Hs.337300 | ESTs                                     | 2.60 |
|    | 442717 | R88362    | Hs.180591 | ESTs, Weakly similar to T23976 hypotheti | 2.59 |
| 50 | 444542 | AI161293  | Hs.280380 | aminopeptidase                           | 2.59 |
|    | 452940 | AA029722  | Hs.2173   | fucosyltransferase 4 {alpha (1,3) fucosy | 2.59 |
|    | 429170 | NM_001394 | Hs.2359   | dual specificity phosphatase 4           | 2.59 |
|    | 417531 | NM_003157 | Hs.1087   | serine/threonine kinase 2                | 2.59 |
|    | 401458 |           |           | NA                                       | 2.58 |
| 55 | 436016 | AA806465  | Hs.121536 | Human DNA sequence from clone RP11-472E5 | 2.58 |
|    | 430980 | AW971904  | Hs.122164 | diaphanous (Drosophila, homolog) 3       | 2.58 |
|    | 441581 | BE551408  | Hs.127196 | ESTs                                     | 2.58 |
|    | 435693 | AI033134  | Hs.119887 | ESTs                                     | 2.58 |
|    | 431814 | BE256242  | Hs.270847 | delta-tubulin                            | 2.58 |
| 60 | 446269 | AW263155  | Hs.14559  | hypothetical protein FLJ10540            | 2.58 |
|    | 422765 | AW409701  | Hs.1578   | baculoviral IAP repeat-containing 5 (sur | 2.58 |
|    | 456999 | AA319798  | Hs.298581 | eukaryotic translation elongation factor | 2.58 |
|    | 425234 | AW152225  | Hs.165909 | ESTs, Weakly similar to I38022 hypotheti | 2.58 |
|    | 434423 | NM_006769 | Hs.3844   | LIM domain only 4                        | 2.57 |
| 65 | 425782 | U66468    | Hs.159525 | cell growth regulatory with EF-hand doma | 2.57 |
|    | 433929 | AI375499  | Hs.27379  | ESTs                                     | 2.57 |
|    | 414907 | X90725    | Hs.77597  | polo (Drosophila)-like kinase            | 2.57 |
|    | 411789 | AF245505  | Hs.72157  | DKFZP564I1922 protein                    | 2.57 |
|    | 435627 | W88774    | Hs.118370 | ESTs                                     | 2.57 |
| 70 | 432168 | AK000563  | Hs.272805 | hypothetical protein FLJ20556            | 2.57 |
|    | 432375 | BE536069  | Hs.2962   | S100 calcium-binding protein P           | 2.57 |
|    | 424057 | AI339874  | Hs.126593 | ESTs                                     | 2.57 |
|    | 424315 | AW614850  | Hs.193384 | putative 28 kDa protein                  | 2.57 |
|    | 435663 | AI023707  | Hs.134273 | ESTs                                     | 2.56 |
| 75 | 439277 | R80061    | Hs.164478 | hypothetical protein FLJ21939 similar to | 2.56 |
|    | 427747 | AW411425  | Hs.180655 | serine/threonine kinase 12               | 2.56 |
|    | 438182 | AW342140  | Hs.182545 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 2.56 |
|    | 421102 | AI470093  | Hs.283085 | protocadherin beta 6                     | 2.56 |
|    | 445725 | AK000956  | Hs.13209  | hypothetical protein FLJ10094            | 2.56 |
| 80 | 448243 | AW369771  | Hs.52620  | integrin, beta 8                         | 2.56 |
|    | 442881 | AI023175  | Hs.167022 | ESTs                                     | 2.56 |
|    | 422165 | AL041199  | Hs.1481   | histidine decarboxylase                  | 2.56 |
|    | 425843 | BE313280  | Hs.159627 | death associated protein 3               | 2.56 |
|    | 448569 | BE382657  | Hs.21486  | signal transducer and activator of trans | 2.55 |

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|    |             |                                       |  |  |      |
|----|-------------|---------------------------------------|--|--|------|
| 5  | 416806      | NM_000288                             | Hs.79993   | peroxisomal biogenesis factor 7          | 2.55 |
|    | 438113      | AI467908                              | Hs.8882  | ESTs                                     | 2.55 |
|    | 413374      | NM_001034                             | Hs.75319   | ribonucleotide reductase M2 polypeptide  | 2.55 |
|    | 448275      | BE514434                              | Hs.20830   | kinesin-like 2                           | 2.55 |
|    | 419987      | NM_005014                             | Hs.94070   | osteomodulin                             | 2.55 |
| 10 | 439929      | S73205                                |  | gb:insulin activator factor [human, panc | 2.55 |
|    | 452240      | AI591147                              | Hs.61232   | ESTs                                     | 2.55 |
|    | 417806      | AI867277                              | Hs.183733  | ESTs                                     | 2.55 |
|    | 421482      | AL135462                              | Hs.104715  | inversin                                 | 2.55 |
|    | 456884      | AA054679                              | Hs.155150  | ribonuclease P (14kD)                    | 2.55 |
| 15 | 442961      | BE614474                              | Hs.289074  | F-box only protein 22                    | 2.55 |
|    | 411274      | NM_002776                             | Hs.69423   | kalikrein 10                             | 2.55 |
|    | 419359      | AL043202                              | Hs.90073   | chromosome segregation 1 (yeast homolog) | 2.54 |
|    | 448666      | NM_014953                             | Hs.323346  | KIAA1008 protein                         | 2.54 |
|    | 428911      | Z43846                                | Hs.194478  | Homo sapiens mRNA; cDNA DKFZp434O1572 (f | 2.54 |
| 20 | 452778      | R71338                                | Hs.5921  | Homo sapiens cDNA: FLJ21592 fis, clone C | 2.54 |
|    | 430733      | AW975920                              | Hs.283361  | ESTs                                     | 2.54 |
|    | 421184      | NM_003616                             | Hs.102456  | survival of motor neuron protein interac | 2.54 |
|    | 435361      | AI168596                              | Hs.117117  | ESTs                                     | 2.54 |
|    | 452833      | BE559681                              | Hs.30736   | KIAA0124 protein                         | 2.54 |
| 25 | 422330      | D30783                                | Hs.115263  | epiregulin                               | 2.54 |
|    | 424962      | NM_012288                             | Hs.153954  | TRAM-like protein                        | 2.54 |
|    | 430264      | AA470519                              |  | gb:nc71f10.s1 NCI_CGAP_Pr1 Homo sapiens  | 2.53 |
|    | 447178      | AW594641                              | Hs.192417  | ESTs                                     | 2.53 |
|    | 411773      | NM_006799                             | Hs.72026   | protease, serine, 21 (testisin)          | 2.53 |
| 30 | 433571      | AA765256                              | Hs.135191  | ESTs, Weakly similar to unnamed protein  | 2.53 |
|    | 419449      | H18417                                | Hs.57483   | Homo sapiens cDNA FLJ14294 fis, clone PL | 2.53 |
|    | 448019      | AW947164                              | Hs.195641  | ESTs, Moderately similar to I38022 hypot | 2.53 |
|    | 409435      | AI810721                              | Hs.95424   | ESTs                                     | 2.52 |
|    | 417900      | BE250127                              | Hs.82906   | CDC20 (cell division cycle 20, S. cerevi | 2.52 |
| 35 | 431385      | BE178536                              | Hs.11090   | membrane-spanning 4-domains, subfamily A | 2.52 |
|    | 422314      | K01900                                | Hs.73890   | interferon, alpha 8                      | 2.52 |
|    | 441343      | AI970348                              | Hs.132230  | ESTs                                     | 2.52 |
|    | 417185      | NM_002484                             | Hs.81469   | nucleotide binding protein 1 (E.coli Min | 2.52 |
|    | 401747      |                                       |  | NA                                       | 2.52 |
| 40 | 448526      | AB028946                              | Hs.21361   | KIAA1023 protein                         | 2.52 |
|    | 419488      | AA316241                              | Hs.90691   | nucleophosmin/nucleoplasmin 3            | 2.52 |
|    | 413627      | BE182082                              | Hs.246973  | ESTs                                     | 2.51 |
|    | 441285      | NM_002374                             | Hs.167   | microtubule-associated protein 2         | 2.51 |
|    | 446921      | AB012113                              | Hs.16530   | small inducible cytokine subfamily A (Cy | 2.51 |
| 45 | 429357      | AA779725                              | Hs.164589  | ESTs                                     | 2.51 |
|    | 443171      | BE281128                              | Hs.9030  | TONDU                                    | 2.50 |
|    | 446636      | AC002563                              | Hs.15767   | citron (rho-interacting, serine/threonin | 2.50 |
|    | 420795      | AA323037                              | Hs.128645  | sorting nexin 16                         | 2.50 |
|    | 448582      | AI538880                              | Hs.94812   | ESTs                                     | 2.50 |
| 50 | 445459      | AI478629                              | Hs.158465  | likely ortholog of mouse putative IKK re | 2.50 |
|    | 423909      | AJ223183                              | Hs.135194  | immunoglobulin superfamily, member 6     | 2.50 |
|    | 414315      | Z24878                                |  | gb:HSB65D052 STRATAGENE Human skeletal m | 2.50 |
|    | 407568      | AA740964                              | Hs.62699   | ESTs                                     | 2.50 |
|    | 453911      | AW503857                              | Hs.4007  | Sarcolemmal-associated protein           | 2.50 |
| 55 | 431571      | AW500486                              | Hs.180610  | splicing factor proline/glutamine rich ( | 2.50 |
|    | 433843      | AW021423                              | Hs.112819  | ESTs                                     | 2.50 |
|    | 456254      | T19844                                |  | gb:B711F Heart Homo sapiens cDNA clone B | 2.50 |
|    | 403137      |                                       |  | NA                                       | 2.50 |
|    | 425895      | AI269484                              | Hs.161427  | zinc finger protein 215                  | 2.50 |
| 60 | 418612      | AB037788                              | Hs.224961  | cleavage and polyadenylation specific fa | 2.50 |
|    | TABLE 45B:  |                                       |  |  |      |
|    | Pkey:       | Unique Eos probeset identifier number |  |  |      |
|    | CAT number: | Gene cluster number                   |  |  |      |
|    | Accession:  | Genbank accession numbers             |  |  |      |
| 65 | Pkey        | CAT Number                            | Accessions   |  |      |
|    | 410784      | 1221005_1                             | AW803201 BE079700 BE062940   |  |      |
|    | 410902      | 1226078_1                             | AW809665 AW810108 AW809781 AW809844  |  |      |
|    | 411765      | 125700_1                              | H43346 AA248302 AA095182   |  |      |
|    | 413170      | 1351880_1                             | BE068819 BE068821 BE068825   |  |      |
| 70 | 413516      | 1374595_1                             | BE145907 BE145796 BE145803 BE145851 BE145923 BE145812 BE145809 BE145852 BE145856                                     |  |      |
|    | 414315      | 143512_1                              | Z24878 AA494098 F13654 AA494040 AA143127   |  |      |
|    | 428858      | 296453_1                              | AA436760 AW237453 BE327496 N47347 N56967   |  |      |
|    | 430264      | 315008_1                              | AA470519 BE303010 BE302954 BE384120  |  |      |
|    | 431322      | 331543_1                              | AW970622 AA503009 AA502998 AA502989 AA502805 T92188  |  |      |
| 75 | 434138      | 380572_1                              | AA625804 AW418787 AW074833 AI675642 AI393368   |  |      |
|    | 436411      | 419334_1                              | AW674352 AA715374 Z25205   |  |      |
|    | 438159      | 45106_-2                              | Z83947   |  |      |
|    | 439929      | 48059_-1                              | S73205   |  |      |
|    | 451105      | 859083_1                              | AI761324 AW880941 AW880937   |  |      |
| 80 | 452453      | 918300_1                              | AI902519 AI902518 AI902516   |  |      |
|    | 454469      | 1213727_1                             | AW792775 BE072509 AW792958   |  |      |
|    | 454600      | 1226077_1                             | AW810001 AW810092 AW810170 AW809884 AW809664 AW810353 AW810428 AW810209 AW810429 AW810154 AW810168 AW809786 AW810006 |  |      |
|    |             |                                       | AW809672 AW809694 AW810552 AW810345 AW810432 AW809950  |  |      |
|    | 454821      | 1236365_1                             | AW833504 AW833751 AW833493 AW833341  |  |      |
|    | 455309      | 1278153_1                             | AW894017 AW893956 AW894032   |  |      |

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456254 1699246\_1 T19844 T11755 T11830 T20136 T11957 R45834 R45828 R15595

TABLE 45C:

Pkey: Unique number corresponding to an Eos probeset  
 Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) Nature 402:489-495.  
 Strand: Indicates DNA strand from which exons were predicted.  
 Nt\_position: Indicates nucleotide positions of predicted exons.

| Pkey   | Ref     | Strand | Nt_position  |
|--------|---------|--------|--|
| 401458 | 9187886 | Plus   | 76485-77597  |
| 401644 | 8576138 | Plus   | 82655-83959  |
| 401747 | 9789672 | Minus  | 118596-118816, 119119-119244, 119609-119761, 120422-120990, 130161-130381, 130468-130593, 131097-131258, 131866-131932, 132451-132575, 133580-134011 |
| 402167 | 8571795 | Plus   | 109122-110357  |
| 402299 | 6693370 | Plus   | 23367-25175  |
| 402408 | 9796239 | Minus  | 110326-110491  |
| 403137 | 9211494 | Minus  | 92349-92572, 92958-93084, 93579-93712, 93949-94072, 94591-94748, 95214-95337   |
| 403381 | 9438267 | Minus  | 26009-26178  |
| 403422 | 9665041 | Minus  | 151169-151561  |
| 403548 | 8081591 | Minus  | 38760-39352  |
| 403637 | 8671936 | Minus  | 142647-142771, 145531-145762   |
| 403639 | 8671948 | Plus   | 113234-113326, 115186-115287, 119649-119786  |
| 403776 | 7770611 | Minus  | 1414-1513, 1624-1756   |
| 404253 | 9367202 | Minus  | 55675-56055  |
| 404440 | 7528051 | Plus   | 80430-81581  |
| 404766 | 7882612 | Minus  | 158681-158882, 160838-160973   |
| 404996 | 6007890 | Plus   | 37999-38145, 38652-38998, 39727-39872, 40557-40674, 42351-42450  |
| 405466 | 7767904 | Minus  | 64498-64675  |
| 405770 | 2735037 | Plus   | 61057-62075  |
| 405817 | 4071056 | Plus   | 19914-20112, 25655-25810   |
| 406117 | 9142932 | Plus   | 54304-54584  |
| 406182 | 5923650 | Minus  | 28256-28935  |

TABLE 46A: ABOUT 1303 GENES UP-REGULATED IN STOMACH CANCER COMPARED TO NORMAL STOMACH

Table 46A lists about 1303 genes up-regulated in stomach cancer compared to normal stomach. These were selected as for Table 45A except using non-malignant stomach specimens in determining the denominator value and the ratio was equal to or greater than 5.0.

Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 R1: Ratio of tumor to normal body tissue

| Pkey   | ExAccn    | UnigenelD | Unigene Title                            | R1    |
|--------|-----------|-----------|--|-------|
| 446619 | AU076643  | Hs.313    | secreted phosphoprotein 1 (osteopontin,  | 80.50 |
| 414152 | NM_003248 | Hs.75774  | thrombospondin 4                         | 70.52 |
| 421552 | AF026692  | Hs.105700 | secreted frizzled-related protein 4      | 65.30 |
| 428698 | AA852773  | Hs.334838 | KIAA1866 protein                         | 61.90 |
| 428368 | BE440042  | Hs.83326  | matrix metalloproteinase 3 (stromelysin  | 50.60 |
| 409041 | AB033025  | Hs.50081  | KIAA1199 protein                         | 44.50 |
| 452281 | T93500    | Hs.28792  | Homo sapiens cDNA FLJ11041 fis, clone PL | 41.10 |
| 452862 | AW378065  | Hs.8687   | ESTs                                     | 33.50 |
| 427585 | D31152    | Hs.179729 | collagen, type X, alpha 1 (Schmid metaph | 32.10 |
| 424834 | AK001432  | Hs.153408 | Homo sapiens cDNA FLJ10570 fis, clone NT | 26.90 |
| 428398 | AI249368  | Hs.98558  | ESTs                                     | 26.40 |
| 409757 | NM_001898 | Hs.123114 | cystatin SN                              | 25.48 |
| 403776 |           |           | NA                                       | 24.90 |
| 427674 | NM_003528 | Hs.2178   | H2B histone family, member Q             | 23.80 |
| 419968 | X04430    | Hs.93913  | interleukin 6 (interferon, beta 2)       | 23.10 |
| 427108 | AB028976  | Hs.173571 | KIAA1053 protein                         | 21.76 |
| 452401 | NM_007115 | Hs.29352  | tumor necrosis factor, alpha-induced pro | 20.70 |
| 400419 | AF084545  |           | NA                                       | 20.40 |
| 415989 | AI267700  | Hs.317584 | ESTs                                     | 19.80 |
| 432101 | AI918950  | Hs.123642 | EphA3                                    | 19.70 |
| 418994 | AA296520  | Hs.89546  | selectin E (endothelial adhesion molecu  | 19.00 |
| 452110 | T47667    | Hs.28005  | Homo sapiens cDNA FLJ11309 fis, clone PL | 18.40 |
| 412652 | AI801777  | Hs.6774   | ESTs                                     | 18.20 |
| 414430 | AI346201  | Hs.76118  | ubiquitin carboxyl-terminal esterase L1  | 17.71 |
| 422168 | AA586894  | Hs.112408 | S100 calcium-binding protein A7 (psorias | 17.38 |
| 448988 | Y09763    | Hs.22785  | gamma-aminobutyric acid (GABA) A recepto | 17.36 |
| 437446 | AA788946  | Hs.16869  | ESTs, Moderately similar to CA1C RAT COL | 17.00 |
| 440594 | AW445187  | Hs.126036 | ESTs                                     | 17.00 |
| 430044 | AA464510  | Hs.152812 | ESTs                                     | 17.00 |
| 426647 | AA243464  | Hs.294101 | pre-B-cell leukemia transcription factor | 16.90 |
| 414737 | AI160386  | Hs.125087 | ESTs                                     | 16.50 |
| 427335 | AA448542  | Hs.251677 | G antigen 7B                             | 16.30 |
| 423453 | AW450737  | Hs.128791 | CGI-09 protein                           | 15.50 |
| 414569 | AF109298  | Hs.118258 | prostate cancer associated protein 1     | 15.40 |
| 401961 | NA        |           | NA                                       | 15.40 |
| 434551 | BE387162  | Hs.280858 | ESTs, Highly similar to A35661 DNA excis | 15.40 |
| 432069 | AW975868  | Hs.294100 | ESTs                                     | 15.30 |
| 434699 | AA643687  | Hs.149425 | Homo sapiens cDNA FLJ11980 fis, clone HE | 15.30 |

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|    | 409062 | AL157488  | Hs.50150  | Homo sapiens mRNA; cDNA DKFZp564B182 (fr | 15.30 |
|    | 400289 | X07820    | Hs.2258   | matrix metalloproteinase 10 (stromelysin | 15.20 |
|    | 415138 | C18356    | Hs.295944 | tissue factor pathway inhibitor 2        | 15.20 |
| 5  | 428820 | AA436187  | Hs.172631 | integrin, alpha M (complement component  | 15.19 |
|    | 410763 | AF279145  | Hs.8966   | hypothetical protein FLJ21776            | 15.10 |
|    | 438639 | AI278360  | Hs.31409  | ESTs                                     | 15.10 |
|    | 458997 | AW937420  | Hs.69662  | ESTs                                     | 15.00 |
|    | 432731 | R31178    | Hs.287820 | fibronectin 1                            | 14.90 |
| 10 | 459247 | N46243    | Hs.110373 | ESTs, Highly similar to T42626 secreted  | 14.70 |
|    | 451099 | R52795    | Hs.25954  | interleukin 13 receptor, alpha 2         | 14.70 |
|    | 452242 | R50956    | Hs.159993 | glycosyltransferase                      | 14.70 |
|    | 426427 | M86699    | Hs.169840 | TTK protein kinase                       | 14.50 |
|    | 439524 | AI985897  | Hs.125293 | ESTs                                     | 14.45 |
|    | 414869 | AA157291  | Hs.21479  | ubiquitin 1                              | 14.40 |
| 15 | 411573 | AB029000  | Hs.70823  | KIAA1077 protein                         | 14.40 |
|    | 418693 | AI750878  | Hs.87409  | thrombospondin 1                         | 14.37 |
|    | 421823 | N40850    | Hs.28625  | ESTs                                     | 14.30 |
|    | 423903 | M57765    | Hs.1721   | interleukin 11                           | 14.20 |
| 20 | 419227 | BE537383  | Hs.89739  | cholinergic receptor, nicotinic, beta po | 14.10 |
|    | 447417 | AW732858  | Hs.143067 | KIAA1602 protein                         | 13.96 |
|    | 416406 | D86961    | Hs.79299  | lipoma HMGIC fusion partner-like 2       | 13.90 |
|    | 446392 | AF142419  | Hs.15020  | homolog of mouse quaking QKI (KH domain  | 13.90 |
|    | 412863 | AA121673  | Hs.59757  | zinc finger protein 281                  | 13.90 |
| 25 | 449509 | AA001615  | Hs.84561  | ESTs                                     | 13.80 |
|    | 440953 | AI683036  | Hs.124135 | Homo sapiens cDNA FLJ13051 fis, clone NT | 13.80 |
|    | 432415 | T16971    | Hs.289014 | ESTs, Weakly similar to A43932 mucin 2 p | 13.60 |
|    | 428769 | AW207175  | Hs.106771 | ESTs                                     | 13.60 |
|    | 416292 | AA179233  | Hs.42390  | nasopharyngeal carcinoma susceptibility  | 13.41 |
| 30 | 424580 | AA446539  | Hs.339024 | ESTs, Weakly similar to A46010 X-linked  | 13.40 |
|    | 438459 | T49300    | Hs.35304  | Homo sapiens cDNA FLJ13655 fis, clone PL | 13.30 |
|    | 431958 | X63629    | Hs.2877   | cadherin 3, type 1, P-cadherin (placenta | 13.26 |
|    | 406972 | M32053    |           | gb:Human H19 RNA gene, complete cds.     | 13.19 |
|    | 432368 | AW970244  | Hs.162188 | ESTs                                     | 13.16 |
| 35 | 424806 | AA382523  | Hs.105689 | MSTP031 protein                          | 13.08 |
|    | 440351 | AF030933  | Hs.7179   | RAD1 (S. pombe) homolog                  | 12.98 |
|    | 437789 | AI581344  | Hs.127812 | ESTs, Weakly similar to T17330 hypotheti | 12.90 |
|    | 447164 | AF026941  | Hs.17518  | Homo sapiens cig5 mRNA, partial sequence | 12.80 |
|    | 417412 | X16896    | Hs.82112  | interleukin 1 receptor, type I           | 12.80 |
| 40 | 402363 | NA        |           | NA                                       | 12.78 |
|    | 444301 | AK000136  | Hs.10760  | asporin (LRR class 1)                    | 12.76 |
|    | 416783 | AA206186  | Hs.79889  | monocyte to macrophage differentiation-a | 12.60 |
|    | 435706 | W31254    | Hs.7045   | GL004 protein                            | 12.50 |
|    | 414618 | AI204600  | Hs.96978  | hypothetical protein MGC10764            | 12.50 |
| 45 | 439737 | AI751438  | Hs.41271  | Homo sapiens mRNA full length insert cDN | 12.49 |
|    | 405770 |           |           | NA                                       | 12.46 |
|    | 418678 | NM_001327 | Hs.167379 | cancer/testis antigen                    | 12.45 |
|    | 414132 | AI801235  | Hs.48480  | ESTs                                     | 12.40 |
|    | 410434 | AF051152  | Hs.63668  | toll-like receptor 2                     | 12.30 |
| 50 | 451092 | AI207256  | Hs.13766  | Homo sapiens mRNA for FLJ00074 protein,  | 12.26 |
|    | 407891 | AA486620  | Hs.41135  | endomucin-2                              | 12.20 |
|    | 450506 | NM_004460 | Hs.418    | fibroblast activation protein, alpha     | 12.01 |
|    | 411213 | AA676939  | Hs.69285  | neuropilin 1                             | 12.00 |
|    | 436476 | AA326108  | Hs.33829  | bHLH protein DEC2                        | 12.00 |
| 55 | 413582 | AW295647  | Hs.71331  | hypothetical protein MGC5350             | 11.90 |
|    | 449318 | AW236021  | Hs.78531  | Homo sapiens, Similar to RIKEN cDNA 5730 | 11.90 |
|    | 401747 |           |           | NA                                       | 11.88 |
|    | 409619 | AK001015  | Hs.55220  | BCL2-associated athanogene 2             | 11.84 |
|    | 432596 | AJ224741  | Hs.278461 | matrilin 3                               | 11.80 |
| 60 | 400298 | AA032279  | Hs.61635  | six transmembrane epithelial antigen of  | 11.73 |
|    | 425688 | U48361    | Hs.159223 | NGF1-A binding protein 2 (ERG1 binding p | 11.72 |
|    | 407938 | AA905097  | Hs.85050  | phospholamban                            | 11.70 |
|    | 419948 | AB041035  | Hs.93847  | NADPH oxidase 4                          | 11.70 |
|    | 459645 | AA074346  | Hs.250715 | ESTs                                     | 11.51 |
|    | 438462 | AI624122  | Hs.89578  | general transcription factor IIH, polype | 11.50 |
| 65 | 434851 | AA806164  | Hs.116502 | ESTs                                     | 11.50 |
|    | 418699 | BE539639  | Hs.173030 | ESTs, Weakly similar to ALU8_HUMAN ALU S | 11.47 |
|    | 413453 | AA129640  | Hs.128065 | ESTs                                     | 11.40 |
|    | 442028 | AI239437  | Hs.48945  | ESTs                                     | 11.40 |
| 70 | 428479 | Y00272    | Hs.184572 | cell division cycle 2, G1 to S and G2 to | 11.39 |
|    | 453313 | BE005771  | Hs.153746 | hypothetical protein FLJ22490            | 11.20 |
|    | 421633 | AF121860  | Hs.106260 | sorting nexin 10                         | 11.20 |
|    | 410339 | AI916499  | Hs.298258 | ESTs                                     | 11.20 |
|    | 448111 | AA053486  | Hs.20315  | interferon-induced protein with tetratri | 11.15 |
| 75 | 453857 | AL080235  | Hs.35861  | DKFZP586E1621 protein                    | 11.15 |
|    | 430217 | N47863    | Hs.336901 | ribosomal protein S24                    | 11.10 |
|    | 452823 | AB012124  | Hs.30696  | transcription factor-like 5 (basic helix | 11.10 |
|    | 416530 | U62801    | Hs.79361  | kallikrein 6 (neurosin, zyme)            | 11.06 |
|    | 416854 | H40164    | Hs.80296  | Purkinje cell protein 4                  | 10.90 |
| 80 | 447072 | D61594    | Hs.17279  | tyrosylprotein sulfotransferase 1        | 10.90 |
|    | 424882 | AI379461  | Hs.153636 | far upstream element (FUSE) binding prot | 10.80 |
|    | 448693 | AW004854  | Hs.228320 | hypothetical protein FLJ23537            | 10.80 |
|    | 408750 | BE294069  | Hs.93581  | hypothetical protein FLJ10512            | 10.80 |
|    | 450221 | AA328102  | Hs.24641  | cytoskeleton associated protein 2        | 10.80 |

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|----|--------|-----------|-----------|--|-------|
|    | 436411 | AW674352  |           | gb:ba63c07.y1 NIH_MGC_12 Homo sapiens cD | 10.80 |
|    | 441693 | AA384673  | Hs.7943   | RPB5-mediating protein                   | 10.80 |
|    | 414922 | D00723    | Hs.77631  | glycine cleavage system protein H (amino | 10.80 |
| 5  | 441801 | AW242799  | Hs.86366  | ESTs                                     | 10.80 |
|    | 417173 | U61397    | Hs.81424  | ubiquitin-like 1 (sentrin)               | 10.80 |
|    | 415727 | BE501389  | Hs.20848  | ESTs, Weakly similar to APAF_HUMAN APOPT | 10.80 |
|    | 414142 | AW368397  | Hs.150042 | Homo sapiens cDNA FLJ14438 fis, clone HE | 10.80 |
|    | 421650 | AA781795  | Hs.122587 | ESTs                                     | 10.80 |
| 10 | 439999 | AA115811  | Hs.6838   | ras homolog gene family, member E        | 10.70 |
|    | 421814 | L12350    | Hs.108623 | thrombospondin 2                         | 10.69 |
|    | 415060 | AJ223810  | Hs.43213  | ESTs, Weakly similar to IEFS_HUMAN TRANS | 10.67 |
|    | 421462 | AF016495  | Hs.104624 | aquaporin 9                              | 10.66 |
|    | 410444 | W73484    |           | gb:zd54e04.s1 Soares_fetal_heart_NbHH19W | 10.61 |
|    | 409743 | N48721    | Hs.183506 | hypothetical protein FLJ14213            | 10.60 |
| 15 | 446142 | AI754693  | Hs.145968 | ESTs                                     | 10.60 |
|    | 444114 | T58003    | Hs.10323  | Homo sapiens mRNA from chromosome 5q31-3 | 10.60 |
|    | 423020 | AA383092  | Hs.1608   | replication protein A3 (14kD)            | 10.55 |
|    | 453891 | AB037751  | Hs.36353  | Homo sapiens mRNA full length insert cDN | 10.50 |
| 20 | 417352 | AA195919  |           | gb:zp95h09.r1 Stratagene muscle 937209 H | 10.46 |
|    | 417866 | AW067903  | Hs.82772  | collagen, type XI, alpha 1               | 10.42 |
|    | 427718 | AI798680  | Hs.25933  | ESTs                                     | 10.40 |
|    | 412589 | R28650    | Hs.24305  | ESTs                                     | 10.40 |
|    | 433332 | AI367347  | Hs.44898  | Homo sapiens clone TCCCTA00151 mRNA sequ | 10.40 |
| 25 | 424717 | H03754    | Hs.152213 | wingless-type MMTV integration site fami | 10.30 |
|    | 450434 | AA166950  | Hs.195870 | hypothetical protein FLJ14991            | 10.30 |
|    | 409044 | AI129586  | Hs.33033  | hypothetical protein FLJ14623            | 10.30 |
|    | 423600 | AI633559  | Hs.310359 | ESTs                                     | 10.30 |
|    | 433819 | AW511097  | Hs.112765 | ESTs                                     | 10.18 |
| 30 | 415076 | NM_000857 | Hs.77890  | guanylate cyclase 1, soluble, beta 3     | 10.10 |
|    | 410503 | AW975746  | Hs.188662 | KIAA1702 protein                         | 10.10 |
|    | 433800 | AI034361  | Hs.135150 | lung type-I cell membrane-associated gly | 10.10 |
|    | 429357 | AA779725  | Hs.164589 | ESTs                                     | 10.00 |
|    | 452838 | U65011    | Hs.30743  | preferentially expressed antigen in mela | 10.00 |
| 35 | 414117 | W88559    | Hs.1787   | proteolipid protein 1 (Pelizaeus-Merzbac | 10.00 |
|    | 416198 | H27332    | Hs.99598  | hypothetical protein MGC5338             | 10.00 |
|    | 413918 | AW015898  | Hs.71245  | ESTs                                     | 10.00 |
|    | 400570 | NA        |           | NA                                       | 10.00 |
|    | 439333 | AW384710  | Hs.125258 | Homo sapiens cDNA FLJ13795 fis, clone TH | 9.97  |
| 40 | 444863 | AW384082  | Hs.104879 | serine (or cysteine) proteinase inhibito | 9.93  |
|    | 450101 | AV649989  | Hs.24385  | Human hbc547 mRNA sequence               | 9.90  |
|    | 434352 | AF129505  | Hs.86492  | small muscle protein, X-linked           | 9.90  |
|    | 453160 | AI263307  | Hs.239884 | H2B histone family, member L             | 9.90  |
|    | 433929 | AI375499  | Hs.27379  | ESTs                                     | 9.89  |
| 45 | 413273 | U75679    | Hs.75257  | stem-loop (histone) binding protein      | 9.81  |
|    | 437536 | X91221    | Hs.144465 | ESTs                                     | 9.80  |
|    | 441350 | AB020690  | Hs.7782   | paraneoplastic antigen MA2               | 9.80  |
|    | 452291 | AF015592  | Hs.28853  | CDC7 (cell division cycle 7, S. cerevisi | 9.80  |
|    | 438913 | AI380429  | Hs.172445 | ESTs                                     | 9.80  |
| 50 | 417849 | AW291587  | Hs.82733  | nidogen 2                                | 9.78  |
|    | 424086 | AI351010  | Hs.102267 | lysyl oxidase                            | 9.72  |
|    | 428186 | AW504300  | Hs.295605 | mannosidase, alpha, class 2A, member 2   | 9.70  |
|    | 414422 | AA147224  | Hs.337232 | ESTs                                     | 9.70  |
|    | 419197 | N48921    | Hs.27441  | KIAA1615 protein                         | 9.70  |
| 55 | 427660 | AI741320  | Hs.114121 | Homo sapiens cDNA: FLJ23228 fis, clone C | 9.70  |
|    | 449347 | AV649748  | Hs.295901 | KIAA0493 protein                         | 9.70  |
|    | 409643 | AW450866  | Hs.257359 | ESTs                                     | 9.70  |
|    | 436209 | AW850417  | Hs.254020 | ESTs, Moderately similar to unnamed prot | 9.70  |
|    | 439608 | AW864696  | Hs.301732 | hypothetical protein MGC5306             | 9.60  |
| 60 | 430290 | AI734110  | Hs.136355 | ESTs                                     | 9.60  |
|    | 447124 | AW976438  | Hs.17428  | RBP1-like protein                        | 9.60  |
|    | 413879 | AA132961  | Hs.212533 | Homo sapiens cDNA: FLJ22572 fis, clone H | 9.60  |
|    | 408101 | AW968504  | Hs.123073 | CDC2-related protein kinase 7            | 9.58  |
|    | 418067 | AI127958  | Hs.83393  | cystatin E/M                             | 9.54  |
| 65 | 424001 | W67883    | Hs.137476 | paternally expressed 10                  | 9.50  |
|    | 443037 | AW500305  | Hs.299166 | syntaxin 7                               | 9.50  |
|    | 428493 | AK001745  | Hs.184628 | hypothetical protein FLJ10883            | 9.50  |
|    | 420170 | U43374    | Hs.95631  | Human normal keratinocyte mRNA           | 9.50  |
|    | 409269 | AA576953  | Hs.22972  | hypothetical protein FLJ13352            | 9.50  |
| 70 | 443162 | T49951    | Hs.9029   | DKFZP434G032 protein                     | 9.45  |
|    | 444381 | BE387335  | Hs.283713 | ESTs, Weakly similar to S64054 hypothesi | 9.43  |
|    | 424026 | AI798295  | Hs.137576 | ribosomal protein L34 pseudogene 1       | 9.40  |
|    | 440052 | AI633744  | Hs.195648 | ESTs, Weakly similar to I38022 hypothesi | 9.40  |
|    | 403137 |           |           | NA                                       | 9.37  |
| 75 | 418051 | AW192535  | Hs.19479  | ESTs                                     | 9.35  |
|    | 418701 | AA814948  | Hs.96343  | ESTs, Weakly similar to ALUC_HUMAN !!!!  | 9.30  |
|    | 430291 | AV660345  | Hs.238126 | CGI-49 protein                           | 9.30  |
|    | 426137 | AL040683  | Hs.167031 | DKFZP566D133 protein                     | 9.30  |
|    | 400195 | NA        |           | NA                                       | 9.30  |
| 80 | 411529 | AA430348  | Hs.317596 | Homo sapiens cDNA FLJ12927 fis, clone NT | 9.20  |
|    | 423936 | U77629    | Hs.135639 | achaete-scute complex (Drosophila) homol | 9.20  |
|    | 414259 | W44633    | Hs.301296 | Homo sapiens cDNA: FLJ23131 fis, clone L | 9.20  |
|    | 416661 | AA634543  | Hs.79440  | IGF-II mRNA-binding protein 3            | 9.20  |
|    | 405543 | NA        |           | NA                                       | 9.20  |

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|    | 420900 | AL045633  | Hs.44269  | ESTs                                     | 9.11 |
|    | 450757 | BE081050  | Hs.31570  | ESTs, Weakly similar to KIAA1324 protein | 9.10 |
|    | 410929 | HA7233    | Hs.30643  | ESTs                                     | 9.10 |
| 5  | 427319 | AW631495  | Hs.27135  | B-cell receptor-associated protein BAP29 | 9.10 |
|    | 443745 | AB039670  | Hs.9728   | ALEX1 protein                            | 9.10 |
|    | 436574 | AW293527  | Hs.126465 | ESTs                                     | 9.10 |
|    | 407192 | AA609200  |           | gb:af12e02.s1 Soares_testis_NHT Homo sap | 9.08 |
|    | 426075 | AW513691  | Hs.270149 | ESTs, Weakly similar to 2109260A B cell  | 9.07 |
| 10 | 408778 | AI500519  | Hs.63382  | hypothetical protein PRO2714             | 9.03 |
|    | 434542 | AA769310  | Hs.61260  | hypothetical protein FLJ13164            | 9.00 |
|    | 404440 |           |           | NA                                       | 9.00 |
|    | 407168 | R45175    | Hs.117183 | ESTs                                     | 9.00 |
|    | 451678 | AA374181  | Hs.26799  | DKFZP564D0764 protein                    | 9.00 |
| 15 | 431946 | AI018336  | Hs.131730 | ESTs                                     | 8.92 |
|    | 408875 | NM_015434 | Hs.48604  | DKFZP434B168 protein                     | 8.90 |
|    | 409928 | AL137163  | Hs.57549  | hypothetical protein dJ473B4             | 8.90 |
|    | 430294 | AI538226  | Hs.32976  | guanine nucleotide binding protein 4     | 8.89 |
|    | 445029 | AF196481  | Hs.12256  | midline 2                                | 8.86 |
| 20 | 442717 | R88362    | Hs.180591 | ESTs, Weakly similar to T23976 hypotheti | 8.80 |
|    | 409089 | NM_014781 | Hs.50421  | KIAA0203 gene product                    | 8.80 |
|    | 419261 | X07876    | Hs.89791  | wingless-type MMTV integration site fami | 8.80 |
|    | 416190 | N54000    |           | gb:yy99d02.r1 Soares_multiple_sclerosis_ | 8.80 |
| 25 | 444783 | AK001468  | Hs.52180  | anillin (Drosophila Scraps homolog), act | 8.77 |
|    | 416440 | AI823912  | Hs.79335  | Homo sapiens, Similar to SWI/SNF related | 8.76 |
|    | 421262 | AA286746  | Hs.9343   | Homo sapiens cDNA FLJ14265 fis, clone PL | 8.70 |
|    | 441031 | AI110684  | Hs.7645   | fibrinogen, B beta polypeptide           | 8.70 |
|    | 452234 | AW084176  | Hs.223296 | ESTs, Weakly similar to I38022 hypotheti | 8.70 |
|    | 452822 | X85689    | Hs.288617 | hypothetical protein FLJ22621            | 8.70 |
| 30 | 430462 | AI584156  | Hs.105640 | Homo sapiens, clone IMAGE:4139775, mRNA, | 8.65 |
|    | 426457 | AW894667  | Hs.169965 | chimerin (chimaerin) 1                   | 8.65 |
|    | 412054 | W87482    | Hs.302209 | ESTs                                     | 8.64 |
|    | 450236 | AW162998  | Hs.24684  | KIAA1376 protein                         | 8.63 |
|    | 418782 | AI792648  | Hs.14665  | ESTs                                     | 8.60 |
| 35 | 452631 | AI188658  | Hs.87496  | ESTs                                     | 8.60 |
|    | 425268 | AI807883  | Hs.180059 | Homo sapiens cDNA FLJ20653 fis, clone KA | 8.60 |
|    | 432014 | H66741    | Hs.38540  | ESTs, Weakly similar to ALU4_HUMAN ALU S | 8.60 |
|    | 440270 | NM_015986 | Hs.7120   | cytokine receptor-like molecule 9        | 8.60 |
|    | 414784 | NM_000344 | Hs.288986 | survival of motor neuron 1, telomeric    | 8.60 |
| 40 | 426809 | BE313114  | Hs.29706  | ESTs                                     | 8.60 |
|    | 419704 | AA429104  | Hs.45057  | ESTs                                     | 8.60 |
|    | 452909 | NM_015368 | Hs.30985  | pannexin 1                               | 8.60 |
|    | 432639 | AW973785  |           | gb:EST385886 MAGE resequences, MAGM Homo | 8.60 |
| 45 | 430418 | R98852    | Hs.36029  | heart and neural crest derivatives expre | 8.58 |
|    | 450480 | X82125    | Hs.25040  | zinc finger protein 239                  | 8.58 |
|    | 444984 | H15474    | Hs.132898 | fatty acid desaturase 1                  | 8.58 |
|    | 419086 | NM_000216 | Hs.89591  | Kallmann syndrome 1 sequence             | 8.57 |
|    | 430518 | AW363687  | Hs.82916  | chaperonin containing TCP1, subunit 6A ( | 8.50 |
|    | 424735 | U31875    | Hs.272499 | short-chain alcohol dehydrogenase family | 8.50 |
| 50 | 414061 | NM_000699 | Hs.300280 | amylase, alpha 2A; pancreatic            | 8.50 |
|    | 407894 | AJ278313  | Hs.41143  | phosphoinositide-specific phospholipase  | 8.50 |
|    | 441079 | AW150697  | Hs.107418 | ESTs                                     | 8.50 |
|    | 419354 | M62839    | Hs.1252   | apolipoprotein H (beta-2-glycoprotein I) | 8.50 |
|    | 418618 | U66097    | Hs.86724  | GTP cyclohydrolase 1 (dopa-responsive dy | 8.50 |
| 55 | 416565 | AW000960  | Hs.44970  | endoplasmic reticulum resident protein 5 | 8.50 |
|    | 441540 | C01367    | Hs.127128 | ESTs                                     | 8.50 |
|    | 416434 | AW163045  | Hs.79334  | nuclear factor, interleukin 3 regulated  | 8.50 |
|    | 417801 | AA417383  | Hs.82582  | integrin, beta-like 1 (with EGF-like rep | 8.50 |
|    | 426855 | AL117427  | Hs.172778 | Homo sapiens mRNA: cDNA DKFZp566P013 (fr | 8.48 |
| 60 | 436515 | AJ278111  | Hs.195292 | putative tumor antigen                   | 8.43 |
|    | 416315 | AA179483  | Hs.73605  | ESTs                                     | 8.42 |
|    | 408432 | AW195262  |           | gb:xn67b05.x1 NCL_CGAP_CML1 Homo sapiens | 8.40 |
|    | 410094 | BE147897  | Hs.58593  | general transcription factor IIF, polype | 8.40 |
|    | 419198 | AA234938  | Hs.87384  | ESTs                                     | 8.36 |
| 65 | 448920 | AW408009  | Hs.22580  | alkylglycerone phosphate synthase        | 8.36 |
|    | 410305 | AF030409  | Hs.62185  | solute carrier family 9 (sodium/hydrogen | 8.31 |
|    | 408687 | AL110280  | Hs.301152 | Homo sapiens mRNA; cDNA DKFZp434F053 (fr | 8.30 |
|    | 427707 | NM_005578 | Hs.180398 | LIM domain-containing preferred transloc | 8.30 |
|    | 459060 | H89244    | Hs.303627 | heterogeneous nuclear ribonucleoprotein  | 8.30 |
| 70 | 451957 | AI796320  | Hs.10299  | Homo sapiens cDNA FLJ13545 fis, clone PL | 8.30 |
|    | 443977 | AL120986  | Hs.150627 | ESTs, Weakly similar to I38022 hypotheti | 8.30 |
|    | 457997 | AA806616  | Hs.209523 | ESTs                                     | 8.30 |
|    | 451934 | AI540842  | Hs.61082  | ESTs                                     | 8.30 |
|    | 404335 |           |           | NA                                       | 8.30 |
| 75 | 445073 | AW291389  | Hs.13056  | hypothetical protein FLJ13920            | 8.30 |
|    | 431566 | AF176012  | Hs.260720 | J domain containing protein 1            | 8.29 |
|    | 446307 | T50083    | Hs.9094   | ESTs                                     | 8.28 |
|    | 423928 | AA332680  |           | gb:EST36768 Embryo, 8 week I Homo sapien | 8.26 |
|    | 436420 | AA443966  | Hs.31595  | ESTs                                     | 8.25 |
| 80 | 426110 | NM_002913 | Hs.166563 | replication factor C (activator 1) 1 (14 | 8.25 |
|    | 442988 | AI026130  | Hs.131683 | ESTs                                     | 8.25 |
|    | 402408 | NA        |           | NA                                       | 8.24 |
|    | 438707 | L08239    | Hs.5326   | amino acid system N transporter 2; porcu | 8.23 |
|    | 425770 | NM_014363 | Hs.159492 | spastic ataxia of Charlevoix-Saguenay (s | 8.22 |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 448704 | AW080932  | Hs.249247 | heterogeneous nuclear protein similar to | 8.21 |
|    | 452682 | AA456193  | Hs.9071   | progesterone membrane binding protein    | 8.20 |
|    | 411984 | NM_005419 | Hs.72988  | signal transducer and activator of trans | 8.20 |
| 5  | 420018 | U56387    | Hs.94376  | proprotein convertase subtilisin/kexin 1 | 8.20 |
|    | 437048 | AA743240  | Hs.91582  | ESTs                                     | 8.20 |
|    | 424653 | AW977534  | Hs.151469 | calcium/calmodulin-dependent serine prot | 8.20 |
|    | 447066 | BE167667  | Hs.32163  | ESTs                                     | 8.20 |
|    | 425932 | M81650    | Hs.1968   | semenogelin 1                            | 8.20 |
| 10 | 431819 | AA515995  | Hs.152334 | ESTs                                     | 8.20 |
|    | 431810 | X67155    | Hs.270845 | kinesin-like 5 (mitotic kinesin-like pro | 8.20 |
|    | 459702 | AI204995  |           | gb:an03c03.x1 Stratagene schizo brain S1 | 8.20 |
|    | 406687 | M31126    | Hs.272620 | pregnancy specific beta-1-glycoprotein 9 | 8.18 |
|    | 413109 | AW389845  | Hs.110855 | ESTs                                     | 8.17 |
|    | 424720 | M89907    | Hs.152292 | SWI/SNF related, matrix associated, acti | 8.16 |
| 15 | 424335 | AW021508  | Hs.28170  | ESTs                                     | 8.10 |
|    | 453096 | AW294631  | Hs.11325  | ESTs                                     | 8.10 |
|    | 427738 | NM_000318 | Hs.180612 | peroxisomal membrane protein 3 (35kD, Ze | 8.10 |
|    | 457796 | AA913389  | Hs.126691 | ESTs                                     | 8.10 |
| 20 | 429340 | N35938    | Hs.199429 | Homo sapiens mRNA; cDNA DKFZp434M2216 (f | 8.10 |
|    | 445165 | AV652831  |           | gb:AV652831 GLC Homo sapiens cDNA clone  | 8.08 |
|    | 418046 | W49670    | Hs.56044  | ESTs                                     | 8.06 |
|    | 426269 | H15302    | Hs.168950 | Homo sapiens mRNA; cDNA DKFZp566A1046 (f | 8.04 |
|    | 439451 | AF086270  | Hs.278554 | heterochromatin-like protein 1           | 8.02 |
| 25 | 419559 | Y07828    | Hs.91096  | ring finger protein                      | 8.02 |
|    | 409268 | AA625304  | Hs.188554 | ESTs                                     | 8.00 |
|    | 447207 | AA442233  | Hs.17731  | hypothetical protein FLJ12892            | 8.00 |
|    | 446977 | AW863613  | Hs.156798 | ESTs                                     | 8.00 |
|    | 424565 | AW102723  | Hs.75295  | guanylate cyclase 1, soluble, alpha 3    | 8.00 |
| 30 | 407013 | U35637    |           | gb:Human nebulin mRNA, partial cds       | 7.99 |
|    | 414523 | AU076633  | Hs.76353  | serine (or cysteine) proteinase inhibito | 7.98 |
|    | 440637 | AW900115  | Hs.7309   | Homo sapiens clone 23741 mRNA sequence   | 7.96 |
|    | 417076 | AW973454  | Hs.238442 | ESTs, Moderately similar to ALU7_HUMAN A | 7.95 |
|    | 425921 | NM_007231 | Hs.162211 | solute carrier family 6 (neurotransmitte | 7.94 |
| 35 | 415585 | R59946    | Hs.184852 | KIAA1553 protein                         | 7.92 |
|    | 453331 | AI240665  | Hs.8895   | ESTs                                     | 7.92 |
|    | 445527 | W39694    | Hs.83286  | ESTs, Weakly similar to S14747 sphingomy | 7.90 |
|    | 417318 | AW953937  | Hs.12891  | ESTs                                     | 7.90 |
|    | 429393 | AA383024  | Hs.201603 | Homo sapiens mRNA; cDNA DKFZp434D0917 (f | 7.90 |
| 40 | 444769 | AI191650  | Hs.221436 | ESTs                                     | 7.90 |
|    | 444272 | AI138596  | Hs.154619 | ESTs                                     | 7.90 |
|    | 425264 | AA353953  | Hs.20369  | ESTs, Weakly similar to gonadotropin ind | 7.90 |
|    | 412642 | BE244598  | Hs.809    | hepatocyte growth factor (hepapoietin A; | 7.90 |
|    | 453765 | BE279901  | Hs.35091  | hypothetical protein FLJ10775            | 7.90 |
| 45 | 421558 | AB011125  | Hs.105749 | KIAA0553 protein                         | 7.90 |
|    | 446444 | AI743737  | Hs.24370  | ESTs                                     | 7.90 |
|    | 420000 | AB036063  | Hs.94262  | p53-inducible ribonucleotide reductase s | 7.86 |
|    | 437237 | BE513073  |           | gb:601171435F1 NIH_MGC_15 Homo sapiens c | 7.86 |
|    | 409582 | R27430    | Hs.271565 | ESTs                                     | 7.84 |
| 50 | 419235 | AW470411  | Hs.288433 | neurotrimin                              | 7.83 |
|    | 439620 | AA838727  | Hs.124405 | ESTs, Weakly similar to A46010 X-linked  | 7.82 |
|    | 441690 | R81733    | Hs.33106  | ESTs                                     | 7.80 |
|    | 417735 | AA188175  | Hs.82506  | KIAA1254 protein                         | 7.80 |
|    | 441795 | N58115    | Hs.21137  | AD024 protein                            | 7.80 |
| 55 | 442992 | AI914699  | Hs.13297  | ESTs                                     | 7.80 |
|    | 422554 | AA312219  | Hs.296338 | ESTs                                     | 7.80 |
|    | 423123 | NM_012247 | Hs.124027 | SELENOPHOSPHATE SYNTHETASE ; Human selen | 7.80 |
|    | 428627 | BE002993  | Hs.187660 | putative Rab5 GDP/GTP exchange factor ho | 7.80 |
|    | 429228 | AI553633  | Hs.337139 | ESTs                                     | 7.80 |
| 60 | 429399 | AA452244  | Hs.16727  | ESTs                                     | 7.80 |
|    | 436396 | AI683487  | Hs.152213 | wingless-type MMTV integration site fami | 7.77 |
|    | 455510 | AA422029  | Hs.143640 | ESTs, Weakly similar to hyperpolarizatio | 7.76 |
|    | 429396 | AW954598  | Hs.201626 | Homo sapiens clone 25015 mRNA sequence   | 7.76 |
|    | 453439 | AI572438  | Hs.32976  | guanine nucleotide binding protein 4     | 7.75 |
| 65 | 410561 | BE540255  | Hs.6994   | Homo sapiens cDNA: FLJ22044 fis, clone H | 7.71 |
|    | 442875 | BE623003  | Hs.23625  | Homo sapiens clone TCCCTA00142 mRNA sequ | 7.71 |
|    | 428655 | H05769    | Hs.188757 | Homo sapiens, clone MGC:5564, mRNA, comp | 7.70 |
|    | 413374 | NM_001034 | Hs.75319  | ribonucleotide reductase M2 polypeptide  | 7.70 |
|    | 404996 |           |           | NA                                       | 7.70 |
| 70 | 418947 | W52990    | Hs.22860  | ESTs                                     | 7.70 |
|    | 427401 | U20582    | Hs.2149   | actin like protein                       | 7.70 |
|    | 410748 | BE383816  | Hs.12532  | chromosome 1 open reading frame 21       | 7.70 |
|    | 426262 | AI792141  | Hs.196270 | folate transporter/carrier               | 7.70 |
|    | 446955 | AW613138  | Hs.156747 | ESTs                                     | 7.70 |
| 75 | 449199 | AI990122  | Hs.196988 | ESTs                                     | 7.70 |
|    | 443212 | AW269515  | Hs.102500 | hypothetical protein FLJ20481            | 7.70 |
|    | 446155 | AI553695  | Hs.159422 | Homo sapiens cDNA FLJ13997 fis, clone Y7 | 7.70 |
|    | 427164 | AB037721  | Hs.173871 | KIAA1300 protein                         | 7.70 |
|    | 452627 | AI122843  | Hs.184319 | ESTs, Weakly similar to KIAA1006 protein | 7.70 |
| 80 | 452588 | AA889120  | Hs.110637 | homeo box A10                            | 7.70 |
|    | 451838 | AW005866  | Hs.193969 | ESTs                                     | 7.67 |
|    | 422956 | BE545072  | Hs.122579 | hypothetical protein FLJ10461            | 7.66 |
|    | 451227 | R84429    | Hs.151944 | ESTs, Weakly similar to high-risk human  | 7.66 |
|    | 450701 | H39960    | Hs.288467 | Homo sapiens cDNA FLJ12280 fis, clone MA | 7.65 |



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|    | 432695 | D63480    | Hs.278634 | KIAA0146 protein                           | 7.63 |
|    | 447476 | BE293466  | Hs.20880  | ESTs, Weakly similar to I38022 hypothe     | 7.60 |
|    | 447289 | AW247017  | Hs.36978  | melanoma antigen, family A, 3              | 7.60 |
| 5  | 447505 | AL049266  | Hs.18724  | Homo sapiens mRNA; cDNA DKFp564F093 (fr    | 7.60 |
|    | 423065 | R96158    | Hs.267130 | Homo sapiens, clone MGC:5406, mRNA, comp   | 7.60 |
|    | 437396 | BE140396  | Hs.21621  | hypothetical protein DKFp762C0076          | 7.60 |
|    | 450628 | AW382884  | Hs.204715 | ESTs                                       | 7.60 |
|    | 418995 | H39599    | Hs.294008 | ESTs                                       | 7.60 |
| 10 | 416402 | NM_000715 | Hs.1012   | complement component 4-binding protein, NA | 7.60 |
|    | 405545 |           |           |  | 7.60 |
|    | 440866 | AI703103  | Hs.271360 | hypothetical protein MGC16275              | 7.60 |
|    | 421281 | AI299139  | Hs.17517  | ESTs                                       | 7.60 |
|    | 424634 | NM_003613 | Hs.151407 | cartilage intermediate layer protein, nu   | 7.60 |
| 15 | 421041 | N36914    | Hs.14691  | ESTs, Moderately similar to I38022 hypot   | 7.60 |
|    | 453311 | AW104911  | Hs.126707 | hypothetical protein FLJ11457              | 7.54 |
|    | 453060 | AW294092  | Hs.21594  | hypothetical protein MGC15754              | 7.50 |
|    | 417655 | AA780791  | Hs.14014  | hypothetical protein FLJ14813              | 7.50 |
|    | 417531 | NM_003157 | Hs.1087   | serine/threonine kinase 2                  | 7.50 |
| 20 | 444099 | D87432    | Hs.10315  | solute carrier family 7 (cationic amino    | 7.50 |
|    | 407853 | AA336797  | Hs.40499  | dickkopf (Xenopus laevis) homolog 1        | 7.50 |
|    | 408920 | AL120071  | Hs.48998  | fibronectin leucine rich transmembrane p   | 7.50 |
|    | 447806 | W03616    | Hs.10432  | ESTs, Weakly similar to I38022 hypothe     | 7.48 |
|    | 424748 | AA346257  | Hs.134933 | ESTs                                       | 7.48 |
| 25 | 421089 | AB037771  | Hs.101799 | KIAA1350 protein                           | 7.46 |
|    | 444856 | AI888057  | Hs.12097  | ESTs                                       | 7.42 |
|    | 447425 | AI963747  | Hs.18573  | acylphosphatase 1, erythrocyte (common)    | 7.41 |
|    | 418450 | R84397    | Hs.193651 | ESTs, Weakly similar to alternatively sp   | 7.40 |
|    | 434539 | AW748078  | Hs.214410 | ESTs, Weakly similar to MUC2_HUMAN MUCIN   | 7.40 |
| 30 | 437036 | AI571514  | Hs.133022 | ESTs                                       | 7.40 |
|    | 414680 | AA743331  | Hs.272572 | hemoglobin, alpha 2                        | 7.40 |
|    | 451815 | AW974911  | Hs.184793 | Homo sapiens cDNA: FLJ21880 fis, clone H   | 7.40 |
|    | 433577 | AW007080  | Hs.8817   | ESTs                                       | 7.40 |
| 35 | 453652 | AW009640  | Hs.28368  | ESTs, Moderately similar to S65657 alpha   | 7.40 |
|    | 422665 | AJ011812  | Hs.119018 | transcription factor NRF                   | 7.40 |
|    | 424188 | AW954552  | Hs.142634 | zinc finger protein                        | 7.40 |
|    | 407300 | AA102616  |           | gb:zn43e07.s1 Stratagene HeLa cell s3 93   | 7.40 |
|    | 431494 | AA991355  | Hs.298312 | hypothetical protein DKFp434A1315          | 7.40 |
|    | 452958 | AA883929  | Hs.40527  | ESTs                                       | 7.40 |
| 40 | 418763 | AK000219  | Hs.88367  | hypothetical protein FLJ20212              | 7.40 |
|    | 428279 | AA425310  | Hs.155766 | ESTs, Weakly similar to A47582 B-cell gr   | 7.40 |
|    | 449670 | F07693    | Hs.23869  | Homo sapiens mRNA; cDNA DKFp434K2172 (f    | 7.40 |
|    | 449601 | AA461509  | Hs.293565 | ESTs, Weakly similar to putative p150 [H   | 7.40 |
|    | 438490 | AW593272  | Hs.301299 | ESTs                                       | 7.40 |
| 45 | 410044 | BE566742  | Hs.58169  | highly expressed in cancer, rich in leuc   | 7.40 |
|    | 429509 | AW614420  | Hs.204354 | ras homolog gene family, member B          | 7.38 |
|    | 433393 | AF038564  | Hs.98074  | itchy (mouse homolog) E3 ubiquitin prote   | 7.38 |
|    | 434096 | AW662958  | Hs.75825  | pleomorphic adenoma gene-like 1            | 7.37 |
|    | 425773 | N21279    | Hs.237749 | ESTs                                       | 7.36 |
| 50 | 422755 | T25365    | Hs.119687 | RAN binding protein 8                      | 7.36 |
|    | 410566 | AA373210  | Hs.43047  | Homo sapiens cDNA FLJ13585 fis, clone PL   | 7.35 |
|    | 412851 | AI826502  | Hs.106149 | ESTs                                       | 7.35 |
|    | 418661 | NM_001949 | Hs.1189   | E2F transcription factor 3                 | 7.35 |
|    | 436246 | AW450963  | Hs.119991 | ESTs                                       | 7.34 |
| 55 | 433159 | AB035898  | Hs.150587 | kinesin-like protein 2                     | 7.33 |
|    | 444781 | NM_014400 | Hs.11950  | GPI-anchored metastasis-associated prote   | 7.32 |
|    | 453878 | AW964440  | Hs.19025  | DC32                                       | 7.31 |
|    | 414696 | AF002020  | Hs.76918  | Niemann-Pick disease, type C1              | 7.31 |
|    | 402250 | AV655272  | Hs.20252  | novel Ras family protein                   | 7.31 |
| 60 | 439039 | AI656707  | Hs.48713  | ESTs                                       | 7.30 |
|    | 417976 | BE565892  | Hs.83077  | interleukin 18 (interferon-gamma-inducin   | 7.30 |
|    | 419436 | AA991639  | Hs.242413 | hypothetical protein DKFp434K1421          | 7.30 |
|    | 417006 | AW673606  | Hs.80758  | aspartyl-tRNA synthetase                   | 7.30 |
|    | 425420 | BE536911  | Hs.234545 | hypothetical protein NUF2R                 | 7.30 |
| 65 | 425889 | M57414    | Hs.161305 | tachykinin receptor 2                      | 7.29 |
|    | 442969 | AI025499  | Hs.132238 | ESTs                                       | 7.26 |
|    | 446360 | N42553    | Hs.267914 | homolog of mouse transient receptor pote   | 7.25 |
|    | 438022 | AW517524  | Hs.135201 | NOD2 protein                               | 7.25 |
|    | 407183 | AA358015  |           | gb:EST66864 Fetal lung III Homo sapiens    | 7.24 |
| 70 | 429882 | AA278898  | Hs.225979 | hypothetical protein similar to small G    | 7.24 |
|    | 420120 | AL049610  | Hs.95243  | transcription elongation factor A (SII)-   | 7.22 |
|    | 400212 | NA        |           | NA   | 7.20 |
|    | 431812 | AA515902  | Hs.130650 | ESTs                                       | 7.20 |
|    | 419481 | AI879195  | Hs.90606  | 15 kDa selenoprotein                       | 7.20 |
| 75 | 447078 | AW885727  | Hs.301570 | ESTs                                       | 7.20 |
|    | 413200 | AA127395  | Hs.222414 | ESTs                                       | 7.20 |
|    | 411750 | BE562298  | Hs.71827  | KIAA0112 protein; homolog of yeast ribos   | 7.20 |
|    | 439901 | N73885    | Hs.124169 | ESTs                                       | 7.20 |
| 80 | 411815 | AA156679  | Hs.125790 | leucine-rich repeat-containing 2           | 7.20 |
|    | 459279 | AW814996  |           | gb:MR1-ST0206-170400-024-h09 ST0206 Homo   | 7.20 |
|    | 445263 | H57646    | Hs.42586  | KIAA1560 protein                           | 7.20 |
|    | 413801 | M62246    | Hs.35406  | ESTs, Highly similar to unnamed protein    | 7.20 |
|    | 418407 | AL044818  | Hs.84928  | nuclear transcription factor Y, beta       | 7.20 |
|    | 452221 | C21322    | Hs.288057 | hypothetical protein FLJ22242              | 7.20 |

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|    | 425202 | AW962282  | Hs.152049 | ESTs, Weakly similar to I38022 hypotheti | 7.20 |
|    | 403764 |           |           | NA                                       | 7.20 |
|    | 416896 | AI752862  | Hs.5638   | KIAA1572 protein                         | 7.20 |
| 5  | 416636 | N32536    | Hs.42645  | ESTs                                     | 7.20 |
|    | 428071 | AF212848  | Hs.182339 | els homologous factor                    | 7.20 |
|    | 450142 | AW207469  | Hs.24485  | chondroitin sulfate proteoglycan 6 (bama | 7.18 |
|    | 451017 | BE391847  | Hs.181173 | hypothetical protein MGC10771            | 7.17 |
|    | 409759 | N40285    | Hs.81182  | histamine N-methyltransferase            | 7.16 |
| 10 | 452448 | AW182440  | Hs.61389  | ESTs, Weakly similar to unnamed protein  | 7.16 |
|    | 427951 | AI826125  | Hs.43546  | ESTs                                     | 7.16 |
|    | 407939 | W05608    | Hs.312679 | ESTs, Weakly similar to A49019 dynein he | 7.15 |
|    | 419457 | AA243146  | Hs.209334 | ESTs, Moderately similar to S23A_HUMAN P | 7.12 |
|    | 411769 | AI694575  | Hs.27207  | KIAA0982 protein                         | 7.11 |
| 15 | 430355 | NM_006219 | Hs.239818 | phosphoinositide-3-kinase, catalytic, be | 7.10 |
|    | 419511 | AA429750  | Hs.75113  | general transcription factor IIIA        | 7.10 |
|    | 409032 | AW301807  | Hs.297260 | ESTs                                     | 7.10 |
|    | 424539 | L02911    | Hs.150402 | activin A receptor, type I               | 7.10 |
|    | 439221 | AA737106  | Hs.32250  | ESTs, Moderately similar to I78885 serin | 7.10 |
| 20 | 430719 | AA488988  | Hs.293796 | ESTs                                     | 7.10 |
|    | 408020 | AA127940  | Hs.62781  | ESTs                                     | 7.10 |
|    | 420218 | AW958037  | Hs.286    | ribosomal protein L4                     | 7.10 |
|    | 443487 | AI073491  | Hs.268887 | ESTs, Highly similar to KPBB_HUMAN PHOSP | 7.10 |
|    | 414865 | AA157155  | Hs.274414 | hypothetical protein FLJ14457            | 7.10 |
| 25 | 428724 | AL390128  | Hs.191268 | KIAA1530 protein                         | 7.10 |
|    | 413293 | AL047483  | Hs.302498 | GTP-binding protein homologous to Saccha | 7.10 |
|    | 419126 | AI810144  | Hs.135276 | ESTs                                     | 7.09 |
|    | 437044 | AL035864  | Hs.69517  | cDNA for differentially expressed CO16 g | 7.09 |
|    | 433730 | AK002135  | Hs.3542   | hypothetical protein FLJ11273            | 7.07 |
| 30 | 417381 | AF164142  | Hs.82042  | solute carrier family 23 (nucleobase tra | 7.07 |
|    | 457019 | AA421844  | Hs.12830  | hypothetical protein                     | 7.07 |
|    | 409697 | AB018348  | Hs.55947  | KIAA0805 protein                         | 7.06 |
|    | 400977 | NA        |           | NA                                       | 7.06 |
|    | 436668 | AA831857  | Hs.209071 | ESTs                                     | 7.03 |
| 35 | 451684 | AF216751  | Hs.26813  | CDA14                                    | 7.03 |
|    | 404029 |           |           | NA                                       | 7.02 |
|    | 448719 | AA033627  | Hs.21858  | trinucleotide repeat containing 3        | 7.02 |
|    | 445577 | N40696    | Hs.137064 | cytoplasmic polyadenylation element bind | 7.00 |
|    | 419647 | AA348947  | Hs.91816  | hypothetical protein                     | 7.00 |
| 40 | 442075 | AW136928  |           | gb:U1-H-BI1-adt-d-08-0-UI.s1 NCI_CGAP_Su | 7.00 |
|    | 429598 | AA811257  | Hs.269710 | ESTs                                     | 7.00 |
|    | 450832 | AW970602  | Hs.105421 | ESTs                                     | 7.00 |
|    | 421389 | AA531291  | Hs.101064 | Homo sapiens cDNA FLJ12777 fis, clone NT | 7.00 |
|    | 453931 | AL121278  | Hs.25144  | ESTs                                     | 7.00 |
| 45 | 432343 | NM_002960 | Hs.2961   | S100 calcium-binding protein A3          | 7.00 |
|    | 452979 | AW167599  | Hs.232282 | ESTs                                     | 7.00 |
|    | 431696 | AA259068  | Hs.267819 | protein phosphatase 1, regulatory (inhib | 7.00 |
|    | 413583 | AL120806  | Hs.5888   | ESTs                                     | 7.00 |
|    | 436758 | AW977167  | Hs.155272 | ESTs                                     | 7.00 |
| 50 | 455944 | BE160643  |           | gb:PM1-HT0422-291299-002-f03 HT0422 Homo | 6.98 |
|    | 430302 | AL137502  | Hs.238679 | Rag D protein                            | 6.96 |
|    | 437613 | R19892    | Hs.10267  | MIL1 protein                             | 6.96 |
|    | 440524 | R71264    | Hs.16798  | ESTs                                     | 6.95 |
|    | 451047 | AB022317  | Hs.25887  | sema domain, immunoglobulin domain (Ig), | 6.93 |
| 55 | 450377 | AB033091  | Hs.74313  | KIAA1265 protein                         | 6.93 |
|    | 457396 | Z20964    | Hs.323817 | DKFZP547E1010 protein                    | 6.93 |
|    | 417393 | R10484    | Hs.82071  | Cbp/p300-interacting transactivator, wit | 6.92 |
|    | 414417 | BE299433  | Hs.68533  | KIAA1679 protein                         | 6.92 |
|    | 412246 | AI160873  | Hs.69233  | zinc finger protein                      | 6.90 |
| 60 | 411003 | AA181018  | Hs.13056  | hypothetical protein FLJ13920            | 6.90 |
|    | 413833 | Z15005    | Hs.75573  | centromere protein E (312kD)             | 6.90 |
|    | 405696 | NA        |           | NA                                       | 6.90 |
|    | 431689 | AA305688  | Hs.267695 | UDP-Gal:betaGlcNAc beta 1,3-galactosyltr | 6.90 |
|    | 414429 | R51494    | Hs.71818  | ESTs                                     | 6.90 |
| 65 | 424641 | AB001106  | Hs.151413 | glia maturation factor, beta             | 6.90 |
|    | 418895 | AA894638  | Hs.14600  | ESTs                                     | 6.90 |
|    | 445900 | AF070526  | Hs.13429  | Homo sapiens clone 24787 mRNA sequence   | 6.90 |
|    | 446006 | NM_004403 | Hs.13530  | deafness, autosomal dominant 5           | 6.90 |
|    | 432038 | AA524746  | Hs.162110 | ESTs                                     | 6.87 |
| 70 | 446610 | AV659433  | Hs.282984 | ESTs, Weakly similar to I38022 hypotheti | 6.86 |
|    | 451286 | AW139789  | Hs.16370  | Homo sapiens cDNA FLJ11652 fis, clone HE | 6.86 |
|    | 408915 | NM_016651 | Hs.48950  | heptacellular carcinoma novel gene-3 pro | 6.85 |
|    | 418934 | T83845    | Hs.191116 | ESTs                                     | 6.82 |
|    | 435143 | R12375    | Hs.194600 | ESTs                                     | 6.82 |
|    | 442660 | AW138174  | Hs.130651 | ESTs                                     | 6.82 |
| 75 | 432729 | AK000292  | Hs.278732 | hypothetical protein FLJ20285            | 6.81 |
|    | 435990 | AI015862  | Hs.131793 | ESTs                                     | 6.80 |
|    | 449062 | AJ272268  | Hs.22958  | calcium channel, voltage-dependent, alph | 6.80 |
|    | 453688 | AW381270  | Hs.194110 | hypothetical protein PRO2730             | 6.80 |
|    | 421476 | AW953805  | Hs.21887  | ESTs                                     | 6.80 |
| 80 | 430510 | AW162916  | Hs.241576 | hypothetical protein PRO2577             | 6.80 |
|    | 409045 | AA635062  | Hs.50094  | Homo sapiens mRNA: cDNA DKFZp434O0515 (f | 6.80 |
|    | 410298 | AI693821  | Hs.182185 | ESTs                                     | 6.80 |
|    | 420560 | AW207748  | Hs.59115  | ESTs                                     | 6.80 |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 427752 | AA470687  | Hs.104772 | ESTs                                     | 6.80 |
|    | 414080 | AA135257  | Hs.47783  | B aggressive lymphoma gene               | 6.80 |
|    | 422420 | U03398    | Hs.1524   | tumor necrosis factor (ligand) superfam  | 6.80 |
| 5  | 416913 | AW934714  |           | gb:RC1-DT0001-031299-011-a11 DT0001 Homo | 6.80 |
|    | 426890 | AA393167  | Hs.41294  | ESTs                                     | 6.80 |
|    | 411773 | NM_006799 | Hs.72026  | protease, serine, 21 (testisin)          | 6.80 |
|    | 413328 | Y15723    | Hs.75295  | guanylate cyclase 1, soluble, alpha 3    | 6.79 |
|    | 437619 | AW351491  | Hs.334853 | hypothetical protein FLJ23544            | 6.79 |
| 10 | 434267 | AI206589  | Hs.116243 | ESTs                                     | 6.79 |
|    | 419358 | T78763    | Hs.90063  | neurocalcin delta                        | 6.79 |
|    | 435854 | AJ278120  | Hs.4996   | putative ankyrin-repeat containing prote | 6.78 |
|    | 424925 | NM_002432 | Hs.153837 | myeloid cell nuclear differentiation ant | 6.77 |
|    | 443184 | AI638728  | Hs.131973 | ESTs                                     | 6.77 |
| 15 | 444484 | AK002126  | Hs.11260  | hypothetical protein FLJ11264            | 6.77 |
|    | 429483 | AA974832  | Hs.128708 | ESTs                                     | 6.76 |
|    | 425605 | BE544300  | Hs.7076   | KIAA1705 protein                         | 6.76 |
|    | 425045 | AW953186  | Hs.92400  | ESTs                                     | 6.76 |
|    | 438776 | AW245243  | Hs.334368 | hypothetical protein MGC11257            | 6.75 |
| 20 | 458174 | AA781530  | Hs.127236 | hypothetical protein FLJ12879            | 6.74 |
|    | 445129 | R39878    | Hs.21394  | ESTs                                     | 6.74 |
|    | 435532 | AW291488  | Hs.117305 | Homo sapiens, clone IMAGE:3682908, mRNA  | 6.73 |
|    | 444442 | AI149234  | Hs.298423 | ESTs, Moderately similar to I54374 gene  | 6.73 |
|    | 431240 | AA496790  | Hs.179481 | ESTs                                     | 6.72 |
| 25 | 422109 | S73265    | Hs.1473   | gastrin-releasing peptide                | 6.70 |
|    | 416655 | AW968613  | Hs.79428  | BCL2/adenovirus E1B 19kD-interacting pro | 6.70 |
|    | 423811 | AW299598  | Hs.50895  | homeo box C4                             | 6.70 |
|    | 443695 | AW204099  | Hs.337720 | ESTs, Weakly similar to AF126780 1 retin | 6.70 |
|    | 420686 | AI950339  | Hs.40782  | ESTs                                     | 6.70 |
| 30 | 419574 | AK001989  | Hs.91165  | hypothetical protein                     | 6.70 |
|    | 418269 | AA806113  | Hs.189025 | ESTs                                     | 6.70 |
|    | 434164 | AW207019  | Hs.148135 | serine/threonine kinase 33               | 6.70 |
|    | 408660 | AA525775  | Hs.292523 | ESTs, Moderately similar to PC4259 ferri | 6.70 |
|    | 453370 | AI470523  | Hs.139336 | ATP-binding cassette, sub-family C (CFTR | 6.70 |
| 35 | 409506 | NM_006153 | Hs.54589  | NCK adaptor protein 1                    | 6.70 |
|    | 454029 | W05150    | Hs.37034  | homeo box A5                             | 6.70 |
|    | 413365 | AW205188  | Hs.124304 | Homo sapiens cDNA FLJ14635 fis, clone NT | 6.70 |
|    | 447247 | AW369351  | Hs.287955 | Homo sapiens cDNA FLJ13090 fis, clone NT | 6.70 |
|    | 426566 | AF131836  | Hs.170453 | tropomodulin                             | 6.70 |
| 40 | 446261 | AA313893  | Hs.306219 | hypothetical protein FLJ12615 similar to | 6.70 |
|    | 408547 | AA574291  | Hs.57837  | ESTs                                     | 6.70 |
|    | 430458 | AA479300  | Hs.225706 | ESTs, Weakly similar to I38022 hypotheti | 6.70 |
|    | 413627 | BE182082  | Hs.246973 | ESTs                                     | 6.70 |
|    | 410498 | AA355749  |           | gb:EST64459 Jurkat T-cells VI Homo sapie | 6.70 |
| 45 | 434015 | AA844518  | Hs.300876 | hypothetical protein FLJ13386            | 6.70 |
|    | 453691 | H12235    | Hs.226505 | ESTs                                     | 6.68 |
|    | 415068 | Z19448    | Hs.131887 | ESTs, Weakly similar to T24396 hypotheti | 6.68 |
|    | 415885 | D79983    | Hs.78894  | KIAA0161 gene product                    | 6.68 |
|    | 405529 | AW410458  | Hs.5258   | chromosome 11 open reading frame2        | 6.68 |
| 50 | 438242 | AW241910  | Hs.122254 | ESTs, Weakly similar to JX0369 collagen  | 6.68 |
|    | 442643 | U82756    | Hs.8551   | PRP4/STKWD splicing factor               | 6.67 |
|    | 424802 | X79201    | Hs.153221 | synovial sarcoma, translocated to X chro | 6.67 |
|    | 415007 | BE244332  | Hs.77770  | adaptor-related protein complex 3, mu 2  | 6.67 |
|    | 458714 | R20916    | Hs.202501 | ESTs                                     | 6.66 |
| 55 | 414591 | AI888490  | Hs.55902  | ESTs, Weakly similar to ALU8_HUMAN ALU S | 6.65 |
|    | 433260 | AB040966  | Hs.83575  | KIAA1533 protein                         | 6.65 |
|    | 400268 | NA        |           | NA                                       | 6.63 |
|    | 453180 | N46243    | Hs.110373 | ESTs, Highly similar to T42626 secreted  | 6.62 |
|    | 403973 | NA        |           | NA                                       | 6.60 |
| 60 | 436862 | AI821940  | Hs.264622 | ESTs, Moderately similar to ALU8_HUMAN A | 6.60 |
|    | 428046 | AW812795  | Hs.155381 | ESTs, Moderately similar to I38022 hypot | 6.60 |
|    | 453387 | AI990741  | Hs.252809 | ESTs                                     | 6.60 |
|    | 424084 | AI940675  | Hs.20914  | hypothetical protein FLJ23056            | 6.60 |
|    | 418444 | AI902899  | Hs.85155  | butyrate response factor 1 (EGF-response | 6.60 |
| 65 | 448172 | N75276    | Hs.135904 | ESTs                                     | 6.60 |
|    | 409571 | AA504249  | Hs.187585 | ESTs                                     | 6.60 |
|    | 423025 | AA831267  | Hs.12244  | hypothetical protein FLJ20097            | 6.60 |
|    | 430701 | AI760833  | Hs.293971 | ESTs                                     | 6.60 |
|    | 450373 | AI915790  | Hs.337282 | ESTs                                     | 6.60 |
| 70 | 419384 | AA490866  | Hs.39429  | ESTs                                     | 6.60 |
|    | 429828 | AB019494  | Hs.225767 | IDN3 protein                             | 6.60 |
|    | 441781 | AI222880  |           | gb:qp40c06.x1 NCI_CGAP_Co8 Homo sapiens  | 6.60 |
|    | 411048 | AK001742  | Hs.67991  | hypothetical protein DKFZp434G0522       | 6.60 |
|    | 421111 | BE299047  | Hs.43532  | ESTs, Weakly similar to T20177 hypotheti | 6.60 |
| 75 | 407424 | AF120493  |           | gb:Homo sapiens elastase 1 precursor (EL | 6.59 |
|    | 412396 | AW947895  |           | gb:PM1-MT0010-200300-001-f10 MT0010 Homo | 6.57 |
|    | 416209 | AA236776  | Hs.79078  | MAD2 (mitotic arrest deficient, yeast, h | 6.57 |
|    | 406674 | AA332152  | Hs.288036 | tRNA isopentenylpyrophosphate transferas | 6.57 |
|    | 400860 |           |           | NA                                       | 6.56 |
| 80 | 457893 | AA744292  |           | gb:ny51d05.s1 NCI_CGAP_Pr18 Homo sapiens | 6.55 |
|    | 426108 | AA622037  | Hs.166468 | programmed cell death 5                  | 6.54 |
|    | 422133 | AW612779  | Hs.333159 | Homo sapiens laryngeal carcinoma related | 6.54 |
|    | 421044 | AF061871  | Hs.311736 | Human DNA sequence from clone RP1-238D15 | 6.54 |
|    | 414136 | AA812434  | Hs.119023 | SMC2 (structural maintenance of chromoso | 6.53 |

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|----|--------|-----------|-----------|---|------|
| 5  | 400351 | AF060169  | Hs.272369 | Homo sapiens AS11 protein mRNA, partial   | 6.52 |
|    | 413670 | AB000115  | Hs.75470  | hypothetical protein, expressed in osleo  | 6.52 |
|    | 410416 | BE410072  | Hs.63304  | protein phosphatase methyltransferase-1   | 6.50 |
|    | 419852 | AW503756  | Hs.286184 | hypothetical protein dJ55102.5            | 6.50 |
|    | 419677 | N77342    | Hs.21851  | Homo sapiens cDNA FLJ12900 fis, clone NT  | 6.50 |
| 10 | 431806 | AF186114  | Hs.270737 | tumor necrosis factor (ligand) superfami  | 6.50 |
|    | 429774 | AI522215  | Hs.50883  | KIAA1804 protein                          | 6.50 |
|    | 428228 | AA424352  | Hs.210586 | ESTs                                      | 6.50 |
|    | 418134 | AA397769  | Hs.86617  | ESTs                                      | 6.50 |
|    | 403859 | NA        |           | NA  | 6.50 |
| 15 | 422704 | AA972147  | Hs.132275 | ESTs                                      | 6.50 |
|    | 416737 | AF154335  | Hs.79691  | LIM domain protein                        | 6.50 |
|    | 429854 | R55508    | Hs.99472  | ESTs                                      | 6.50 |
|    | 422672 | X12784    | Hs.119129 | collagen, type IV, alpha 1                | 6.49 |
|    | 453600 | BE246211  | Hs.119120 | E3 ubiquitin ligase SMURF1                | 6.48 |
| 20 | 454835 | AW833763  |           | gb:QV4-TT0008-130100-077-d10 TT0008 Homo  | 6.48 |
|    | 434603 | AF147384  |           | gb:Homo sapiens full length insert cDNA   | 6.48 |
|    | 408243 | Y00787    | Hs.624    | interleukin 8                             | 6.48 |
|    | 429317 | AA831552  | Hs.268016 | Homo sapiens cDNA: FLJ21243 fis, clone C  | 6.47 |
|    | 451316 | AI770011  | Hs.208310 | ESTs                                      | 6.46 |
| 25 | 448339 | AL035920  | Hs.20938  | RNA binding motif, single stranded inter  | 6.46 |
|    | 433423 | BE407127  | Hs.8997   | heat shock 70kD protein 1A                | 6.44 |
|    | 410358 | AW975168  | Hs.13337  | ESTs, Weakly similar to unnamed protein   | 6.44 |
|    | 434025 | AF114264  | Hs.216381 | Homo sapiens clone HH409 unknown mRNA     | 6.42 |
|    | 440526 | AI832243  | Hs.211471 | ESTs                                      | 6.42 |
| 30 | 432727 | AA305233  | Hs.278712 | eukaryotic translation initiation factor  | 6.41 |
|    | 433009 | AA761668  |           | gb:nz24c08.s1 NCL_CGAP_GC81 Homo sapiens  | 6.40 |
|    | 435782 | N49433    | Hs.285737 | Homo sapiens cDNA: FLJ20895 fis, clone A  | 6.40 |
|    | 415071 | AK002197  | Hs.284270 | Homo sapiens cDNA FLJ111335 fis, clone PL | 6.40 |
|    | 407162 | N63855    | Hs.142634 | zinc finger protein                       | 6.40 |
| 35 | 446152 | AI292036  | Hs.150028 | ESTs                                      | 6.40 |
|    | 422828 | AL133396  | Hs.121281 | prion protein 2 (dublet)                  | 6.40 |
|    | 418866 | T65754    |           | gb:yc11c07.s1 Stratagene lung (937210) H  | 6.40 |
|    | 411411 | AA345241  | Hs.55950  | ESTs, Weakly similar to KIAA1330 protein  | 6.40 |
|    | 429039 | AI524793  | Hs.301897 | ESTs                                      | 6.40 |
| 40 | 447254 | NM_004153 | Hs.17908  | origin recognition complex, subunit 1 (y  | 6.40 |
|    | 435159 | AA668879  | Hs.116649 | ESTs                                      | 6.40 |
|    | 429625 | AA455568  | Hs.193814 | ESTs                                      | 6.40 |
|    | 430180 | AA331406  | Hs.75456  | A kinase (PRKA) anchor protein 10         | 6.40 |
|    | 408420 | NM_006915 | Hs.44766  | retinitis pigmentosa 2 (X-linked recessi  | 6.40 |
| 45 | 426572 | AB037783  | Hs.170623 | hypothetical protein FLJ11183             | 6.40 |
|    | 449911 | AI262106  | Hs.12653  | ESTs                                      | 6.40 |
|    | 440105 | AA694010  | Hs.6932   | Homo sapiens clone 23809 mRNA sequence    | 6.40 |
|    | 440395 | AA884412  | Hs.216342 | ESTs                                      | 6.37 |
|    | 429500 | X78565    | Hs.289114 | hexabrachion (tenascin C, cytotoxic)      | 6.37 |
| 50 | 417771 | AA804698  | Hs.82547  | retinoic acid receptor responder (tazaro  | 6.36 |
|    | 417092 | H97508    | Hs.181165 | eukaryotic translation elongation factor  | 6.36 |
|    | 412227 | AW902282  |           | gb:QV3-NN1023-260400-169-g10 NN1023 Homo  | 6.36 |
|    | 400845 |           |           | NA  | 6.36 |
|    | 403546 | NA        |           | NA  | 6.36 |
| 55 | 412345 | AW938386  |           | gb:PM4-DT0057-201299-002-G10 DT0057 Homo  | 6.35 |
|    | 422186 | AW962364  | Hs.129051 | ESTs                                      | 6.34 |
|    | 426990 | AL044315  | Hs.173094 | Homo sapiens mRNA for KIAA1750 protein,   | 6.34 |
|    | 417687 | AI828596  | Hs.250691 | ESTs                                      | 6.33 |
|    | 426223 | AW977812  | Hs.130391 | ESTs                                      | 6.32 |
| 60 | 417588 | Z44510    |           | gb:HSC22D091 normalized infant brain cDN  | 6.32 |
|    | 432629 | AW860548  | Hs.280658 | ESTs                                      | 6.31 |
|    | 440495 | AA887212  | Hs.14161  | hypothetical protein DKFZp434I1930        | 6.31 |
|    | 407771 | AL138272  | Hs.62713  | ESTs                                      | 6.31 |
|    | 417517 | AF001176  | Hs.82238  | POP4 (processing of precursor, S. cerev   | 6.30 |
| 65 | 431041 | AA490967  | Hs.197955 | KIAA0704 protein                          | 6.30 |
|    | 445571 | AI378000  | Hs.158489 | ESTs, Weakly similar to Z184_HUMAN ZINC   | 6.30 |
|    | 433309 | AA807060  | Hs.126558 | ESTs                                      | 6.30 |
|    | 415659 | W27214    | Hs.78547  | zinc finger protein (clone 647)           | 6.30 |
|    | 420271 | AI954365  | Hs.42892  | ESTs                                      | 6.30 |
| 70 | 426921 | AA037145  | Hs.172865 | cleavage stimulation factor, 3' pre-RNA,  | 6.30 |
|    | 400950 | NA        |           | NA  | 6.30 |
|    | 429692 | N48422    | Hs.9977   | ESTs, Weakly similar to B34087 hypotheti  | 6.30 |
|    | 439813 | AA846321  | Hs.124501 | ESTs                                      | 6.30 |
|    | 449444 | AW818436  | Hs.23590  | solute carrier family 16 (monocarboxylic  | 6.30 |
| 75 | 453596 | AA441838  | Hs.62905  | hypothetical protein FLJ14834             | 6.30 |
|    | 446847 | T51454    | Hs.82845  | Homo sapiens cDNA: FLJ21930 fis, clone H  | 6.30 |
|    | 435820 | AA700580  | Hs.189000 | ESTs                                      | 6.30 |
|    | 452576 | AB023177  | Hs.29900  | KIAA0960 protein                          | 6.30 |
|    | 448924 | AW450569  | Hs.188399 | ESTs                                      | 6.30 |
| 80 | 424343 | AW956360  | Hs.4748   | adenylate cyclase activating polypeptide  | 6.30 |
|    | 412591 | BE217736  | Hs.292653 | ESTs, Weakly similar to T26845 hypotheti  | 6.30 |
|    | 426642 | AW068223  | Hs.171581 | ubiquitin C-terminal hydrolase UCH37      | 6.30 |
|    | 419088 | AI538323  | Hs.52620  | integrin, beta 8                          | 6.30 |
|    | 401424 |           |           | NA  | 6.30 |
|    | 412189 | R60982    | Hs.22581  | ESTs                                      | 6.30 |
|    | 435501 | AW051819  | Hs.129908 | KIAA0591 protein                          | 6.30 |
|    | 408221 | AA912183  | Hs.47447  | ESTs                                      | 6.28 |

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|----|--------|-----------|-----------|--|------|
|    | 413943 | AW294416  | Hs.144687 | Homo sapiens cDNA FLJ12581 fis, clone NT | 6.28 |
|    | 416845 | H95279    |           | gb:yu20h02.s1 Soares fetal liver spleen  | 6.27 |
|    | 402732 | NA        |           | NA                                       | 6.26 |
| 5  | 413224 | AI732470  | Hs.191157 | ESTs, Weakly similar to ALU7_HUMAN ALU S | 6.24 |
|    | 415642 | U19878    | Hs.336224 | transmembrane protein with EGF-like and  | 6.24 |
|    | 449284 | BE502240  | Hs.38592  | hypothetical protein FLJ23342            | 6.24 |
|    | 419548 | AW978142  | Hs.326248 | Homo sapiens cDNA: FLJ22071 fis, clone H | 6.23 |
|    | 453880 | AI803166  | Hs.28462  | ESTs, Weakly similar to I38022 hypotheti | 6.22 |
| 10 | 422675 | BE018517  | Hs.119140 | eukaryotic translation initiation factor | 6.22 |
|    | 413384 | NM_000401 | Hs.75334  | exostoses (multiple) 2                   | 6.21 |
|    | 445584 | AF217518  | Hs.8360   | PTD012 protein                           | 6.21 |
|    | 451065 | AW295132  | Hs.222231 | ESTs, Weakly similar to granule cell mar | 6.21 |
|    | 420807 | AA280627  | Hs.57846  | ESTs                                     | 6.20 |
| 15 | 421155 | H87879    | Hs.102267 | lysyl oxidase                            | 6.20 |
|    | 441421 | AA356792  | Hs.334824 | hypothetical protein FLJ14825            | 6.20 |
|    | 440209 | H05049    | Hs.22269  | neurexin 3                               | 6.20 |
|    | 408170 | AW204516  | Hs.31835  | ESTs                                     | 6.20 |
|    | 433590 | N98410    | Hs.48364  | Homo sapiens regulator of G-protein sign | 6.20 |
| 20 | 442008 | AI457814  | Hs.270272 | ESTs                                     | 6.20 |
|    | 420617 | AK001652  | Hs.99423  | ATP-dependent RNA helicase               | 6.20 |
|    | 402343 |           |           | NA                                       | 6.20 |
|    | 432682 | AI376400  | Hs.159588 | ESTs                                     | 6.20 |
|    | 452109 | AI525873  | Hs.61164  | hypothetical protein FLJ14909            | 6.20 |
| 25 | 429954 | AI918130  | Hs.21374  | ESTs                                     | 6.20 |
|    | 417256 | U94332    | Hs.81791  | tumor necrosis factor receptor superfam  | 6.20 |
|    | 435525 | AI831297  | Hs.123310 | ESTs                                     | 6.20 |
|    | 413604 | R51767    |           | gb:yg73g11.r1 Soares infant brain 1NIB H | 6.20 |
| 30 | 425305 | AA363025  | Hs.155572 | Human clone 23801 mRNA sequence          | 6.20 |
|    | 443285 | AI301918  | Hs.334264 | ESTs                                     | 6.20 |
|    | 446565 | D13757    | Hs.311    | phosphoribosyl pyrophosphate amidotransf | 6.20 |
|    | 451027 | AW519204  | Hs.40808  | ESTs                                     | 6.20 |
|    | 452243 | AL355715  | Hs.28555  | programmed cell death 9                  | 6.19 |
| 35 | 429782 | NM_005754 | Hs.220689 | Ras-GTPase-activating protein SH3-domain | 6.17 |
|    | 424060 | X92108    | Hs.138629 | H.sapiens mRNA for subtelomeric repeat s | 6.17 |
|    | 432494 | AA551060  |           | gb:nk74f02.s1 NCL CGAP_Sch1 Homo sapiens | 6.16 |
|    | 448186 | AA262105  | Hs.4094   | Homo sapiens cDNA FLJ14208 fis, clone NT | 6.14 |
|    | 419638 | N46504    | Hs.91747  | profilin 2                               | 6.13 |
|    | 445595 | W25950    | Hs.14512  | DIPB protein                             | 6.13 |
| 40 | 433036 | AA574091  | Hs.105964 | ESTs                                     | 6.13 |
|    | 457155 | AL110243  | Hs.187991 | DKFZF564A122 protein                     | 6.13 |
|    | 443715 | AI583187  | Hs.9700   | cyclin E1                                | 6.13 |
|    | 422867 | L32137    | Hs.1584   | cartilage oligomeric matrix protein (pse | 6.12 |
|    | 453286 | AA034319  | Hs.29041  | Homo sapiens cDNA FLJ14177 fis, clone NT | 6.11 |
| 45 | 424897 | D63216    | Hs.153684 | frizzled-related protein                 | 6.11 |
|    | 429188 | AB011171  | Hs.198037 | KIAA0599 protein                         | 6.11 |
|    | 434894 | AW977850  | Hs.23856  | hypothetical protein MGC5297             | 6.10 |
|    | 413339 | AI818080  | Hs.194290 | ESTs                                     | 6.10 |
|    | 453685 | AL110309  |           | gb:DKFZp564L0278_r1 564 (synonym: hibr2) | 6.10 |
| 50 | 421195 | BE464560  | Hs.133017 | ESTs                                     | 6.10 |
|    | 453296 | AA034413  | Hs.62560  | ESTs                                     | 6.10 |
|    | 444985 | AI677737  | Hs.28329  | hypothetical protein FLJ14005            | 6.10 |
|    | 423492 | AF020761  | Hs.129683 | ubiquitin-conjugating enzyme E2D 1 (homo | 6.10 |
|    | 419841 | BE005848  | Hs.7326   | ESTs                                     | 6.10 |
| 55 | 429190 | H18650    | Hs.92602  | ESTs                                     | 6.10 |
|    | 426116 | AA868729  | Hs.144694 | ESTs                                     | 6.10 |
|    | 451441 | AA017601  | Hs.84529  | ESTs, Weakly similar to Z202_HUMAN ZINC  | 6.10 |
|    | 401740 |           |           | NA                                       | 6.10 |
| 60 | 441953 | H11695    | Hs.322901 | disrupter of silencing 10                | 6.10 |
|    | 401464 | AF039241  | Hs.9028   | histone deacetylase 5                    | 6.10 |
|    | 405033 |           |           | NA                                       | 6.10 |
|    | 410743 | AA089474  | Hs.272153 | ESTs                                     | 6.10 |
|    | 454758 | AW845266  |           | gb:IL2-CT0031-160999-003-608 CT0031 Homo | 6.10 |
|    | 417728 | AW138437  | Hs.24790  | KIAA1573 protein                         | 6.10 |
| 65 | 418553 | T88964    |           | gb:yd97a07.r1 Soares fetal liver spleen  | 6.09 |
|    | 431617 | AK000738  | Hs.264636 | hypothetical protein FLJ20731            | 6.08 |
|    | 455608 | BE011437  |           | gb:CM4-BN0220-080500-170-f03 BN0220 Homo | 6.08 |
|    | 450755 | AA010984  | Hs.159464 | ESTs                                     | 6.07 |
|    | 455217 | AW867534  |           | gb:MR0-SN0037-160400-004-e05 SN0037 Homo | 6.07 |
| 70 | 437179 | AA393508  | Hs.300642 | serologically defined colon cancer antig | 6.06 |
|    | 408622 | AA056060  | Hs.202577 | Homo sapiens cDNA FLJ12166 fis, clone MA | 6.06 |
|    | 415308 | F05251    |           | gb:HSC04H101 normalized infant brain cDN | 6.06 |
|    | 428417 | AK001699  | Hs.184227 | F-box only protein 21                    | 6.05 |
|    | 426501 | AW043782  | Hs.293616 | ESTs                                     | 6.03 |
| 75 | 431077 | AI669133  | Hs.115660 | hypothetical protein FLJ12810            | 6.03 |
|    | 403040 |           |           | NA                                       | 6.02 |
|    | 445704 | AI493742  | Hs.165210 | ESTs, Moderately similar to I38022 hypot | 6.02 |
|    | 415637 | R25517    |           | gb:yg44f01.r1 Soares infant brain 1NIB H | 6.02 |
| 80 | 427925 | N51323    | Hs.255935 | Homo sapiens, clone IMAGE:3448993, mRNA  | 6.02 |
|    | 404702 | NA        |           | NA                                       | 6.02 |
|    | 433183 | AF231338  | Hs.222024 | transcription factor BMAL2               | 6.01 |
|    | 437762 | T78028    | Hs.154679 | synaptotagmin I                          | 6.01 |
|    | 443833 | AI654108  | Hs.135125 | ESTs                                     | 6.01 |
|    | 422263 | AA307639  | Hs.129908 | KIAA0591 protein                         | 6.00 |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 420909 | AI640551  | Hs.88878  | Homo sapiens cDNA: FLJ23536 fis, clone L | 6.00 |
|    | 407612 | U26403    | Hs.37142  | ephrin-A5                                | 6.00 |
|    | 450715 | AI266484  | Hs.31570  | ESTs, Weakly similar to KIAA1324 protein | 6.00 |
| 5  | 453853 | AL040600  | Hs.188083 | ESTs                                     | 6.00 |
|    | 444188 | AI393165  | Hs.599    | peptidylprolyl isomerase B (cyclophilin  | 6.00 |
|    | 451813 | NM_016117 | Hs.27182  | phospholipase A2-activating protein      | 6.00 |
|    | 422505 | AL120862  | Hs.124165 | ESTs                                     | 6.00 |
|    | 420734 | AW972872  | Hs.293736 | ESTs                                     | 6.00 |
| 10 | 455082 | BE148180  |           | gb:RC0-HT0232-211099-011-e04 HT0232 Homo | 6.00 |
|    | 444200 | AA327113  | Hs.149057 | ESTs                                     | 6.00 |
|    | 447432 | AW958473  | Hs.301957 | nudix (nucleoside diphosphate linked moi | 6.00 |
|    | 419752 | AA249573  | Hs.152618 | ESTs, Moderately similar to ZN91_HUMAN Z | 6.00 |
|    | 428412 | AA428240  | Hs.126083 | ESTs                                     | 6.00 |
| 15 | 407790 | AI027274  | Hs.288941 | Homo sapiens cDNA FLJ14866 fis, clone PL | 6.00 |
|    | 428945 | AW192803  | Hs.98974  | ESTs, Weakly similar to S65824 reverse t | 6.00 |
|    | 431878 | AA521207  | Hs.270202 | ESTs, Weakly similar to ALU4_HUMAN ALU S | 6.00 |
|    | 425282 | AW163518  | Hs.155485 | huntingtin interacting protein 2         | 6.00 |
|    | 401093 |           |           | NA                                       | 6.00 |
| 20 | 411861 | AW867875  |           | gb:MR0-SN0040-050500-003-f11 SN0040 Homo | 6.00 |
|    | 411800 | N39342    | Hs.103042 | microtubule-associated protein 1B        | 5.99 |
|    | 446925 | AW974605  | Hs.176669 | ESTs                                     | 5.98 |
|    | 401708 | NA        |           | NA                                       | 5.98 |
|    | 449894 | AK001578  | Hs.24129  | CLLL7 protein                            | 5.97 |
| 25 | 403278 | NA        |           | NA                                       | 5.96 |
|    | 455212 | AW866330  |           | gb:QV4-SN0024-080400-167-e01 SN0024 Homo | 5.96 |
|    | 410116 | AW630671  | Hs.58636  | squamous cell carcinoma antigen recogniz | 5.96 |
|    | 441271 | AA927290  | Hs.130462 | ESTs                                     | 5.95 |
|    | 404072 |           |           | NA                                       | 5.95 |
| 30 | 431596 | T34708    | Hs.272927 | Sec23 (S. cerevisiae) homolog A          | 5.94 |
|    | 421622 | AB037748  | Hs.106204 | KIAA1327 protein                         | 5.93 |
|    | 441300 | R35063    | Hs.181536 | ESTs                                     | 5.92 |
|    | 445517 | AF208855  | Hs.12830  | hypothetical protein                     | 5.91 |
|    | 429559 | AI985345  | Hs.26425  | ESTs                                     | 5.91 |
| 35 | 443767 | BE562136  | Hs.9736   | proteasome (prosome, macropain) 26S subu | 5.91 |
|    | 440510 | H08427    | Hs.309165 | ESTs, Weakly similar to ISHUS protein d  | 5.90 |
|    | 414727 | BE466904  |           | gb:h28f03.x1 NCI_CGAP_GC6 Homo sapiens   | 5.90 |
|    | 451686 | AA059246  | Hs.110293 | ESTs                                     | 5.90 |
|    | 438032 | BE045624  | Hs.152992 | ESTs                                     | 5.90 |
| 40 | 450470 | Z75330    | Hs.286148 | stromal antigen 1                        | 5.90 |
|    | 430533 | AA480895  | Hs.201552 | ESTs, Weakly similar to T17288 hypotheti | 5.90 |
|    | 432662 | AL049314  | Hs.280700 | ESTs                                     | 5.90 |
|    | 451742 | T77609    | Hs.117970 | ankyrin 2, neuronal                      | 5.90 |
|    | 431217 | NM_013427 | Hs.250830 | Rho GTPase activating protein 6          | 5.90 |
| 45 | 412537 | AL031778  | Hs.797    | nuclear transcription factor Y, alpha    | 5.90 |
|    | 447233 | AW246333  | Hs.17901  | Homo sapiens, clone IMAGE:3937015, mRNA, | 5.90 |
|    | 410804 | U64820    | Hs.66521  | Machado-Joseph disease (spinocerebellar  | 5.90 |
|    | 452619 | AW298597  | Hs.61884  | Homo sapiens, clone IMAGE:4298026, mRNA, | 5.90 |
|    | 433865 | N29862    | Hs.44104  | ESTs                                     | 5.90 |
| 50 | 453403 | BE466639  | Hs.61779  | Homo sapiens cDNA FLJ13591 fis, clone PL | 5.90 |
|    | 448743 | AB032962  | Hs.21896  | KIAA1136 protein                         | 5.90 |
|    | 447153 | AA805202  | Hs.315562 | ESTs                                     | 5.90 |
|    | 425793 | AA363946  | Hs.20969  | ESTs                                     | 5.90 |
|    | 404632 |           |           | NA                                       | 5.90 |
| 55 | 446364 | AB006624  | Hs.14912  | KIAA0286 protein                         | 5.90 |
|    | 452240 | AI591147  | Hs.61232  | ESTs                                     | 5.90 |
|    | 410424 | AA084984  |           | gb:zn11a08.r1 Stratagene hNT neuron (937 | 5.90 |
|    | 404170 |           |           | NA                                       | 5.89 |
|    | 458390 | AI792585  | Hs.133272 | ESTs, Weakly similar to ALUC_HUMAN !!!!  | 5.89 |
| 60 | 408296 | AL117452  | Hs.44155  | DKFZP586G1517 protein                    | 5.88 |
|    | 444406 | AI147237  | Hs.300697 | immunoglobulin heavy constant gamma 3 (C | 5.87 |
|    | 413894 | BE177983  |           | gb:RC3-HT0600-230300-021-g10 HT0600 Homo | 5.87 |
|    | 453922 | AF053306  | Hs.36708  | budding uninhibited by benzimidazoles 1  | 5.86 |
|    | 446700 | AW206257  | Hs.156326 | Human DNA sequence from clone RP11-145L2 | 5.86 |
| 65 | 443377 | AI792547  | Hs.133292 | ESTs                                     | 5.86 |
|    | 419162 | AA234591  | Hs.304123 | ESTs                                     | 5.85 |
|    | 436608 | AA528980  | Hs.192371 | down syndrome critical region protein DS | 5.84 |
|    | 428650 | AI560456  | Hs.107319 | ESTs                                     | 5.84 |
|    | 437410 | AW023340  | Hs.14880  | ESTs                                     | 5.84 |
| 70 | 428303 | AW974476  | Hs.183601 | regulator of G-protein signalling 16     | 5.84 |
|    | 401004 |           |           | NA                                       | 5.83 |
|    | 414504 | AW069181  | Hs.115175 | sterile-alpha motif and leucine zipper c | 5.83 |
|    | 410979 | BE151480  |           | gb:RC0-HT0295-071199-011-a01 HT0295 Homo | 5.82 |
|    | 424576 | BE154142  | Hs.96833  | ESTs                                     | 5.82 |
| 75 | 439352 | BE614347  | Hs.169615 | hypothetical protein FLJ20989            | 5.81 |
|    | 423057 | AW961597  | Hs.130816 | ESTs, Moderately similar to I38022 hypot | 5.80 |
|    | 429250 | H56585    | Hs.198308 | tryptophan rich basic protein            | 5.80 |
|    | 413048 | M93221    | Hs.75182  | mannose receptor, C type 1               | 5.80 |
|    | 451367 | AA923729  | Hs.26322  | cell cycle related kinase                | 5.80 |
| 80 | 418647 | AA226198  |           | gb:nc26a07.s1 NCI_CGAP_Pr1 Homo sapiens  | 5.80 |
|    | 421589 | AW954177  | Hs.82919  | cullin 2                                 | 5.80 |
|    | 427969 | NM_001963 | Hs.2230   | epidermal growth factor (beta-urogastron | 5.80 |
|    | 451406 | AI694320  | Hs.6295   | ESTs, Weakly similar to T17248 hypotheti | 5.80 |
|    | 436096 | H55931    | Hs.269582 | ESTs                                     | 5.80 |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 443353 | AI052659  | Hs.133255 | ESTs                                     | 5.80 |
|    | 457244 | AA581385  | Hs.162473 | ESTs, Weakly similar to I38022 hypotheti | 5.80 |
|    | 407746 | AK001962  | Hs.38114  | hypothetical protein FLJ11100            | 5.80 |
| 5  | 440688 | AW404591  | Hs.147440 | ESTs, Weakly similar to Z192_HUMAN ZINC  | 5.80 |
|    | 445745 | AB007924  | Hs.13245  | KIAA0455 gene product                    | 5.80 |
|    | 405637 | NA        |           | NA                                       | 5.80 |
|    | 415293 | R49462    | Hs.106541 | ESTs                                     | 5.80 |
|    | 440404 | AI015881  | Hs.324527 | mitochondrial ribosomal protein S5       | 5.80 |
| 10 | 442227 | AW771958  | Hs.175437 | ESTs, Moderately similar to PC4259 ferri | 5.80 |
|    | 423395 | AA326613  |           | gb:EST29922 Cerebellum II Homo sapiens c | 5.80 |
|    | 410555 | U92649    | Hs.64311  | a disintegrin and metalloproteinase doma | 5.80 |
|    | 416000 | R82342    | Hs.79856  | ESTs, Weakly similar to S65657 alpha-1C- | 5.80 |
|    | 422108 | AA297914  | Hs.111749 | postmeiotic segregation increased (S. ce | 5.80 |
| 15 | 430818 | AI311928  |           | gb:q089h04.x1 NCI_CGAP_Kid5 Homo sapiens | 5.80 |
|    | 444749 | AI190672  | Hs.65926  | ESTs                                     | 5.80 |
|    | 417515 | L24203    | Hs.82237  | ataxia-telangiectasia group D-associated | 5.79 |
|    | 456192 | D84109    | Hs.80248  | RNA-binding protein gene with multiple s | 5.78 |
|    | 411253 | AW833897  |           | gb:QV0-TT0009-111199-055-b07 TT0009 Homo | 5.78 |
| 20 | 417219 | AW973473  | Hs.220936 | ESTs                                     | 5.78 |
|    | 409450 | AW628650  | Hs.61260  | hypothetical protein FLJ13164            | 5.76 |
|    | 412013 | AA400753  | Hs.43761  | ESTs, Weakly similar to A46010 X-linked  | 5.76 |
|    | 425566 | AW162943  | Hs.250618 | UL16 binding protein 2                   | 5.75 |
|    | 417877 | AI025829  | Hs.86320  | ESTs                                     | 5.75 |
| 25 | 437114 | AA836641  | Hs.163085 | ESTs                                     | 5.75 |
|    | 421238 | AB033171  | Hs.102796 | Homo sapiens cDNA FLJ10708 fis, clone NT | 5.74 |
|    | 428959 | AF100779  | Hs.194680 | WNT1 inducible signaling pathway protein | 5.73 |
|    | 415209 | F00183    | Hs.172004 | titin                                    | 5.73 |
|    | 429922 | Z97630    | Hs.226117 | H1 histone family, member 0              | 5.72 |
| 30 | 420022 | AA256253  | Hs.120817 | ESTs                                     | 5.71 |
|    | 431485 | BE621320  | Hs.257486 | hypothetical protein FLJ20062            | 5.71 |
|    | 424304 | NM_001395 | Hs.144879 | dual specificity phosphatase 9           | 5.71 |
|    | 434276 | AF123659  | Hs.93605  | leucine zipper, putative tumor suppresso | 5.71 |
|    | 438085 | R52518    | Hs.7967   | ESTs                                     | 5.70 |
|    | 444379 | N99035    | Hs.222657 | ESTs                                     | 5.70 |
| 35 | 401348 | NA        |           | NA                                       | 5.70 |
|    | 428878 | AA436884  | Hs.48926  | ESTs                                     | 5.70 |
|    | 422564 | AI148006  | Hs.222120 | ESTs                                     | 5.70 |
|    | 452560 | BE077084  | Hs.336432 | ESTs                                     | 5.70 |
| 40 | 408384 | BE144344  | Hs.7589   | ESTs, Weakly similar to A46010 X-linked  | 5.70 |
|    | 409948 | AA078643  |           | gb:7P08B01 Chromosome 7 Placental cDNA L | 5.70 |
|    | 421166 | AA305407  | Hs.102308 | potassium inwardly-rectifying channel, s | 5.70 |
|    | 439231 | AW581935  | Hs.141480 | Homo sapiens mRNA; cDNA DKFZp434N079 (fr | 5.70 |
|    | 439203 | AA448930  | Hs.8453   | KIAA1587 protein                         | 5.70 |
| 45 | 442029 | AW956698  | Hs.14456  | neural precursor cell expressed, develop | 5.70 |
|    | 451922 | BE463995  | Hs.211033 | ESTs                                     | 5.70 |
|    | 407808 | AA663559  | Hs.279789 | histone deacetylase 3                    | 5.70 |
|    | 428161 | M96954    | Hs.182741 | TIA1 cytotoxic granule-associated RNA-bi | 5.70 |
|    | 413430 | R22479    | Hs.167073 | Homo sapiens cDNA FLJ13047 fis, clone NT | 5.70 |
| 50 | 428223 | AA424313  | Hs.98402  | ESTs                                     | 5.70 |
|    | 427972 | AA864870  | Hs.181304 | putative gene product                    | 5.70 |
|    | 416283 | NM_005429 | Hs.79141  | vascular endothelial growth factor C     | 5.70 |
|    | 416319 | AI815601  | Hs.79197  | CD83 antigen (activated B lymphocytes, i | 5.70 |
|    | 458044 | AW979114  | Hs.326135 | ESTs                                     | 5.70 |
| 55 | 432911 | AW807634  | Hs.279799 | putative zinc finger protein NY-REN-34 a | 5.70 |
|    | 411643 | AI924519  | Hs.192570 | hypothetical protein FLJ22028            | 5.70 |
|    | 408867 | AA437199  | Hs.656    | cell division cycle 25C                  | 5.70 |
|    | 428679 | AA431765  |           | gb:zw80c03.s1 Soares_testis_NHT Homo sap | 5.70 |
|    | 428822 | W28418    | Hs.30715  | potassium voltage-gated channel, Isk-rel | 5.70 |
| 60 | 409570 | AW418720  | Hs.167583 | ESTs                                     | 5.70 |
|    | 457441 | BE467737  | Hs.146125 | ESTs                                     | 5.70 |
|    | 409101 | NM_004297 | Hs.50612  | guanine nucleotide binding protein (G pr | 5.70 |
|    | 420192 | AA256281  | Hs.105040 | ESTs                                     | 5.69 |
|    | 423582 | BE000831  | Hs.23837  | Homo sapiens cDNA FLJ11812 fis, clone HE | 5.69 |
| 65 | 454511 | AW948146  |           | gb:RC0-MT0013-280300-031-e02 MT0013 Homo | 5.68 |
|    | 419586 | AI088485  | Hs.144759 | ESTs, Weakly similar to I38022 hypotheti | 5.67 |
|    | 416777 | AF145760  | Hs.79844  | DKFZP564M1416 protein                    | 5.67 |
|    | 435849 | BE305242  | Hs.16098  | claudin 2                                | 5.67 |
|    | 457892 | AA744389  |           | gb:ny51e10.s1 NCI_CGAP_Pr18 Homo sapiens | 5.66 |
| 70 | 450191 | AW137243  | Hs.222446 | ESTs                                     | 5.66 |
|    | 438653 | AW188099  | Hs.131813 | ESTs                                     | 5.66 |
|    | 422910 | AI269508  | Hs.121591 | Human DNA sequence from PAC 257A7 on chr | 5.66 |
|    | 453694 | AW504918  | Hs.258208 | Homo sapiens, clone MGC:15606, mRNA, com | 5.66 |
|    | 445302 | AK001537  | Hs.12488  | hypothetical protein FLJ10675            | 5.66 |
| 75 | 445080 | AI221741  | Hs.117777 | ESTs                                     | 5.65 |
|    | 425474 | Z48054    | Hs.158084 | peroxisome receptor 1                    | 5.65 |
|    | 432542 | AW083920  | Hs.16098  | claudin 2                                | 5.65 |
|    | 446983 | AA157484  | Hs.97199  | complement component C1q receptor        | 5.65 |
|    | 420898 | AB002379  | Hs.100113 | KIAA0381 protein                         | 5.65 |
| 80 | 401372 |           |           | NA                                       | 5.64 |
|    | 428541 | AI862570  | Hs.299214 | Homo sapiens, clone IMAGE:2822295, mRNA, | 5.63 |
|    | 426249 | F05422    | Hs.168352 | nucleoporin-like protein 1               | 5.63 |
|    | 459705 | BE082764  | Hs.270252 | ESTs, Weakly similar to androgen recepto | 5.63 |
|    | 451863 | AL120634  | Hs.305923 | ATPase, Ca++ transporting, plasma membra | 5.62 |

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|    |        |           |           |   |      |
|----|--------|-----------|-----------|---|------|
|    | 426316 | NM_002430 | Hs.268515 | meningioma (disrupted in balanced translocation)    | 5.62 |
|    | 401183 |           |           | NA  | 5.62 |
|    | 426029 | AW294138  | Hs.255277 | ESTs  | 5.61 |
|    | 443452 | AI064690  | Hs.171176 | ESTs  | 5.61 |
| 5  | 447102 | BE167434  | Hs.98471  | ESTs, Weakly similar to T18712 hypothetical protein | 5.60 |
|    | 419150 | T29618    | Hs.89640  | TEK tyrosine kinase, endothelial (venous)           | 5.60 |
|    | 444577 | AI207721  | Hs.11393  | RAD51 (S. cerevisiae) homolog C                     | 5.60 |
|    | 423605 | AF047826  | Hs.129887 | cadherin 19, type 2                                 | 5.60 |
| 10 | 413447 | AW969388  | Hs.10450  | Homo sapiens cDNA: FLJ22063 fis, clone H            | 5.60 |
|    | 442957 | AI949952  | Hs.49397  | ESTs  | 5.60 |
|    | 424296 | AI631874  | Hs.155140 | casein kinase 2, alpha 1 polypeptide                | 5.60 |
|    | 430679 | R44428    | Hs.22801  | ESTs  | 5.60 |
|    | 449358 | AA001229  | Hs.131436 | ESTs  | 5.60 |
|    | 418348 | AI537167  | Hs.96322  | hypothetical protein FLJ23560                       | 5.60 |
| 15 | 433133 | AB027249  | Hs.104741 | PDZ-binding kinase; T-cell originated protein       | 5.60 |
|    | 444059 | R69743    | Hs.116774 | integrin, alpha 1                                   | 5.60 |
|    | 438157 | AW137011  | Hs.49576  | ESTs  | 5.60 |
|    | 428233 | AI358831  | Hs.20578  | ESTs  | 5.60 |
|    | 434265 | AA846811  | Hs.130554 | Homo sapiens cDNA: FLJ23089 fis, clone L            | 5.60 |
| 20 | 451652 | AA018968  | Hs.133536 | ESTs  | 5.59 |
|    | 422762 | AL031320  | Hs.119976 | Human DNA sequence from clone RP1-20N2 o            | 5.59 |
|    | 447591 | AI675417  | Hs.282855 | ESTs  | 5.58 |
|    | 417958 | AA767382  | Hs.193417 | ESTs  | 5.57 |
|    | 438146 | Z36842    | Hs.57548  | ESTs  | 5.57 |
| 25 | 413595 | AW235215  | Hs.16145  | ESTs  | 5.57 |
|    | 422406 | AF025441  | Hs.116206 | Opa-interacting protein 5                           | 5.56 |
|    | 420529 | D25259    | Hs.319844 | ESTs, Moderately similar to I54374 gene             | 5.56 |
|    | 439582 | W79161    | Hs.118327 | Homo sapiens cDNA FLJ11522 fis, clone HE            | 5.56 |
| 30 | 408744 | AW806177  |           | gb:MR1-UM0108-130400-003-d04 UM0108 Homo            | 5.56 |
|    | 447230 | AW972147  | Hs.101395 | hypothetical protein MGC11352                       | 5.54 |
|    | 428856 | AA436735  | Hs.183171 | hypothetical protein FLJ22002                       | 5.54 |
|    | 446813 | AA971436  | Hs.16218  | KIAA0903 protein                                    | 5.53 |
|    | 451424 | AI862026  | Hs.302810 | Novel human gene mapping to chromosome 20           | 5.53 |
| 35 | 410516 | BE537917  | Hs.90034  | hypothetical protein FLJ21916                       | 5.53 |
|    | 453994 | BE180964  | Hs.165590 | ribosomal protein S13                               | 5.53 |
|    | 435583 | AA767714  | Hs.291627 | ESTs  | 5.52 |
|    | 431585 | BE242803  | Hs.262823 | hypothetical protein FLJ10326                       | 5.51 |
|    | 408912 | AB011084  | Hs.48924  | KIAA0512 gene product; ALEX2                        | 5.51 |
|    | 427966 | R97130    | Hs.189699 | ESTs  | 5.51 |
| 40 | 433611 | AW327692  | Hs.3446   | mitogen-activated protein kinase kinase             | 5.51 |
|    | 401244 |           |           | NA  | 5.50 |
|    | 410784 | AW803201  |           | gb:IL2-UM0077-070500-080-E06 UM0077 Homo            | 5.50 |
|    | 434006 | AF113688  |           | gb:Homo sapiens clone FLB4630                       | 5.50 |
| 45 | 425650 | NM_001944 | Hs.1925   | desmoglein 3 (pemphigus vulgaris antigen)           | 5.50 |
|    | 427507 | AF240467  | Hs.179152 | tol-like receptor 7                                 | 5.50 |
|    | 423268 | BE386898  | Hs.131162 | ESTs, Weakly similar to ALU5_HUMAN ALU S            | 5.50 |
|    | 405065 | NA        |           | NA  | 5.50 |
|    | 444302 | AI140115  | Hs.225130 | ESTs  | 5.50 |
| 50 | 418183 | NM_001772 | Hs.83731  | CD33 antigen (gp67)                                 | 5.50 |
|    | 435586 | AI279137  | Hs.151498 | ESTs  | 5.50 |
|    | 438279 | AA805166  | Hs.154752 | HIV-1 rev binding protein 2                         | 5.50 |
|    | 427189 | H82453    | Hs.5635   | ESTs  | 5.50 |
|    | 415263 | AA948033  | Hs.130853 | ESTs  | 5.50 |
| 55 | 441818 | AI630451  | Hs.7976   | KIAA0332 protein                                    | 5.50 |
|    | 407834 | AW084991  | Hs.26100  | ESTs  | 5.50 |
|    | 404012 | NA        |           | NA  | 5.50 |
|    | 449932 | AI675444  | Hs.263024 | ESTs  | 5.50 |
|    | 423760 | AA775891  | Hs.191980 | ESTs  | 5.50 |
| 60 | 431576 | M76665    | Hs.275215 | hydroxysteroid (11-beta) dehydrogenase 1            | 5.50 |
|    | 423172 | R15652    |           | gb:HH503-F Adult heart, Clontech Homo sa            | 5.50 |
|    | 422295 | AF051151  | Hs.114408 | tol-like receptor 5                                 | 5.50 |
|    | 429044 | AI261490  | Hs.145527 | ESTs  | 5.50 |
|    | 433280 | AA581404  | Hs.289037 | Homo sapiens cDNA FLJ14135 fis, clone MA            | 5.50 |
| 65 | 414323 | NM_014759 | Hs.334688 | KIAA0273 gene product                               | 5.50 |
|    | 405511 | NA        |           | NA  | 5.49 |
|    | 444655 | BE613126  | Hs.47783  | B aggressive lymphoma gene                          | 5.49 |
|    | 434434 | AA633516  | Hs.157201 | ESTs  | 5.48 |
|    | 421997 | R66740    | Hs.110613 | KIAA0220 protein                                    | 5.47 |
|    | 410276 | AI554545  | Hs.68301  | ESTs  | 5.47 |
| 70 | 435867 | AA954229  | Hs.114052 | ESTs  | 5.47 |
|    | 453837 | AL138387  | Hs.256126 | baculoviral IAP repeat-containing 7 (liv)           | 5.47 |
|    | 409617 | BE003760  | Hs.55209  | Homo sapiens mRNA; cDNA DKFZp434K0514 (f            | 5.47 |
|    | 430387 | AW372884  | Hs.240770 | nuclear cap binding protein subunit 2, 2            | 5.47 |
|    | 401629 | NA        |           | NA  | 5.46 |
| 75 | 433071 | BE150229  | Hs.281564 | retinal outer segment membrane protein 1            | 5.46 |
|    | 458247 | R14439    | Hs.209194 | ESTs  | 5.46 |
|    | 418049 | AA211467  | Hs.190488 | Homo sapiens, Similar to nuclear localiz            | 5.45 |
|    | 418247 | RS5174    |           | gb:yg87h04.r1 Soares infant brain 1N1B H            | 5.45 |
| 80 | 453716 | AA037675  | Hs.152675 | ESTs  | 5.44 |
|    | 431157 | AI823969  | Hs.132678 | ESTs  | 5.44 |
|    | 426873 | AI190540  | Hs.131092 | ESTs  | 5.43 |
|    | 437092 | AA744292  |           | gb:ny51d05.s1 NCI_CGAP_Pr18 Homo sapiens            | 5.42 |
|    | 445782 | AW407672  | Hs.315367 | Homo sapiens, Similar to hypothetical pr            | 5.42 |



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|----|--------|-----------|-----------|--|------|
|    | 447393 | AI377458  | Hs.158831 | EST                                      | 5.42 |
|    | 425283 | AA354338  | Hs.131100 | ESTs                                     | 5.42 |
|    | 401208 | NA        |           | NA                                       | 5.42 |
| 5  | 430536 | AI809163  | Hs.9908   | nitrogen fixation cluster-like           | 5.42 |
|    | 405523 |           |           | NA                                       | 5.42 |
|    | 409012 | AL117435  | Hs.49725  | DKFZP434I216 protein                     | 5.41 |
|    | 429803 | W81489    | Hs.223025 | RAB31, member RAS oncogene family        | 5.41 |
|    | 436982 | AB018305  | Hs.5378   | spondin 1, (f-spondin) extracellular mat | 5.40 |
| 10 | 422892 | AA988176  | Hs.121553 | hypothetical protein FLJ20641            | 5.40 |
|    | 456027 | BE327387  | Hs.13913  | KJAA1577 protein                         | 5.40 |
|    | 411897 | AW875066  | Hs.326876 | Homo sapiens SOX6 mRNA, complete cds     | 5.40 |
|    | 449689 | AF228421  | Hs.23889  | DKFZP564A032 protein                     | 5.40 |
|    | 432865 | AI753709  | Hs.152484 | ESTs, Weakly similar to I38022 hypotheti | 5.40 |
|    | 408248 | AW854832  |           | gb:QV2-CT0261-201099-011-f05 CT0261 Homo | 5.40 |
| 15 | 418516 | NM_006218 | Hs.85701  | phosphoinositide-3-kinase, catalytic, al | 5.40 |
|    | 423289 | N77774    |           | gb:yz83e01.r1 Soares_multiple_sclerosis_ | 5.40 |
|    | 453365 | AA035211  | Hs.17404  | ESTs                                     | 5.40 |
|    | 406465 |           |           | NA                                       | 5.40 |
| 20 | 441858 | AW173339  | Hs.135665 | ESTs                                     | 5.40 |
|    | 432507 | BE391093  | Hs.324667 | ESTs                                     | 5.40 |
|    | 440570 | AI205712  | Hs.125998 | ESTs                                     | 5.40 |
|    | 445062 | AI339915  | Hs.44324  | ESTs                                     | 5.40 |
|    | 421639 | NM_012082 | Hs.106309 | Friend of GATA2                          | 5.40 |
| 25 | 410406 | AI969703  | Hs.1466   | glycerol kinase                          | 5.40 |
|    | 418939 | AW630803  | Hs.89497  | lamin B1                                 | 5.40 |
|    | 426010 | AA136563  | Hs.1975   | hypothetical protein FLJ21007            | 5.40 |
|    | 400250 | NA        |           | NA                                       | 5.40 |
|    | 424650 | AW576156  | Hs.250824 | Homo sapiens cDNA: FLJ23435 fis, clone H | 5.40 |
| 30 | 414998 | NM_002543 | Hs.77729  | oxidised low density lipoprotein (lectin | 5.39 |
|    | 433384 | AI021992  | Hs.124244 | ESTs                                     | 5.38 |
|    | 428781 | AF164799  | Hs.193384 | putative 28 kDa protein                  | 5.38 |
|    | 438150 | AA037534  | Hs.79059  | transforming growth factor, beta recepto | 5.38 |
|    | 400639 |           |           | NA                                       | 5.38 |
| 35 | 426485 | NM_006207 | Hs.170040 | platelet-derived growth factor receptor- | 5.37 |
|    | 424205 | AA336825  |           | gb:EST41732 Endometrial tumor Homo sapie | 5.36 |
|    | 459596 | H29554    | Hs.113871 | ESTs                                     | 5.36 |
|    | 408234 | AW993356  | Hs.285814 | sprouty (Drosophila) homolog 4           | 5.36 |
|    | 414547 | T47770    | Hs.191463 | ESTs                                     | 5.35 |
| 40 | 419851 | AA287987  | Hs.13477  | ESTs, Weakly similar to 1207289A reverse | 5.35 |
|    | 411945 | AL033527  | Hs.92137  | v-myc avian myelocytomatosis viral oncog | 5.34 |
|    | 425764 | AW996009  | Hs.112572 | Homo sapiens cDNA FLJ14130 fis, clone MA | 5.34 |
|    | 405352 |           |           | NA                                       | 5.33 |
|    | 448030 | N30714    | Hs.325960 | membrane-spanning 4-domains, subfamily A | 5.32 |
| 45 | 424284 | BE541008  | Hs.6193   | hypothetical protein FLJ14590            | 5.32 |
|    | 427741 | AW753185  | Hs.180628 | dynamitin 1-like                         | 5.31 |
|    | 426021 | AW770897  | Hs.34392  | ESTs, Weakly similar to I38022 hypotheti | 5.31 |
|    | 442186 | AA984083  | Hs.269746 | ESTs, Weakly similar to T03306 PSD-95/SA | 5.30 |
|    | 437319 | BE410958  | Hs.56406  | Homo sapiens cDNA FLJ13549 fis, clone PL | 5.30 |
|    | 405287 | NA        |           | NA                                       | 5.30 |
| 50 | 427032 | AF012023  | Hs.173274 | integrin cytoplasmic domain-associated p | 5.30 |
|    | 415371 | R15239    |           | gb:yf89b02.r1 Soares infant brain 1N1B H | 5.30 |
|    | 420024 | AA252905  | Hs.194477 | E3 ubiquitin ligase SMURF2               | 5.30 |
|    | 434408 | AI031771  | Hs.132586 | ESTs                                     | 5.30 |
| 55 | 434739 | AA804487  | Hs.144130 | ESTs                                     | 5.30 |
|    | 421327 | AA837295  | Hs.188802 | ESTs                                     | 5.30 |
|    | 453058 | AW612293  | Hs.288684 | Homo sapiens cDNA FLJ11750 fis, clone HE | 5.30 |
|    | 446776 | BE302464  | Hs.30057  | MRS2 (S. cerevisiae)-like, magnesium hom | 5.30 |
|    | 417845 | AL117461  | Hs.82719  | Homo sapiens mRNA: cDNA DKFZp586F1822 (f | 5.30 |
| 60 | 430264 | AA470519  |           | gb:nc71f1f0.s1 NCI_CGAP_Pr1 Homo sapiens | 5.30 |
|    | 411402 | BE297855  | Hs.69855  | NRAS-related gene                        | 5.30 |
|    | 419220 | AA811938  | Hs.291759 | ESTs                                     | 5.30 |
|    | 407995 | AI094748  | Hs.100134 | hypothetical protein FLJ12787            | 5.30 |
|    | 459256 | AW967468  | Hs.99821  | hypothetical protein FLJ14547            | 5.30 |
| 65 | 452449 | AW068658  | Hs.20943  | ESTs                                     | 5.30 |
|    | 430366 | AI057368  | Hs.105575 | ESTs                                     | 5.30 |
|    | 434360 | AW015415  | Hs.127780 | ESTs                                     | 5.30 |
|    | 422560 | F11469    | Hs.118281 | zinc finger protein 266                  | 5.29 |
|    | 441704 | AI458766  | Hs.201988 | ESTs                                     | 5.29 |
| 70 | 443635 | AI080230  | Hs.134214 | ESTs                                     | 5.29 |
|    | 434342 | AI791138  | Hs.116768 | ESTs                                     | 5.29 |
|    | 423409 | NM_006466 | Hs.128207 | polymerase (RNA) III (DNA directed) (39k | 5.29 |
|    | 449000 | U69560    | Hs.3826   | kelch-like protein C3IP1                 | 5.29 |
|    | 452381 | H23329    | Hs.290880 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 5.29 |
| 75 | 409068 | AW236991  | Hs.102495 | ESTs, Moderately similar to I38022 hypot | 5.29 |
|    | 434860 | AA932386  | Hs.292657 | ESTs                                     | 5.28 |
|    | 408096 | BE250162  | Hs.83765  | dihydrofolate reductase                  | 5.28 |
|    | 418036 | Z37976    | Hs.83337  | latent transforming growth factor beta b | 5.28 |
|    | 435443 | AI248674  | Hs.14295  | ESTs                                     | 5.26 |
| 80 | 414269 | AA298489  | Hs.303171 | olfactory receptor, family 51, subfamily | 5.26 |
|    | 408371 | AF161545  | Hs.279883 | hypothetical protein                     | 5.26 |
|    | 401205 | NA        |           | NA                                       | 5.26 |
|    | 450904 | R07118    | Hs.189924 | ESTs                                     | 5.26 |
|    | 416351 | H49704    | Hs.173522 | ESTs                                     | 5.26 |

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|    | 426524 | AA380611 | Hs.163841 | ESTs                                     | 5.25 |
|    | 412901 | AI127359 | Hs.289088 | heat shock 90kD protein 1, alpha         | 5.25 |
|    | 452487 | AW207659 | Hs.6630   | Homo sapiens cDNA FLJ13329 fis, clone OV | 5.24 |
|    | 444825 | AW167613 | Hs.248    | mitogen-activated protein kinase kinase  | 5.24 |
| 5  | 412953 | Z45794   | Hs.238809 | ESTs                                     | 5.24 |
|    | 404117 | NA       |           | NA                                       | 5.22 |
|    | 427956 | AL046175 | Hs.108169 | Homo sapiens mRNA; cDNA DKFZp586C1619 (f | 5.22 |
|    | 421787 | AA227068 | Hs.108301 | nuclear receptor subfamily 2, group C, m | 5.22 |
|    | 437255 | R58970   | Hs.9887   | ESTs                                     | 5.22 |
| 10 | 424697 | AL136169 | Hs.250708 | CAAX box 1                               | 5.20 |
|    | 449771 | AI668702 | Hs.54976  | ESTs                                     | 5.20 |
|    | 432193 | AA372264 | Hs.273193 | hypothetical protein FLJ10706            | 5.20 |
|    | 438885 | AI886558 | Hs.184987 | ESTs                                     | 5.20 |
|    | 407182 | AA312551 | Hs.230157 | ESTs                                     | 5.20 |
| 15 | 452150 | W42490   | Hs.260844 | ESTs                                     | 5.20 |
|    | 419680 | AA249720 | Hs.59335  | ESTs                                     | 5.20 |
|    | 438940 | AF075045 | Hs.271609 | ESTs                                     | 5.20 |
|    | 405362 | NA       |           | NA                                       | 5.20 |
|    | 449370 | AK002114 | Hs.23495  | hypothetical protein FLJ11252            | 5.20 |
| 20 | 442353 | BE379594 | Hs.49136  | ESTs, Moderately similar to ALU7_HUMAN A | 5.20 |
|    | 409331 | M36634   | Hs.53973  | vasoactive intestinal peptide            | 5.20 |
|    | 415397 | H10818   |           | gb:ym04f10.r1 Soares infant brain 1N1B H | 5.20 |
|    | 406735 | AA603092 |           | gb:np37a01.s1 NCL_CGAP_Lu1 Homo sapiens  | 5.20 |
|    | 418489 | U76421   | Hs.85302  | adenosine deaminase, RNA-specific, B1 (h | 5.20 |
| 25 | 431480 | AA837274 | Hs.257005 | hypothetical protein FLJ20837            | 5.20 |
|    | 425523 | AB007948 | Hs.158244 | KIAA0479 protein                         | 5.20 |
|    | 425673 | R70318   | Hs.339730 | ESTs                                     | 5.20 |
|    | 439267 | AA287747 | Hs.173012 | ESTs, Weakly similar to A46010 X-linked  | 5.20 |
|    | 457030 | AI301740 | Hs.173381 | dihydropyrimidinase-like 2               | 5.20 |
| 30 | 424638 | AI472106 | Hs.49303  | Homo sapiens cDNA FLJ11663 fis, clone HE | 5.20 |
|    | 454434 | AA083558 | Hs.261286 | ESTs                                     | 5.20 |
|    | 448336 | R53848   | Hs.44976  | ESTs                                     | 5.20 |
|    | 429534 | AW976987 | Hs.163327 | ESTs, Weakly similar to 2109260A B cell  | 5.20 |
|    | 434803 | AW974640 | Hs.303413 | ESTs                                     | 5.20 |
| 35 | 403199 | NA       |           | NA                                       | 5.20 |
|    | 435225 | AI021912 | Hs.187983 | ESTs                                     | 5.20 |
|    | 451654 | AA889081 | Hs.153952 | 5' nucleotidase (CD73)                   | 5.20 |
|    | 440385 | AA884283 | Hs.192136 | ESTs                                     | 5.20 |
|    | 432328 | AI572739 | Hs.195471 | 6-phosphofructo-2-kinase/fructose-2,6-bi | 5.20 |
| 40 | 400484 |          |           | NA                                       | 5.20 |
|    | 425757 | AA363171 |           | gb:EST72986 Ovary II Homo sapiens cDNA 5 | 5.19 |
|    | 449841 | AI671602 | Hs.199602 | ESTs                                     | 5.19 |
|    | 420303 | AA258282 | Hs.278436 | KIAA1474 protein                         | 5.19 |
|    | 429687 | AI675749 | Hs.211608 | nucleoporin 153kD                        | 5.19 |
| 45 | 453345 | AA302862 | Hs.90063  | neurocalcin delta                        | 5.18 |
|    | 447499 | AW262580 | Hs.147674 | protocadherin beta 16                    | 5.18 |
|    | 404913 |          |           | NA                                       | 5.18 |
|    | 405114 | NA       |           | NA                                       | 5.18 |
|    | 431117 | AF003522 | Hs.250500 | delta (Drosophila)-like 1                | 5.18 |
| 50 | 411995 | W49701   | Hs.29667  | ESTs                                     | 5.17 |
|    | 401736 | NA       |           | NA                                       | 5.17 |
|    | 425250 | AA353495 | Hs.269762 | ESTs, Weakly similar to A47582 B-cell gr | 5.16 |
|    | 454388 | AA630905 | Hs.333300 | hypothetical protein FLJ14026            | 5.16 |
|    | 449032 | AA045573 | Hs.22900  | nuclear factor (erythroid-derived 2)-lik | 5.16 |
| 55 | 443646 | AI085198 | Hs.164226 | ESTs                                     | 5.15 |
|    | 436032 | AA150797 | Hs.109276 | latexin protein                          | 5.15 |
|    | 456896 | M97639   | Hs.155585 | receptor tyrosine kinase-like orphan rec | 5.15 |
|    | 433672 | BE281165 | Hs.288038 | TLS-associated serine-arginine protein 1 | 5.15 |
|    | 432826 | X75363   | Hs.250770 | ACO for serine protease homologue        | 5.14 |
| 60 | 439441 | W67993   | Hs.323135 | ESTs                                     | 5.14 |
|    | 400205 | NA       |           | NA                                       | 5.14 |
|    | 430854 | AW440369 | Hs.47026  | ESTs                                     | 5.14 |
|    | 408771 | AW732573 | Hs.47584  | potassium voltage-gated channel, delayed | 5.14 |
| 65 | 456804 | AI421645 | Hs.139851 | caveolin 2                               | 5.14 |
|    | 424690 | BE538356 | Hs.151777 | eukaryotic translation initiation factor | 5.13 |
|    | 449210 | AI635363 | Hs.197636 | ESTs                                     | 5.12 |
|    | 419013 | T90378   | Hs.14463  | ESTs                                     | 5.12 |
|    | 425843 | BE313280 | Hs.159627 | death associated protein 3               | 5.12 |
| 70 | 422545 | X02761   | Hs.287820 | fibronectin 1                            | 5.12 |
|    | 424785 | R23519   | Hs.6126   | hypothetical protein dJ1141E15.2         | 5.11 |
|    | 442833 | AA328153 | Hs.88201  | ESTs, Weakly similar to A Chain A, Cryst | 5.10 |
|    | 422411 | AW749443 | Hs.22511  | ESTs                                     | 5.10 |
|    | 457565 | BE294029 | Hs.279903 | Ras homolog enriched in brain 2          | 5.10 |
| 75 | 437722 | AW292947 | Hs.122872 | ESTs, Weakly similar to JU0033 hypotheti | 5.10 |
|    | 446893 | AI610818 | Hs.7110   | ESTs                                     | 5.10 |
|    | 401581 |          |           | NA                                       | 5.10 |
|    | 417511 | AL049176 | Hs.82223  | chordin-like                             | 5.10 |
|    | 422336 | AI761322 | Hs.115285 | dihydrolipoamide S-acetyltransferase (E2 | 5.10 |
| 80 | 437662 | AA765387 | Hs.145095 | ESTs                                     | 5.10 |
|    | 429526 | AA454182 | Hs.99360  | ESTs                                     | 5.10 |
|    | 447332 | AW445012 | Hs.160918 | ESTs                                     | 5.10 |
|    | 436207 | AA334774 | Hs.12845  | hypothetical protein MGC13159            | 5.10 |
|    | 428155 | H17012   | Hs.14633  | ESTs                                     | 5.10 |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 420185 | AL044056  | Hs.158047 | ESTs                                     | 5.10 |
|    | 445657 | AW612141  | Hs.279575 | Homo sapiens G-protein coupled receptor  | 5.10 |
|    | 440913 | AI267491  | Hs.160593 | ESTs                                     | 5.10 |
| 5  | 452943 | BE247449  | Hs.31082  | hypothetical protein FLJ10525            | 5.10 |
|    | 428603 | BE241619  | Hs.24641  | cytoskeleton associated protein 2        | 5.10 |
|    | 436577 | W84774    | Hs.17643  | ESTs                                     | 5.10 |
|    | 400241 | NA        | NA        | NA                                       | 5.10 |
|    | 437205 | AL110232  | Hs.279243 | Homo sapiens mRNA; cDNA DKFZp564D0271 (f | 5.10 |
| 10 | 423654 | AI674253  | Hs.35828  | ESTs                                     | 5.10 |
|    | 417637 | AA204969  | Hs.234863 | Homo sapiens cDNA FLJ12082 fis, clone HE | 5.10 |
|    | 430849 | AI940727  | Hs.270556 | ESTs, Highly similar to AF156779 1 ASB-4 | 5.10 |
|    | 452605 | AW968557  | Hs.90012  | hypothetical protein FLJ23441            | 5.10 |
|    | 440381 | AA917808  | Hs.190495 | ESTs                                     | 5.10 |
| 15 | 441033 | BE562555  |           | gb:601335867F1 NIH_MGC_44 Homo sapiens c | 5.10 |
|    | 450229 | R18717    | Hs.8929   | hypothetical protein FLJ11362            | 5.10 |
|    | 447197 | R36075    |           | gb:yh88b01.s1 Soares placenta Nb2HP Homo | 5.10 |
|    | 442150 | AI368158  | Hs.70983  | PTPL1-associated RhoGAP 1                | 5.10 |
|    | 415651 | AI207162  | Hs.3815   | stathmin-like-protein RB3                | 5.10 |
| 20 | 453655 | AW960427  | Hs.79059  | transforming growth factor, beta recepto | 5.09 |
|    | 434442 | AA737415  | Hs.152826 | ESTs                                     | 5.09 |
|    | 429389 | AA454779  | Hs.201441 | Homo sapiens cDNA FLJ11079 fis, clone PL | 5.09 |
|    | 435419 | AI281068  | Hs.152835 | ESTs                                     | 5.09 |
|    | 427620 | NM_003705 | Hs.179866 | solute carrier family 25 (mitochondrial  | 5.09 |
| 25 | 445706 | AA305520  | Hs.108812 | hypothetical protein FLJ22004            | 5.08 |
|    | 424071 | R71340    | Hs.12876  | ESTs                                     | 5.08 |
|    | 428227 | AA321649  | Hs.2248   | small inducible cytokine subfamily B (Cy | 5.08 |
|    | 426400 | M78361    | Hs.169743 | Homo sapiens clone 25121 neuronal olfact | 5.08 |
|    | 429026 | AA443385  | Hs.221993 | ESTs                                     | 5.08 |
| 30 | 455847 | BE146775  |           | gb:QV4-HT0222-181099-013-e04 HT0222 Homo | 5.08 |
|    | 416110 | Z42262    | Hs.322844 | hypothetical protein DKFZp564A176        | 5.08 |
|    | 436854 | AA749167  | Hs.173911 | ESTs                                     | 5.08 |
|    | 421799 | AW972292  | Hs.292998 | ESTs                                     | 5.08 |
|    | 452154 | AW953265  | Hs.302746 | MSTP028 protein                          | 5.06 |
| 35 | 444946 | AW139205  | Hs.156457 | hypothetical protein FLJ22408            | 5.06 |
|    | 445950 | AI267957  | Hs.145706 | ESTs                                     | 5.06 |
|    | 443124 | AI033500  | Hs.132895 | ESTs                                     | 5.06 |
|    | 440698 | AI348455  | Hs.147492 | Homo sapiens cDNA FLJ11777 fis, clone HE | 5.06 |
|    | 444713 | AW812074  | Hs.28631  | Homo sapiens cDNA: FLJ22141 fis, clone H | 5.06 |
| 40 | 447970 | AW086109  | Hs.20136  | chromosome X open reading frame 6        | 5.06 |
|    | 419307 | AW953190  | Hs.23180  | ESTs                                     | 5.06 |
|    | 421954 | AA410245  | Hs.40323  | BUB3 (budding uninhibited by benzimidazo | 5.06 |
|    | 451807 | W52854    | Hs.27099  | hypothetical protein FLJ23293 similar to | 5.05 |
|    | 421782 | AB029290  | Hs.108258 | actin binding protein; macrophin (microf | 5.05 |
| 45 | 407976 | AI633875  | Hs.77823  | hypothetical protein FLJ21343            | 5.05 |
|    | 400869 |           |           | NA                                       | 5.04 |
|    | 416153 | R13894    |           | gb:yf62a06.r1 Soares infant brain 1NIB H | 5.04 |
|    | 428242 | H55709    | Hs.2250   | leukemia inhibitory factor (cholinergic  | 5.04 |
|    | 406038 | Y14443    | Hs.88219  | zinc finger protein 200                  | 5.03 |
| 50 | 440659 | AF134160  | Hs.7327   | claudin 1                                | 5.03 |
|    | 425188 | AK002052  | Hs.155071 | hypothetical protein FLJ11190            | 5.02 |
|    | 446051 | BE048061  | Hs.37054  | ephrin-A3                                | 5.02 |
|    | 443387 | BE139135  | Hs.254629 | ESTs                                     | 5.02 |
|    | 414407 | AA147026  | Hs.76704  | ESTs                                     | 5.02 |
| 55 | 408349 | BE546947  | Hs.44276  | homeo box C10                            | 5.01 |
|    | 452510 | Z33566    | Hs.301491 | ESTs                                     | 5.01 |
|    | 447245 | AK001713  | Hs.17860  | hypothetical protein FLJ10851            | 5.00 |
|    | 413472 | BE242870  | Hs.75379  | solute carrier family 1 (glial high affi | 5.00 |
|    | 447857 | AA081218  | Hs.58608  | Homo sapiens cDNA FLJ14206 fis, clone NT | 5.00 |
| 60 | 423648 | AK000456  | Hs.130546 | hypothetical protein FLJ20449            | 5.00 |
|    | 412997 | BE046600  |           | gb:hn41d08.x1 NCI_CGAP_RDF2 Homo sapiens | 5.00 |
|    | 408964 | AF201468  | Hs.49349  | beta-site APP-cleaving enzyme            | 5.00 |
|    | 411636 | AW855001  |           | gb:PM3-CT0263-091299-007-f05 CT0263 Homo | 5.00 |
|    | 418111 | R42003    | Hs.106513 | ESTs                                     | 5.00 |
| 65 | 402709 | NA        |           | NA                                       | 5.00 |
|    | 408677 | AI279892  | Hs.46801  | sorting nexin 14                         | 5.00 |
|    | 411350 | AW877011  |           | gb:QV2-PT0010-250300-096-b05 PT0010 Homo | 5.00 |
|    | 453382 | AA709285  | Hs.5997   | hypothetical protein FLJ13078            | 5.00 |
|    | 458090 | AI282149  | Hs.56213  | ESTs, Highly similar to FXD3_HUMAN FORKH | 5.00 |
| 70 | 408512 | AW902013  | Hs.255937 | ESTs                                     | 5.00 |
|    | 453240 | AI969564  | Hs.165254 | hypothetical protein DKFZp568i133        | 5.00 |
|    | 440491 | R35252    | Hs.24944  | ESTs, Weakly similar to 2109260A B cell  | 5.00 |
|    | 423896 | AA332216  | Hs.130584 | ESTs                                     | 5.00 |
|    | 429091 | AA935658  | Hs.187939 | ESTs                                     | 5.00 |
| 75 | 410968 | AA199907  | Hs.67397  | homeo box A1                             | 5.00 |
|    | 436859 | AA732681  | Hs.270053 | ESTs                                     | 5.00 |
|    | 452198 | AI097560  | Hs.61210  | ESTs, Weakly similar to i38022 hypotheti | 5.00 |
|    | 424511 | BE300512  | Hs.193557 | ESTs, Moderately similar to ALU7_HUMAN A | 5.00 |
|    | 414631 | AW970130  | Hs.65406  | ESTs                                     | 5.00 |
| 80 | 405481 |           |           | NA                                       | 5.00 |
|    | 431118 | BE264901  | Hs.250502 | carbonic anhydrase VIII                  | 5.00 |
|    | 421373 | AA808229  | Hs.167771 | ESTs                                     | 5.00 |
|    | 424916 | AW867440  | Hs.23096  | ESTs                                     | 5.00 |
|    | 433106 | AB002443  | Hs.184418 | ESTs                                     | 5.00 |

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|    |        |          |           |  |      |
|----|--------|----------|-----------|--|------|
| 5  | 427386 | AW836261 | Hs.337717 | ESTs                                     | 5.00 |
|    | 441998 | AI733236 | Hs.128312 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 5.00 |
|    | 420161 | AI683069 | Hs.175319 | ESTs                                     | 5.00 |
|    | 430899 | BE018217 | Hs.183528 | hypothetical protein FLJ14906            | 5.00 |
|    | 415188 | BE007531 | Hs.258791 | ESTs                                     | 5.00 |
|    | 420429 | AW293291 | Hs.255180 | ESTs                                     | 5.00 |
|    | 439038 | AV655045 | Hs.8366   | ESTs                                     | 5.00 |
|    | 457031 | AI497955 | Hs.304802 | ESTs, Weakly similar to KIAA0944 protein | 5.00 |
| 10 | 430865 | AI073424 | Hs.5232   | HSPC125 protein                          | 5.00 |
|    | 420583 | H77859   | Hs.65450  | reticulin 4                              | 5.00 |
|    | 432229 | AW290976 | Hs.143587 | ESTs                                     | 5.00 |
|    | 455208 | BE180276 |           | gb:RC3-HT0622-130400-022-a02 HT0622 Homo | 5.00 |
|    | 419263 | AW583874 | Hs.89832  | insulin                                  | 5.00 |
|    | 452279 | AA286844 | Hs.61260  | hypothetical protein FLJ13164            | 5.00 |
| 15 | 419100 | AA464362 | Hs.6748   | hypothetical protein PP1665              | 5.00 |
|    | 438585 | AA811371 | Hs.123362 | ESTs                                     | 5.00 |
|    | 436953 | AW959074 | Hs.23648  | Homo sapiens cDNA FLJ13097 fis, clone NT | 5.00 |
|    | 428775 | AA434579 | Hs.143691 | ESTs                                     | 5.00 |
| 20 | 422471 | AA311027 | Hs.271894 | ESTs, Weakly similar to I38022 hypotheti | 5.00 |
|    | 402524 |          |           | NA                                       | 5.00 |

## TABLE 46B:

|    |             |                                       |
|----|-------------|---------------------------------------|
| 25 | Pkey:       | Unique Eos probeset identifier number |
|    | CAT number: | Gene cluster number                   |
|    | Accession:  | Genbank accession numbers             |

|    |        |            |  |
|----|--------|------------|--|
| 30 | Pkey   | CAT number | Accessions   |
|    | 408248 | 1049240_1  | AW854832 AW854798 AW854857 AW854816 AW854834 AW854817  |
|    | 408432 | 1058667_1  | AW195262 R27868 AW811262   |
|    | 408744 | 1078309_1  | AW806177 AW806178 AW266775   |
|    | 409948 | 116139_1   | AA078643 BE535933 AA132607   |
|    | 410424 | 120166_1   | AA084984 Z18302 AW502279 AW499519  |
|    | 410444 | 1203699_1  | W73484 AW748569 AW748532 AW748585  |
| 35 | 410498 | 120611_1   | AA355749 AA085520 AW966333 AA340319 BE170936   |
|    | 410784 | 1221005_1  | AW803201 BE079700 BE062940   |
|    | 410979 | 1228509_1  | BE151480 D63282 AW812615   |
|    | 411253 | 1236671_1  | AW833897 AW833907 AW833908 AW833920 AW833953 AW833881 AW833878 AW833879 AW833952 AW833919 AW833921 AW833915          |
|    | 411350 | 1239976_1  | AW877011 AW877066 AW877136 AW876980 AW991827 AW877073 AW877070 AW882665 AW876972 AW877068 AW877064 AW838297 AW877065 |
| 40 |        |            | AW876974 AW877101 AW877067 AW877127 AW876975 AW876979 AW876983 AW877131 AW877104                                     |
|    | 411636 | 1252525_1  | AW855001 AW855031 BE062221   |
|    | 411861 | 1261785_1  | AW867875 BE067343 BE067301 BE067350 BE067305 BE067347 BE067306 BE067304 BE067303 BE067302 AW938147                   |
|    | 412227 | 1284297_1  | AW902282 AW902508 AW902509 AW902605 AW902606 AW902643 AW902490   |
|    | 412345 | 1289783_1  | AW938386 AW938411 AW938426 AW938397  |
| 45 | 412396 | 1292796_1  | AW947895 AW947891 AW947933 AW947892 AW947930 AW947889 AW947894 AW947931 AW947893 AW947932 AW947929                   |
|    | 412997 | 1343205_1  | BE046600 BE046677 BE046236   |
|    | 413604 | 1379715_1  | R51767 BE152515 Z44834 H23397  |
|    | 413894 | 1397740_1  | BE177983 BE178322  |
|    | 414727 | 1481204_1  | BE466904 W28721  |
| 50 | 415308 | 1533673_1  | F05251 R13748 Z44028 H14747  |
|    | 415371 | 1535066_1  | R15239 Z45189 F06836   |
|    | 415397 | 1535937_1  | H10818 F07831 Z43072   |
|    | 415637 | 1540904_1  | R25517 F13222 T75465   |
|    | 416153 | 1573947_1  | R13894 H23037 R56371   |
| 55 | 416190 | 1576789_1  | N54000 H26494 T83818   |
|    | 416845 | 1624038_1  | H95279 H95331 H95933   |
|    | 416913 | 163001_1   | AW934714 BE161007 BE162500 AW749902 AW749864 BE162498 BE161005 AA190449 AW513465 BE161006 BE162499                   |
|    | 417352 | 166908_1   | AA195919 D79180 BE543135 BE008355 BE008353 BE008315 BE008317   |
|    | 417588 | 1688092_1  | Z44510 R24958 R00714 T82024  |
| 60 | 418247 | 1733290_1  | R55174 Z19829 X97508   |
|    | 418553 | 1767393_1  | T88964 R99447 T84773   |
|    | 418647 | 177521_1   | AA226198 AA226513 AA383773   |
|    | 418866 | 179788_1   | T65754 AA229857 AA229658   |
|    | 423172 | 225618_1   | R15652 AA322742 AW961639 AW961637  |
| 65 | 423289 | 226804_1   | N77774 AA324125 AW955199 AA452230  |
|    | 423395 | 227885_1   | AA326613 AA325417 AW962164   |
|    | 423928 | 233416_1   | AA332680 AA332831 AW962684   |
|    | 424205 | 236651_1   | AA336825 AA337256 AA337682 AA337525  |
|    | 425757 | 255956_1   | AA363171 AW963347 AA371863   |
| 70 | 428679 | 294049_1   | AA431765 AA432015  |
|    | 430264 | 315008_1   | AA470519 BE303010 BE302954 BE384120  |
|    | 430818 | 324239_1   | AI311928 AA936030 T51931 AA609816 AA487195 AA664207  |
|    | 432494 | 348522_1   | AA551060 AW979274 AA847429 AA878487  |
|    | 432639 | 351744_1   | AW973785 H60163 AA557608   |
| 75 | 433009 | 357371_1   | AA761668 AA573621 R92814 R09670  |
|    | 434006 | 37855_1    | AF113688 AI114617  |
|    | 434503 | 38944_1    | AF147384 T60126 T60244   |
|    | 436411 | 419334_1   | AW674352 AA715374 Z25205   |
|    | 437092 | 432938_1   | AA744292 AA745577 AW748517 AW748564 AW748511 AW748513 AW748530 AW748574 BE062923                                     |
| 80 | 437237 | 43506_2    | BE513073   |
|    | 441033 | 50807_1    | BE562555   |
|    | 441761 | 525307_1   | AI222880 AI242392 AA961560 AI242524 AI719648 AI718138 AW275807   |
|    | 442075 | 532052_1   | AW136928 AI685655 BE218584 BE465078 N68963 AA975338 BE147199 N76377  |

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445165 63181\_1 AV652831 AA191140 AA329706 AI267893 AI796986 AW675672 AW195369 BE002835 BE003284 AA190592 AA769594 AW275548 R56781 AA807313  
 AW169695 N31806  
 447197 711623\_1 R36075 AI366546 R36167  
 453685 977734\_1 AL110309 AW088119 H22881  
 454511 1220533\_1 AW948146 AW948135 AW802578  
 454758 1233743\_1 AW845266 AW845254 AW819440 AW819430 AW819425 AW819423  
 454835 1236507\_1 AW833763 AW833704 AW833618  
 455082 1252687\_1 BE148180 AW855210 AW855243  
 455208 1260551\_1 BE180276 AW866156 BE180165  
 455212 1260678\_1 AW866330 AW866410 AW866332 AW866411 AW866327 AW866326 AW866335 AW866334 AW866331 AW866333 AW866328 AW866329  
 455217 1261522\_1 AW867534 AW867539  
 455608 1337389\_1 BE011437 BE011402 BE011395 BE011428 BE011407 BE011421 BE011406  
 455847 1375358\_1 BE146775 BE146789 BE146792 BE147010 BE146941 BE146801 BE146998 BE147011 BE146903 BE146901  
 455944 1385569\_1 BE160643 BE160585  
 457892 432926\_1 AA744389 AA744270 AA744284 AA744299 AA745380 AA744337 AA846905 AA847698  
 457893 432938\_1 AA744292 AA745577 AW748517 AW748564 AW748511 AW748513 AW748530 AW748574 BE062923  
 459279 975649\_1 AW814996 AL047199 AW850979

TABLE 46C:  
 Pkey: Unique number corresponding to an Eos probeset  
 Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) Nature 402:489-495.  
 Strand: Indicates DNA strand from which exons were predicted.  
 NT\_position: Indicates nucleotide positions of predicted exons.

| Pkey   | Ref     | Strand | NT_position   |
|--------|---------|--------|---|
| 400484 | 8569067 | Minus  | 52725-52912   |
| 400570 | 9884797 | Minus  | 156787-156862,178082-178208,186819-186957   |
| 400639 | 9887597 | Plus   | 23150-23580   |
| 400845 | 9188605 | Plus   | 34428-34612   |
| 400860 | 9757499 | Minus  | 151830-152104,152649-152744   |
| 400869 | 9838306 | Plus   | 29152-30102   |
| 400950 | 7658481 | Minus  | 157920-158554   |
| 400977 | 8072510 | Plus   | 73950-74364   |
| 401004 | 7229982 | Plus   | 62580-62772   |
| 401093 | 8516137 | Minus  | 22335-23166   |
| 401183 | 7670214 | Minus  | 39921-40601   |
| 401205 | 9743388 | Plus   | 167373-167433,167936-168031   |
| 401208 | 7712287 | Plus   | 163145-163281   |
| 401244 | 4827300 | Minus  | 55359-56376   |
| 401348 | 9930791 | Minus  | 9365-9490   |
| 401372 | 9944181 | Plus   | 127056-127196   |
| 401424 | 8176894 | Plus   | 24223-24428   |
| 401581 | 9502454 | Plus   | 9440-10165  |
| 401629 | 8575965 | Minus  | 169336-169788   |
| 401708 | 2951946 | Plus   | 154511-155298   |
| 401736 | 3219338 | Plus   | 1771-1894   |
| 401740 | 2982169 | Plus   | 148357-148484,148591-148690   |
| 401747 | 9789672 | Minus  | 118596-118816,119119-119244,119609-119761,120422-120990,130161-130381,130468-130593,131097-131258,131866-131932,132451-132575,133580-134011 |
| 401961 | 4581193 | Minus  | 124054-124209   |
| 402343 | 8099256 | Plus   | 4677-5084   |
| 402363 | 9454515 | Plus   | 25693-25991   |
| 402408 | 9796239 | Minus  | 110326-110491   |
| 402524 | 9798518 | Minus  | 20529-21096   |
| 402709 | 8901246 | Minus  | 56847-57055   |
| 402732 | 9211639 | Minus  | 147904-148107   |
| 403040 | 3133144 | Minus  | 91632-91788,97918-98115   |
| 403137 | 9211494 | Minus  | 92349-92572,92958-93084,93579-93712,93949-94072,94591-94748,95214-95337   |
| 403199 | 9958183 | Minus  | 58895-59036,66618-66789   |
| 403278 | 8072597 | Plus   | 145823-146986   |
| 403546 | 8078400 | Plus   | 94703-94849   |
| 403764 | 7717105 | Minus  | 118692-118853   |
| 403776 | 7770611 | Minus  | 1414-1513,1624-1756   |
| 403859 | 7708954 | Plus   | 113738-113858   |
| 403973 | 8575876 | Plus   | 93873-94384   |
| 404012 | 8655948 | Plus   | 551356-552233   |
| 404029 | 7671252 | Plus   | 108716-111112   |
| 404072 | 9931705 | Plus   | 49546-50498   |
| 404117 | 9796029 | Plus   | 149723-149920   |
| 404170 | 9930793 | Plus   | 168836-169248   |
| 404335 | 9838027 | Minus  | 21030-21145,26504-26692   |
| 404440 | 7528051 | Plus   | 80430-81581   |
| 404632 | 9796668 | Plus   | 45096-45229   |
| 404702 | 7630798 | Plus   | 78043-78890   |
| 404913 | 7341740 | Plus   | 97717-97976   |
| 404996 | 6007890 | Plus   | 37999-38145,38652-38998,39727-39872,40557-40674,42351-42450   |
| 405033 | 7107731 | Minus  | 142358-142546   |
| 405065 | 7684500 | Minus  | 13855-14027   |
| 405114 | 8096938 | Minus  | 97013-97560   |
| 405287 | 3928029 | Plus   | 89802-89999   |
| 405352 | 2822162 | Minus  | 97253-97742   |
| 405362 | 2337862 | Minus  | 105008-105142,105980-106091,140445-140556,142519-142641   |

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|    |        |         |       |   |
|----|--------|---------|-------|---|
| 5  | 405481 | 3688109 | Plus  | 5718-5837,8719-8818   |
|    | 405511 | 9454623 | Plus  | 57731-57852   |
|    | 405523 | 9454643 | Plus  | 114550-114688,117265-117407,119490-119599,123237-123395,131140-131217                       |
|    | 405543 | 9857582 | Minus | 104338-104449   |
|    | 405545 | 1054740 | Plus  | 118677-118807,119091-119296,121626-121823   |
| 10 | 405637 | 6289229 | Plus  | 189852-189978   |
|    | 405696 | 4309923 | Minus | 1865-2013,2124-2231   |
|    | 405770 | 2735037 | Plus  | 61057-62075   |
|    | 406465 | 9795550 | Plus  | 94502-94706,96776-96914,98795-98928,102423-102576,105087-105191,107023-107127,108852-108992 |
|    |        |         |       |   |

TABLE 47A: ABOUT 370 GENES SIGNIFICANTLY DOWN-REGULATED IN STOMACH CANCER COMPARED TO NORMAL STOMACH

Table 47A lists about 370 genes significantly down-regulated in stomach cancer compared to normal stomach. These were selected as for Table 46A, except that the numerator and denominator were switched and the ratio was equal to or less than 0.33.

Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 R1: Ratio of tumor to normal body tissue

| Pkey   | ExAccn    | UnigenelD | Unigene Title                            | R1   |
|--------|-----------|-----------|--|------|
| 412859 | NM_000705 | Hs.813    | ATPase, H+/K+ exchanging, beta polypepti | 0.02 |
| 423371 | AU076819  | Hs.1650   | solute carrier family 26, member 3       | 0.02 |
| 425607 | U09850    | Hs.158333 | protease, serine, 7 (enterokinase)       | 0.04 |
| 429050 | X81333    | Hs.194777 | meprin A, beta                           | 0.04 |
| 421996 | AW583807  | Hs.1460   | glucagon                                 | 0.05 |
| 441212 | AW242447  | Hs.146182 | cytosolic beta-glucosidase               | 0.05 |
| 429093 | NM_000253 | Hs.195799 | microsomal triglyceride transfer protein | 0.06 |
| 403697 | NA        |           | NA                                       | 0.07 |
| 402760 | NA        |           | NA                                       | 0.08 |
| 428285 | AW340797  | Hs.98434  | ESTs                                     | 0.08 |
| 419279 | AA235900  | Hs.87500  | ESTs                                     | 0.08 |
| 422459 | K02100    | Hs.117050 | ornithine carbamoyltransferase           | 0.09 |
| 422992 | AF016833  | Hs.122785 | maltase-glucoamylase (alpha-glucosidase) | 0.09 |
| 430867 | M16404    | Hs.248099 | cholinergic receptor, muscarinic 2       | 0.09 |
| 453989 | M63962    | Hs.36992  | ATPase, H+/K+ exchanging, alpha polypept | 0.10 |
| 443022 | AL046485  | Hs.207604 | ESTs                                     | 0.10 |
| 413382 | BE090689  |           | gb:RC1-BT0720-280300-011-f08 BT0720 Homo | 0.10 |
| 450769 | AA057418  | Hs.33654  | ESTs                                     | 0.10 |
| 428070 | T63918    | Hs.182313 | retinol-binding protein 2, cellular      | 0.10 |
| 415447 | Z97171    | Hs.78454  | myocitin, trabecular meshwork inducible  | 0.11 |
| 430073 | U86136    | Hs.232070 | telomerase-associated protein 1          | 0.11 |
| 431716 | D89053    | Hs.268012 | fatty-acid-Coenzyme A ligase, long-chain | 0.12 |
| 416889 | AW250318  | Hs.80395  | mal, T-cell differentiation protein      | 0.12 |
| 405650 | NA        |           | NA                                       | 0.12 |
| 419219 | AW583139  | Hs.89717  | carboxypeptidase A2 (pancreatic)         | 0.12 |
| 401623 | NA        |           | NA                                       | 0.12 |
| 400811 | AF219139  | Hs.87726  | KIAA0154 protein; ADP-ribosylation facto | 0.13 |
| 455826 | BE144228  |           | gb:MR0-HT0165-140200-009-d04 HT0165 Homo | 0.13 |
| 414949 | C15314    | Hs.323349 | ESTs                                     | 0.13 |
| 407486 | S69741    |           | gb:hSCG-3=stomach cancer gene-3 (oncogen | 0.13 |
| 407494 | U10072    |           | gb:Human forkhead family (AFX1) mRNA, pa | 0.13 |
| 401015 | NA        |           | NA                                       | 0.13 |
| 426651 | AU076646  | Hs.171583 | nuclear receptor subfamily 1, group H, m | 0.14 |
| 450926 | A1744361  | Hs.205591 | ESTs, Weakly similar to T46608 zinc fing | 0.14 |
| 443564 | A1921685  | Hs.199713 | ESTs                                     | 0.14 |
| 457955 | A1208986  | Hs.143945 | ESTs                                     | 0.14 |
| 457345 | A1699933  | Hs.192175 | ESTs                                     | 0.14 |
| 417118 | U38654    | Hs.50477  | RAB27A, member RAS oncogene family       | 0.14 |
| 408518 | BE162203  | Hs.314758 | ESTs                                     | 0.14 |
| 444938 | AW470690  | Hs.148814 | ESTs                                     | 0.15 |
| 403670 | NA        |           | NA                                       | 0.15 |
| 432440 | X63597    | Hs.2996   | sucrase-isomaltase                       | 0.15 |
| 428492 | AW662740  | Hs.259391 | ESTs                                     | 0.15 |
| 443607 | A1452512  | Hs.134069 | ESTs                                     | 0.15 |
| 446914 | BE044496  | Hs.166994 | FAT tumor suppressor (Drosophila) homolo | 0.15 |
| 424596 | AB020639  | Hs.151017 | estrogen-related receptor gamma          | 0.15 |
| 430350 | BE169639  |           | gb:PM1-HT0527-280200-005-a05 HT0527 Homo | 0.16 |
| 431094 | AW972276  | Hs.116195 | ESTs                                     | 0.16 |
| 401683 | NA        |           | NA                                       | 0.16 |
| 419278 | AU076799  | Hs.1247   | apolipoprotein A-IV                      | 0.16 |
| 455071 | BE145826  |           | gb:MR0-HT0208-101299-202-e12 HT0208 Homo | 0.16 |
| 454282 | AW296422  |           | gb:UL-H-BW0-aic-h-05-0-UI.s1 NC1_CGAP_Su | 0.16 |
| 428848 | NM_000230 | Hs.194236 | leptin (murine obesity homolog)          | 0.16 |
| 451729 | AW160725  | Hs.312469 | ESTs                                     | 0.16 |
| 451103 | R52804    | Hs.25956  | DKFZP564D206 protein                     | 0.16 |
| 428602 | AL137479  | Hs.186655 | Homo sapiens mRNA; cDNA DKFZp434M0223 (f | 0.16 |
| 437157 | BE048860  | Hs.120655 | ESTs                                     | 0.17 |
| 422731 | AL138411  |           | gb:DKFZp434A1229_r1 434 (synonym: htes3) | 0.17 |
| 402015 | NA        |           | NA                                       | 0.17 |
| 414758 | H82022    | Hs.282847 | pregnancy specific beta-1-glycoprotein 3 | 0.17 |
| 412793 | AW997986  |           | gb:RC1-BN0056-230200-021-e11 BN0056 Homo | 0.17 |
| 438152 | AW292520  | Hs.122082 | ESTs                                     | 0.17 |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 401685 | NA        | NA        | 0.17                                     |      |
|    | 441519 | AA972740  | Hs.127092 | ESTs                                     | 0.17 |
|    | 438327 | H87407    | Hs.172944 | chorionic gonadotropin, beta polypeptide | 0.17 |
| 5  | 402761 | BE387621  | Hs.108809 | chaperonin containing TCP1, subunit 7 (e | 0.17 |
|    | 424268 | AA397653  | Hs.307438 | Human DNA sequence from clone 495O10 on  | 0.18 |
|    | 414507 | AW102637  | Hs.13349  | Homo sapiens cDNA FLJ14647 fis, clone NT | 0.18 |
|    | 413808 | J00287    | Hs.182183 | Homo sapiens mRNA for caldesmon, 3' UTR  | 0.18 |
|    | 401132 | NA        | NA        | NA                                       | 0.18 |
| 10 | 412374 | X01388    | Hs.73849  | apolipoprotein C-III                     | 0.18 |
|    | 423417 | AP000365  | Hs.128342 | potassium large conductance calcium-acti | 0.18 |
|    | 447677 | AI419235  |           | gb:tt21d02.x1 NCI_CGAP_Brn23 Homo sapien | 0.18 |
|    | 448828 | AI580296  | Hs.174782 | ESTs, Weakly similar to KIAA1437 protein | 0.18 |
|    | 424122 | AA335593  | Hs.116147 | ESTs                                     | 0.18 |
| 15 | 417332 | AW972717  | Hs.288462 | hypothetical protein FLJ21511            | 0.18 |
|    | 434597 | AW974668  |           | gb:EST386757 MAGE resequences, MAGM Homo | 0.19 |
|    | 428804 | AK000713  | Hs.193736 | hypothetical protein FLJ20706            | 0.19 |
|    | 410280 | AA083558  | Hs.261286 | ESTs                                     | 0.19 |
|    | 409382 | AA071244  |           | gb:zm73g03.r1 Stratagene neuroepithelium | 0.19 |
| 20 | 428062 | AA420683  | Hs.98321  | hypothetical protein FLJ14103            | 0.19 |
|    | 426069 | H10807    | Hs.281434 | Homo sapiens cDNA FLJ14028 fis, clone HE | 0.19 |
|    | 430135 | NM_000035 | Hs.234234 | aldolase B, fructose-bisphosphate        | 0.19 |
|    | 414802 | AI793107  | Hs.27018  | Ris                                      | 0.19 |
|    | 457432 | NM_005136 | Hs.268538 | potassium voltage-gated channel, Isk-rel | 0.19 |
| 25 | 446909 | AA004895  | Hs.30082  | ESTs                                     | 0.19 |
|    | 435447 | AI872932  |           | gb:wm72e03.x1 NCI_CGAP_UI2 Homo sapiens  | 0.20 |
|    | 408611 | NM_004367 | Hs.46468  | chemokine (C-C motif) receptor 6         | 0.20 |
|    | 423577 | AW810107  | Hs.58633  | Homo sapiens cDNA: FLJ22145 fis, clone H | 0.20 |
| 30 | 439328 | W07411    | Hs.118212 | ESTs, Moderately similar to ALU3_HUMAN A | 0.20 |
|    | 436741 | AA860163  | Hs.291319 | ESTs                                     | 0.20 |
|    | 426635 | BE395109  | Hs.129327 | hypothetical protein MGC13057            | 0.20 |
|    | 418277 | AW135221  | Hs.130812 | ESTs                                     | 0.20 |
|    | 448871 | BE616709  | Hs.159265 | kruppel-related zinc finger protein hKcr | 0.20 |
| 35 | 459370 | AA899982  | Hs.271826 | ESTs, Weakly similar to I38022 hypotheti | 0.21 |
|    | 427469 | AA403084  | Hs.269347 | ESTs, Weakly similar to 2109260A B cell  | 0.21 |
|    | 432887 | AI926047  | Hs.162859 | ESTs                                     | 0.21 |
|    | 421296 | NM_002666 | Hs.103253 | perilipin                                | 0.21 |
|    | 449216 | AW295417  | Hs.224616 | ESTs                                     | 0.21 |
|    | 414835 | AA156720  | Hs.185342 | ESTs                                     | 0.21 |
| 40 | 459233 | AI939966  |           | gb:MR0-CT0015-160799-002-b06 CT0015 Homo | 0.21 |
|    | 439756 | AL359651  | Hs.283852 | Homo sapiens mRNA full length insert cDN | 0.21 |
|    | 427167 | AI239607  | Hs.99196  | hypothetical protein MGC11324            | 0.21 |
|    | 400410 | AF154915  | Hs.283958 | homeo box D12                            | 0.21 |
|    | 409828 | AW501137  |           | gb:UI-HF-BP0p-ait-e-12-O-UI.r1 NIH_MGC_5 | 0.22 |
| 45 | 428470 | AC002301  | Hs.184507 | Homo sapiens Chromosome 16 BAC clone CIT | 0.22 |
|    | 455968 | BE168828  |           | gb:QV1-HT0517-020400-145-f04 HT0517 Homo | 0.22 |
|    | 404145 | NA        |           | NA                                       | 0.22 |
|    | 454011 | M31008    | Hs.37009  | alkaline phosphatase, intestinal         | 0.22 |
|    | 430588 | AI741461  | Hs.161904 | ESTs                                     | 0.22 |
| 50 | 403652 | NA        |           | NA                                       | 0.22 |
|    | 440410 | AW204436  | Hs.128715 | ESTs                                     | 0.22 |
|    | 453871 | BE300380  | Hs.69476  | Homo sapiens cDNA FLJ12758 fis, clone NT | 0.22 |
|    | 458567 | AI222075  | Hs.147831 | ESTs                                     | 0.22 |
|    | 436004 | AA703332  | Hs.196270 | folate transporter/carrier               | 0.22 |
| 55 | 417408 | F17211    | Hs.85092  | Homo sapiens skeletal myosin light chain | 0.22 |
|    | 448643 | AI557531  |           | gb:pt2.1-06.D06.r tumor2 Homo sapiens cD | 0.22 |
|    | 404401 | NA        |           | NA                                       | 0.22 |
|    | 428088 | AA421130  | Hs.112640 | EST                                      | 0.22 |
|    | 427074 | AA527435  | Hs.178589 | hepatocellular carcinoma antigen gene 52 | 0.22 |
| 60 | 421972 | M18185    | Hs.1454   | gastric inhibitory polypeptide           | 0.22 |
|    | 429001 | AF098951  | Hs.194720 | ATP-binding cassette, sub-family G (WHIT | 0.22 |
|    | 441155 | AW161008  | Hs.7719   | GABA(A) receptor-associated protein      | 0.22 |
|    | 402750 | NA        |           | NA                                       | 0.22 |
|    | 438587 | AA811450  | Hs.136984 | ESTs                                     | 0.22 |
| 65 | 404848 | NA        |           | NA                                       | 0.22 |
|    | 427833 | AA416615  | Hs.98242  | ESTs                                     | 0.23 |
|    | 439907 | AA853978  | Hs.124577 | ESTs                                     | 0.23 |
|    | 414373 | AW162907  | Hs.75969  | proline-rich protein with nuclear target | 0.23 |
|    | 446817 | AJ700684  | Hs.134166 | ESTs                                     | 0.23 |
| 70 | 437333 | AA748898  |           | gb:ny76h10.s1 NCI_CGAP_GCB1 Homo sapiens | 0.23 |
|    | 404097 | NA        |           | NA                                       | 0.23 |
|    | 446393 | AW014174  | Hs.301956 | zinc finger protein                      | 0.23 |
|    | 456328 | T41368    |           | gb:ph1d1_19/1TV Outward Alu-primed hncDN | 0.23 |
|    | 401042 | NA        |           | NA                                       | 0.23 |
| 75 | 458441 | AW842283  | Hs.79933  | cyclin I                                 | 0.23 |
|    | 435547 | AW117431  | Hs.191906 | ESTs                                     | 0.23 |
|    | 429060 | AW139155  | Hs.194995 | hypothetical protein DKFZp434C0320       | 0.23 |
|    | 425158 | AW954631  | Hs.266940 | t-complex-associated-testis-expressed 1- | 0.23 |
|    | 448758 | AB018311  | Hs.21917  | KIAA0768 protein                         | 0.23 |
| 80 | 441240 | AA923749  | Hs.132442 | ESTs                                     | 0.23 |
|    | 436562 | H71937    | Hs.322904 | ESTs, Weakly similar to I38022 hypotheti | 0.23 |
|    | 424104 | AA669515  | Hs.144950 | ESTs                                     | 0.23 |
|    | 447452 | BE618258  | Hs.102480 | Homo sapiens, clone IMAGE:3869590, mRNA, | 0.23 |
|    | 444515 | AW204908  | Hs.169979 | ESTs                                     | 0.24 |

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| 5  | 433084 | M18079    | Hs.282265 | fatty acid binding protein 2, intestinal | 0.24 |
|    | 406560 | NA        |           | NA                                       | 0.24 |
|    | 432408 | N39127    | Hs.332557 | ESTs, Weakly similar to A46010 X-linked  | 0.24 |
|    | 455699 | BE068121  |           | gb:CM1-BT0368-061299-060-a02 BT0368 Homo | 0.24 |
|    | 453979 | M68895    | Hs.76800  | alcohol dehydrogenase 6 (class V)        | 0.24 |
| 10 | 439657 | W93589    |           | gb:zd95g05.s1 Soares_fetal_heart_NbHH19W | 0.24 |
|    | 407512 | X15674    |           | gb:Human pTR5 mRNA for repetitive sequen | 0.24 |
|    | 440875 | AW138036  | Hs.201788 | ESTs                                     | 0.24 |
|    | 404753 | NA        |           | NA                                       | 0.24 |
|    | 411119 | M60627    | Hs.753    | formyl peptide receptor 1                | 0.24 |
| 15 | 418692 | AK000268  | Hs.87383  | hypothetical protein                     | 0.24 |
|    | 415327 | H22769    |           | gb:ym54c02.r1 Soares infant brain 1N1B H | 0.24 |
|    | 429446 | AI547111  |           | gb:PN2.1_A01_G12.r mynorm Homo sapiens c | 0.24 |
|    | 455391 | BE156230  |           | gb:QV0-HT0367-310100-102-c11 HT0367 Homo | 0.25 |
|    | 422818 | AA404290  | Hs.97848  | ESTs                                     | 0.25 |
| 20 | 435338 | AA678071  | Hs.194300 | ESTs, Weakly similar to I38022 hypotheti | 0.25 |
|    | 414203 | BE262170  | Hs.78629  | ATPase, Na+K+ transporting, beta 1 poly  | 0.25 |
|    | 403941 | NA        |           | NA                                       | 0.25 |
|    | 414383 | BE279406  |           | gb:601157981F1 NIH_MGC_21 Homo sapiens c | 0.25 |
|    | 412008 | NM_001841 | Hs.73037  | cannabinoid receptor 2 (macrophage)      | 0.25 |
| 25 | 424985 | AI907236  | Hs.279935 | Homo sapiens cDNA FLJ11780 fis, clone HE | 0.25 |
|    | 450736 | AW970060  |           | gb:EST382140 MAGE resequences, MAGK Homo | 0.25 |
|    | 431185 | H02767    | Hs.28944  | ESTs                                     | 0.25 |
|    | 455308 | AW893949  |           | gb:RC4-NN0027-060400-011-a09 NN0027 Homo | 0.25 |
|    | 435464 | BE548300  | Hs.192999 | ESTs, Moderately similar to KIAA0961 pro | 0.25 |
| 30 | 418525 | AW450369  | Hs.86937  | ESTs                                     | 0.25 |
|    | 402790 |           |           | NA                                       | 0.25 |
|    | 411869 | W20027    | Hs.23439  | ESTs                                     | 0.25 |
|    | 400332 | S66407    | Hs.248032 | FLT4                                     | 0.25 |
|    | 424884 | AW299437  | Hs.225717 | ESTs                                     | 0.25 |
| 35 | 414376 | BE393856  | Hs.66915  | ESTs, Weakly similar to 16.7Kd protein [ | 0.25 |
|    | 439780 | AL109688  |           | gb:Homo sapiens mRNA full length insert  | 0.25 |
|    | 408947 | AL080093  | Hs.49117  | Homo sapiens mRNA; cDNA DKFZp564N1662 (f | 0.25 |
|    | 404900 | NA        |           | NA                                       | 0.25 |
|    | 441918 | AI733373  | Hs.128119 | ESTs                                     | 0.25 |
| 40 | 441639 | AI133287  | Hs.303953 | ESTs                                     | 0.25 |
|    | 459396 | AI907536  | Hs.103869 | ESTs                                     | 0.25 |
|    | 452755 | AW138937  | Hs.213436 | ESTs, Weakly similar to A34087 hypotheti | 0.25 |
|    | 422183 | AA431698  | Hs.112794 | Human DNA sequence from clone 1068E13 on | 0.25 |
|    | 415186 | AA160945  | Hs.14479  | Homo sapiens cDNA FLJ14199 fis, clone NT | 0.26 |
| 45 | 429450 | AA824451  | Hs.94292  | hypothetical protein FLJ23311            | 0.26 |
|    | 455615 | BE045344  | Hs.274923 | ESTs, Moderately similar to unnamed prot | 0.26 |
|    | 454633 | AW811380  |           | gb:IL3-ST0143-290999-019-D05 ST0143 Homo | 0.26 |
|    | 424853 | BE549737  | Hs.132967 | Human EST clone 122887 manner transpos   | 0.26 |
|    | 455802 | BE141491  |           | gb:MRO-HT0080-011099-002-h06 HT0080 Homo | 0.26 |
| 50 | 414003 | AA134472  |           | gb:zo13c01.s1 Stratagene colon (937204)  | 0.26 |
|    | 436363 | AA843926  | Hs.124434 | ESTs                                     | 0.26 |
|    | 456074 | BE409525  | Hs.902    | neurofibromin 2 (bilateral acoustic neur | 0.26 |
|    | 430569 | AF241254  | Hs.178098 | angiotensin I converting enzyme (peptidy | 0.26 |
|    | 445635 | AI769774  | Hs.209831 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 0.26 |
| 55 | 405953 | NA        |           | NA                                       | 0.26 |
|    | 411021 | F00055    | Hs.172004 | titin                                    | 0.26 |
|    | 428443 | BE618106  | Hs.184326 | CDC10 (cell division cycle 10, S. cerevi | 0.26 |
|    | 434345 | AF127772  |           | gb:Homo sapiens cell-line E8CASS clone E | 0.26 |
|    | 455743 | BE073754  |           | gb:RC0-BT0561-210100-032-d07 BT0561 Homo | 0.26 |
| 60 | 451138 | W92287    | Hs.40268  | ESTs                                     | 0.26 |
|    | 449528 | H63337    | Hs.38178  | hypothetical protein FLJ23458            | 0.26 |
|    | 441040 | AW449782  | Hs.178803 | ESTs                                     | 0.26 |
|    | 458830 | AW501248  | Hs.250824 | Homo sapiens cDNA: FLJ23435 fis, clone H | 0.26 |
|    | 428861 | AW352234  | Hs.265365 | ESTs, Weakly similar to ALU8_HUMAN ALU S | 0.26 |
| 65 | 435469 | AW388237  | Hs.191204 | ESTs                                     | 0.27 |
|    | 427562 | R56424    | Hs.26534  | ESTs                                     | 0.27 |
|    | 434779 | AF153815  | Hs.50151  | potassium inwardly-rectifying channel, s | 0.27 |
|    | 423528 | AB011137  | Hs.300938 | KIAA0565 gene product                    | 0.27 |
|    | 406589 |           |           | NA                                       | 0.27 |
| 70 | 450059 | BE220223  | Hs.279626 | ESTs                                     | 0.27 |
|    | 417296 | L36196    | Hs.81884  | sulfotransferase family, cytosolic, 2A,  | 0.27 |
|    | 454007 | AW015870  | Hs.232081 | ESTs                                     | 0.27 |
|    | 426062 | N57014    | Hs.75874  | pregnancy-associated plasma protein A    | 0.27 |
|    | 441665 | AI301355  | Hs.151285 | ESTs                                     | 0.27 |
| 75 | 405037 | NA        |           | NA                                       | 0.27 |
|    | 446820 | AW295037  | Hs.254986 | ESTs                                     | 0.27 |
|    | 448487 | AI523720  | Hs.172567 | ESTs                                     | 0.27 |
|    | 447567 | AW474513  | Hs.224397 | ESTs, Weakly similar to I38931 Wiskott-A | 0.27 |
|    | 408540 | L13220    | Hs.639    | calbindin 3, (vitamin D-dependent calci  | 0.27 |
| 80 | 407601 | AC002300  | Hs.37129  | sodium channel, nonvoltage-gated 1, beta | 0.27 |
|    | 432501 | BE546532  | Hs.25682  | Homo sapiens mRNA for KIAA1863 protein,  | 0.27 |
|    | 401350 | NA        |           | NA                                       | 0.27 |
|    | 417569 | R00271    | Hs.144651 | ESTs                                     | 0.27 |
|    | 443542 | AI927065  | Hs.146040 | ESTs                                     | 0.27 |
|    | 437105 | AA744554  | Hs.222127 | ESTs                                     | 0.27 |
|    | 432119 | T80289    | Hs.302041 | Homo sapiens clone 24762 mRNA sequence   | 0.27 |
|    | 419056 | M89957    | Hs.89575  | CD79B antigen (immunoglobulin-associated | 0.28 |



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|    | 427812 | AA770424  | Hs.98162  | ESTs                                     | 0.28 |
|    | 423557 | AB011176  | Hs.129801 | KIAA0604 gene product                    | 0.28 |
|    | 445311 | AW027556  | Hs.156286 | ESTs                                     | 0.28 |
|    | 402758 | NA        |           | NA                                       | 0.28 |
| 5  | 448240 | AJ478345  | Hs.191034 | ESTs                                     | 0.28 |
|    | 401333 | NA        |           | NA                                       | 0.28 |
|    | 444107 | T46839    | Hs.10319  | UDP glycosyltransferase 2 family, polype | 0.28 |
|    | 454738 | BE072139  |           | gb:PM1-BT0533-291299-002-b05 BT0533 Homo | 0.28 |
|    | 442896 | R37725    | Hs.261108 | ESTs                                     | 0.28 |
| 10 | 447949 | AI446820  | Hs.165839 | EST                                      | 0.28 |
|    | 435625 | H50554    | Hs.113999 | ESTs                                     | 0.28 |
|    | 415817 | U88967    | Hs.78867  | protein tyrosine phosphatase, receptor-t | 0.28 |
|    | 438380 | T06430    | Hs.6194   | chondroitin sulfate proteoglycan BEHAB/b | 0.28 |
|    | 442967 | AI025460  | Hs.220977 | ESTs                                     | 0.28 |
| 15 | 448062 | AW295923  | Hs.255472 | KIAA1843 protein                         | 0.28 |
|    | 425860 | L29339    | Hs.1964   | solute carrier family 5 (sodium/glucose  | 0.28 |
|    | 451839 | AI820516  | Hs.16857  | ESTs                                     | 0.28 |
|    | 446000 | AV658052  | Hs.1504   | hemopexin                                | 0.28 |
|    | 443506 | H10661    | Hs.192124 | ESTs, Weakly similar to I38022 hypotheti | 0.28 |
| 20 | 418345 | AJ001696  | Hs.241407 | serine (or cysteine) proteinase inhibito | 0.28 |
|    | 445481 | AW661846  | Hs.148836 | ESTs                                     | 0.28 |
|    | 409337 | H71289    | Hs.220535 | ESTs                                     | 0.28 |
|    | 411414 | AW897236  |           | gb:CM0-NN0057-150400-335-c06 NN0057 Homo | 0.28 |
| 25 | 427642 | R40761    | Hs.9834   | ESTs                                     | 0.28 |
|    | 456392 | W28766    |           | gb:51d3 Human retina cDNA randomly prime | 0.28 |
|    | 409920 | BE169746  | Hs.12504  | likely ortholog of mouse Arkadia         | 0.28 |
|    | 410285 | AA083609  |           | gb:zm63d05.r1 Stratagene fibroblast (937 | 0.28 |
|    | 442496 | R55073    | Hs.124130 | ESTs                                     | 0.28 |
| 30 | 423770 | AW976766  | Hs.132776 | Homo sapiens cDNA FLJ10077 fs, clone HE  | 0.28 |
|    | 423467 | AK000214  | Hs.129014 | hypothetical protein FLJ20207            | 0.29 |
|    | 458716 | N99013    | Hs.16762  | Homo sapiens mRNA; cDNA DKFZp564B2062 (f | 0.29 |
|    | 423235 | AW410698  | Hs.169917 | neurabin II                              | 0.29 |
|    | 431087 | H12723    | Hs.290791 | ESTs                                     | 0.29 |
| 35 | 459106 | AW589793  | Hs.224713 | ESTs                                     | 0.29 |
|    | 414870 | N72264    | Hs.300670 | KIAA1204 protein                         | 0.29 |
|    | 402243 |           |           | NA                                       | 0.29 |
|    | 432628 | R02394    | Hs.269436 | ESTs, Moderately similar to PC4259 ferri | 0.29 |
|    | 404364 | NA        |           | NA                                       | 0.29 |
| 40 | 400480 |           |           | NA                                       | 0.29 |
|    | 456083 | U46922    | Hs.77252  | fragile histidine triad gene             | 0.29 |
|    | 446598 | AW250546  |           | gb:2821774.5prime NIH_MGC_7 Homo sapiens | 0.29 |
|    | 422201 | NM_001505 | Hs.113207 | G protein-coupled receptor 30            | 0.29 |
|    | 443919 | AI091284  | Hs.135224 | ESTs, Weakly similar to A47582 B-cell gr | 0.29 |
| 45 | 453948 | AI970797  | Hs.64859  | ESTs                                     | 0.29 |
|    | 403792 | NA        |           | NA                                       | 0.29 |
|    | 418957 | AI792615  | Hs.188712 | ESTs                                     | 0.29 |
|    | 457960 | AA771881  | Hs.298149 | ESTs                                     | 0.29 |
|    | 404269 |           |           | NA                                       | 0.29 |
| 50 | 439309 | AF090097  | Hs.6524   | Homo sapiens clone IMAGE 25997           | 0.29 |
|    | 458239 | BE439877  | Hs.283389 | ESTs                                     | 0.30 |
|    | 414941 | C14865    | Hs.332341 | ESTs                                     | 0.30 |
|    | 404954 |           |           | NA                                       | 0.30 |
|    | 441609 | AA946764  | Hs.133460 | ESTs                                     | 0.30 |
| 55 | 426895 | AA416880  | Hs.225738 | ESTs                                     | 0.30 |
|    | 403182 | NA        |           | NA                                       | 0.30 |
|    | 402319 |           |           | NA                                       | 0.30 |
|    | 429699 | AI383469  | Hs.159300 | ESTs                                     | 0.30 |
|    | 405669 | NA        |           | NA                                       | 0.30 |
| 60 | 459312 | AF107457  | Hs.37035  | homeo box HB9                            | 0.30 |
|    | 431853 | AA521034  | Hs.70834  | ESTs                                     | 0.30 |
|    | 449768 | AI972746  | Hs.102945 | ESTs, Weakly similar to I78885 serine/th | 0.30 |
|    | 443609 | AV650231  | Hs.282941 | ESTs, Highly similar to A Chain A, Human | 0.30 |
|    | 454293 | H49739    | Hs.134013 | ESTs, Moderately similar to HK61_HUMAN H | 0.30 |
| 65 | 447569 | AI393202  | Hs.147554 | hypothetical protein FLJ23392            | 0.30 |
|    | 400128 | NA        |           | NA                                       | 0.30 |
|    | 423208 | AA323191  | Hs.137064 | cytoplasmic polyadenylation element bind | 0.30 |
|    | 434227 | AF119893  | Hs.63382  | hypothetical protein PRO2714             | 0.30 |
|    | 424208 | AW583123  | Hs.143113 | pancreatic lipase-related protein 2      | 0.30 |
|    | 401165 | NA        |           | NA                                       | 0.30 |
| 70 | 415394 | R19249    | Hs.22654  | sodium channel, voltage-gated, type I, a | 0.30 |
|    | 443110 | AW352243  | Hs.132665 | ESTs                                     | 0.30 |
|    | 426724 | AA383623  | Hs.293616 | ESTs                                     | 0.30 |
|    | 416035 | H42314    |           | gb:yo09e02.s1 Soares adult brain N2b5HB5 | 0.30 |
| 75 | 409753 | AA234847  |           | gb:zs37b10.r1 Soares_NhHMPu_S1 Homo sapi | 0.31 |
|    | 459221 | BE246522  | Hs.306121 | leukocyte receptor cluster (LRC) encoded | 0.31 |
|    | 408895 | AA058730  | Hs.191464 | ESTs                                     | 0.31 |
|    | 405110 | NA        |           | NA                                       | 0.31 |
|    | 432430 | AW079984  | Hs.262480 | ESTs, Weakly similar to PIHUB6 salivary  | 0.31 |
| 80 | 426442 | AA378656  | Hs.106510 | ESTs, Moderately similar to ALU2_HUMAN A | 0.31 |
|    | 411765 | H43346    |           | gb:yp09a04.r1 Soares breast 3NbHBst Homo | 0.31 |
|    | 431854 | AA383550  | Hs.271699 | polymerase (DNA directed) iota           | 0.31 |
|    | 457553 | AI861896  | Hs.304505 | ESTs                                     | 0.31 |
|    | 412301 | AW936328  |           | gb:QV4-DT0021-281299-070-07 DT0021 Homo  | 0.31 |

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|    |        |          |           |  |      |
|----|--------|----------|-----------|--|------|
|    | 418626 | AW299508 | Hs.135230 | ESTs                                     | 0.31 |
|    | 416156 | Z41922   |           | gb:HSC03B101 normalized infant brain cDN | 0.31 |
|    | 416275 | H42823   | Hs.155742 | glyoxylate reductase/hydroxypyruvate red | 0.31 |
| 5  | 419091 | T85332   | Hs.178294 | ESTs                                     | 0.31 |
|    | 420118 | AW295297 | Hs.182585 | KIAA1276 protein                         | 0.31 |
|    | 451094 | AI949825 | Hs.260395 | ESTs                                     | 0.31 |
|    | 403214 | NA       |           | NA                                       | 0.31 |
|    | 412717 | W00973   | Hs.334728 | ESTs                                     | 0.31 |
| 10 | 428782 | X12830   | Hs.193400 | interleukin 6 receptor                   | 0.31 |
|    | 449202 | AW295154 | Hs.255396 | ESTs                                     | 0.31 |
|    | 433138 | AB029496 | Hs.59729  | semaphorin sem2                          | 0.31 |
|    | 436602 | AI793222 | Hs.166817 | ESTs                                     | 0.31 |
|    | 424844 | D61524   |           | gb:HUM413E07B Clontech human fetal brain | 0.32 |
| 15 | 435253 | W91884   |           | gb:zh47f08.s1 Soares_fetal_liver_spleen_ | 0.32 |
|    | 455350 | AW901809 |           | gb:QV0-NN1020-170400-195-h02 NN1020 Homo | 0.32 |
|    | 416320 | H47867   | Hs.34024  | ESTs                                     | 0.32 |
|    | 406333 |          |           | NA                                       | 0.32 |
|    | 443652 | AI080692 | Hs.134229 | ESTs, Weakly similar to I54401 hypertens | 0.32 |
| 20 | 457103 | AI421187 | Hs.189192 | ESTs, Weakly similar to T COMPLEX TESTIS | 0.32 |
|    | 423593 | AA328144 |           | gb:EST31752 Embryo, 12 week I Homo sapie | 0.32 |
|    | 453242 | T98327   | Hs.18343  | ESTs                                     | 0.32 |
|    | 456281 | AA284166 | Hs.84113  | cyclin-dependent kinase inhibitor 3 (CDK | 0.32 |
|    | 403847 | NA       |           | NA                                       | 0.32 |
| 25 | 458711 | AL036877 | Hs.282878 | ESTs                                     | 0.32 |
|    | 406242 | NA       |           | NA                                       | 0.32 |
|    | 433493 | AA594915 | Hs.155087 | ESTs                                     | 0.32 |
|    | 458147 | AW752597 |           | gb:IL3-CT0214-161299-045-B06 CT0214 Homo | 0.32 |
|    | 437403 | AI208149 | Hs.121196 | ESTs                                     | 0.32 |
| 30 | 407823 | D44744   | Hs.247447 | ESTs                                     | 0.32 |
|    | 457300 | AW297436 | Hs.158849 | Homo sapiens cDNA: FLJ21663 fis, clone C | 0.32 |
|    | 436089 | AA804957 | Hs.119840 | ESTs                                     | 0.32 |
|    | 457463 | AW877031 | Hs.272321 | hypothetical protein FLJ12571            | 0.32 |
|    | 433370 | AI084343 | Hs.122310 | ESTs                                     | 0.32 |
| 35 | 436298 | AW293496 | Hs.180138 | ESTs                                     | 0.32 |
|    | 419768 | T72104   | Hs.93194  | apolipoprotein A-I                       | 0.33 |
|    | 449428 | AI651280 | Hs.195685 | ESTs                                     | 0.33 |
|    | 406291 | NA       |           | NA                                       | 0.33 |
|    | 409699 | BE154650 |           | gb:PM3-HT0344-071299-003-c08 HT0344 Homo | 0.33 |
| 40 | 418162 | T11958   |           | gb:A802R Heart Homo sapiens cDNA clone A | 0.33 |
|    | 408316 | AW807771 |           | gb:MR4-ST0098-090300-003-c05 ST0098 Homo | 0.33 |
|    | 404187 | NA       |           | NA                                       | 0.33 |
|    | 452992 | AI792376 | Hs.31290  | Homo sapiens clone 23832 mRNA sequence   | 0.33 |
|    | 448355 | AI493734 | Hs.329374 | ESTs                                     | 0.33 |
| 45 | 442423 | BE326264 | Hs.246842 | ESTs                                     | 0.33 |
|    | 439474 | AI824060 | Hs.211501 | ESTs                                     | 0.33 |
|    | 457149 | AA429575 | Hs.297493 | ESTs                                     | 0.33 |
|    | 448623 | BE613468 | Hs.107515 | ESTs, Weakly similar to T00329 hypothe   | 0.33 |
|    | 454790 | AW820852 |           | gb:RC2-ST0301-120200-011-f12 ST0301 Homo | 0.33 |
| 50 | 419372 | W28781   |           | gb:51h3 Human retina cDNA randomly prime | 0.33 |
|    | 406293 | NA       |           | NA                                       | 0.33 |
|    | 422933 | AF073931 | Hs.122359 | calcium channel, voltage-dependent, alph | 0.33 |
|    | 451818 | AI819018 | Hs.339668 | ESTs                                     | 0.33 |
|    | 441912 | AA971484 | Hs.159938 | ESTs                                     | 0.33 |
| 55 | 429013 | AJ012590 | Hs.194728 | hexose-6-phosphate dehydrogenase (glucos | 0.33 |
|    | 422304 | AK002016 | Hs.114727 | Homo sapiens, clone MGC:16327, mRNA, com | 0.33 |
|    | 457394 | M86528   | Hs.266902 | neurotrophin 5 (neurotrophin 4/5)        | 0.33 |
|    | 406597 |          |           | NA                                       | 0.33 |
|    | 451636 | AW173270 | Hs.140444 | ESTs                                     | 0.33 |
| 60 | 424226 | N94153   | Hs.19155  | ESTs                                     | 0.33 |

TABLE 47B:

Pkey: Unique Eos probeset identifier number  
CAT number: Gene cluster number  
Accession: Genbank accession numbers

|    |        |            |   |
|----|--------|------------|---|
| 65 | Pkey   | CAT Number | Accession   |
|    | 408316 | 1051210_1  | AW807771 AW179260 AW807851 AW179240 AW845961 AW807693 BE141176 AW807594 AW807772 AW846003 AW845963 AW179239 |
|    | 409382 | 112508_1   | AA071244 AA071477   |
| 70 | 409699 | 1149033_1  | BE154650 BE154785 AW468343 BE154816 BE154667  |
|    | 409753 | 115305_1   | AA234847 AA077472   |
|    | 409828 | 1155571_1  | AW501137 AW501295 AW501212  |
|    | 410285 | 119128_1   | AA083609 AA083790 AA112048  |
|    | 411414 | 1245024_1  | AW897236 AW845406   |
| 75 | 411765 | 125700_1   | H43346 AA248302 AA095182  |
|    | 412301 | 1288123_1  | AW936328 AW936539   |
|    | 412793 | 1327636_-1 | AW997986  |
|    | 413382 | 1365954_1  | BE090689 BE090685 BE090697 BE090680 BE090691 BE090696 BE090698 BE090686                                     |
|    | 414003 | 140888_1   | AA134472 R76288 AW750262  |
| 80 | 414383 | 1440279_1  | BE279406 BE280100   |
|    | 415327 | 1534137_1  | H22769 R35182 Z43545 F05783 N92089 H71928   |
|    | 416035 | 1567254_1  | H42314 H43080 H45217 H15384   |
|    | 416156 | 1573980_1  | Z41922 H23072 T77322  |
|    | 418162 | 1725383_1  | T11958 T11756 T11816 T20135 T19729 R45874   |

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|    |        |           |  |
|----|--------|-----------|--|
| 5  | 419372 | 1842942_1 | W28781 W26588 W26377   |
|    | 422731 | 220507_1  | AL138411 AL138412 AA315860   |
|    | 423593 | 229955_1  | AA328144 AW962385 N30457   |
|    | 424844 | 244291_1  | D61524 AA347654 AW961758   |
|    | 429446 | 304683_1  | AI547111 AW973749 AA558007   |
|    | 430350 | 315401_1  | BE169639 AA476976  |
|    | 434345 | 38411_1   | AF127772 AF062358 AF060217 AA652270 F23288   |
|    | 434597 | 389383_1  | AW974668 AA661959 AA649572 AA640401 AA640402   |
| 10 | 435253 | 403478_1  | W91884 W95119 AA676941   |
|    | 435447 | 406400_1  | AI872932 AA682306 BE220163 W88695 T81307 H91447  |
|    | 437333 | 436167_1  | AA748898 AW997701 AW997703   |
|    | 439657 | 47499_1   | W93589 W93487 AF086493   |
|    | 439780 | 47673_1   | AL109688 R23655 R26578   |
| 15 | 446598 | 68463_1   | AW250546 BE257108 BE251006 BE255957 BE250926 BE513012 AV659318                                     |
|    | 447677 | 732252_1  | AI419235 AW055016 BE007490 BE550241  |
|    | 448643 | 773566_-1 | AI557531   |
|    | 450736 | 844652_1  | AW970060 AI732366 AI792313 AW839644  |
|    | 454282 | 1091035_1 | AW296422 H72616 H63825   |
| 20 | 454633 | 1227504_1 | AW811380 AW811385  |
|    | 454738 | 1232449_1 | BE072139 BE157977 BE157974 AW857974 AW817778   |
|    | 454790 | 1234752_1 | AW820852 AW820773 AW821088   |
|    | 455071 | 1252281_1 | BE145826 BE145815 BE145822 AW854707 BE145912   |
|    | 455308 | 1278147_1 | AW893949 AW893960 AW893966   |
| 25 | 455350 | 1283853_1 | AW901809 AW901787 AW901795 AW901792 AW901744 AW901753 AW901807 AW901798                            |
|    | 455391 | 1288067_1 | BE156230 BE156239 AW936260   |
|    | 455699 | 1351258_1 | BE068121 BE068090 BE068153 BE068128 BE068197 BE068136 BE068140 BE068185 BE068105                   |
|    | 455743 | 1354978_1 | BE073754 BE073753 BE073755 BE073756 BE073752 BE073795 BE073796 BE073704 BE073791 BE073733 BE073695 |
|    | 455802 | 1370828_1 | BE141491 BE141016 BE141479   |
| 30 | 455826 | 1373392_1 | BE144228 BE144291  |
|    | 455968 | 1391117_1 | BE168828 BE168830 BE168823 BE168928 BE168820 BE168826  |
|    | 456328 | 1789791_1 | T41368 T41369 T41294   |
|    | 456392 | 1843059_1 | W28766 W26500  |
|    | 458147 | 488021_1  | AW752597 AW846781 AW849062 AW848490 AW752699 AW752604 AW752700                                     |
| 35 | 459233 | 944881_1  | AI939966 AI939988 AI939951 AI939981 AI939976 AI939959  |

TABLE 47C:

Pkey: Unique number corresponding to an Eos probeset  
Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. \*Dunham, et al.\* refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.  
Strand: Indicates DNA strand from which exons were predicted.  
Nt\_position: Indicates nucleotide positions of predicted exons.

|    |        |         |        |   |
|----|--------|---------|--------|---|
| 45 | Pkey   | Ref     | Strand | Nt_position   |
|    | 400480 | 8439796 | Minus  | 110553-111119   |
|    | 401015 | 8117441 | Plus   | 72260-72369   |
|    | 401042 | 8117611 | Plus   | 151364-151606   |
|    | 401132 | 8705350 | Minus  | 85679-85795   |
|    | 401165 | 9438376 | Minus  | 168244-168423   |
| 50 | 401333 | 9884881 | Plus   | 13852-14861   |
|    | 401350 | 9931226 | Plus   | 14471-14623   |
|    | 401623 | 8575907 | Plus   | 163249-163623   |
|    | 401683 | 7689961 | Plus   | 2934-3446   |
|    | 401685 | 7689961 | Minus  | 8038-8319   |
| 55 | 402015 | 7417802 | Minus  | 48791-49043,50038-50205,51530-51672,54448-54565,55933-56073 |
|    | 402243 | 7690137 | Minus  | 196521-196721   |
|    | 402319 | 7582559 | Plus   | 116589-117549   |
|    | 402750 | 7210067 | Plus   | 69466-69678,71139-71284,71572-71865                         |
|    | 402758 | 9213869 | Plus   | 87638-87924   |
| 60 | 402760 | 9213869 | Plus   | 136829-136952,137336-137521                                 |
|    | 402790 | 4835258 | Minus  | 147744-147861   |
|    | 403182 | 9838273 | Plus   | 102163-102345,102545-102725                                 |
|    | 403214 | 7630945 | Minus  | 76723-77027,79317-79484                                     |
|    | 403652 | 8705848 | Minus  | 49991-50129   |
| 65 | 403670 | 7259739 | Minus  | 88377-88537   |
|    | 403697 | 3962501 | Minus  | 102965-103174   |
|    | 403792 | 7230192 | Minus  | 149707-149873   |
|    | 403847 | 7708844 | Plus   | 317240-317391,317913-318032                                 |
|    | 403941 | 7454203 | Plus   | 114876-115342   |
| 70 | 404097 | 7770701 | Plus   | 55512-55781   |
|    | 404145 | 9863643 | Plus   | 30607-31266   |
|    | 404187 | 4481839 | Plus   | 7644-7991   |
|    | 404269 | 9711443 | Plus   | 70261-70404,72944-73063                                     |
|    | 404364 | 9964977 | Minus  | 32986-33202   |
|    | 404401 | 7259738 | Plus   | 71066-71326   |
| 75 | 404753 | 7637341 | Plus   | 14770-14931   |
|    | 404848 | 8248647 | Minus  | 23955-24034,25143-25264                                     |
|    | 404900 | 7331453 | Plus   | 22032-22219   |
|    | 404954 | 7387327 | Plus   | 131720-132042   |
| 80 | 405037 | 7543748 | Minus  | 127374-127578   |
|    | 405110 | 8096888 | Minus  | 118940-119100   |
|    | 405650 | 4926905 | Minus  | 71743-72291   |
|    | 405669 | 4508140 | Plus   | 14130-14270   |
|    | 405953 | 7960374 | Minus  | 65101-65574   |

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|        |         |       |   |
|--------|---------|-------|---|
| 406242 | 7417725 | Minus | 36736-36951   |
| 406291 | 5686274 | Plus  | 9562-9867   |
| 406293 | 5686274 | Minus | 17646-17953   |
| 406333 | 9213235 | Plus  | 64689-64798   |
| 406560 | 7711569 | Minus | 35162-35292   |
| 406589 | 8224211 | Plus  | 38806-38989   |
| 406597 | 8248613 | Minus | 132738-132985,134266-134425,135034-135192,135471-135608,137345-137478,138768-138912 |

# TABLE 48A: ABOUT 426 GENES UPREGULATED IN MELANOMA RELATIVE TO NORMAL BODY TISSUES

Table 48A lists about 426 genes upregulated in melanoma relative to normal body tissues. These genes were selected from 59680 probesets on the Eos/Affymetrix Hu03 Genechip array. Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

Pkey: Unique Eos probeset identifier number  
ExAccn: Exemplar Accession number, Genbank accession number  
UnigenelD: Unigene number  
Unigene Title: Unigene gene title  
R1: Mean of melanoma AIs divided by the mean of normal tissue AIs, where the minimum value for the numerator and denominator was set to 1.0

| Pkey   | ExAccn    | UnigenelD | Unigene Title                            | R1     |
|--------|-----------|-----------|--|--------|
| 426555 | NM 000372 | Hs.2053   | tyrosinase (oculocutaneous albinism IA)  | 376.61 |
| 428655 | H05769    | Hs.188757 | Homo sapiens, clone MGC:5564, mRNA, comp | 324.36 |
| 430377 | NM 001922 | Hs.301865 | dopachrome tautomerase (dopachrome delta | 231.30 |
| 453344 | BE349075  | Hs.44571  | ESTs                                     | 180.67 |
| 425289 | AW139342  | Hs.155530 | interferon, gamma-inducible protein 16   | 107.36 |
| 417166 | AA431323  | Hs.42146  | ESTs                                     | 97.76  |
| 425234 | AW152225  | Hs.165909 | ESTs, Weakly similar to I38022 hypotheti | 96.76  |
| 434826 | AF155661  | Hs.22265  | pyruvate dehydrogenase phosphatase       | 94.52  |
| 427528 | AU077143  | Hs.179565 | minichromosome maintenance deficient (S. | 90.88  |
| 438209 | AL120659  | Hs.6111   | aryl-hydrocarbon receptor nuclear transl | 87.91  |
| 443983 | H04482    | Hs.163724 | ESTs                                     | 85.55  |
| 428513 | BE220806  | Hs.184697 | Homo sapiens clone 23785 mRNA sequence   | 85.03  |
| 419956 | AL137939  | Hs.40096  | cadherin 19, type 2                      | 84.27  |
| 423605 | AF047826  | Hs.129887 | cadherin 19, type 2                      | 80.88  |
| 430540 | AW245422  |           | Homo sapiens cDNA: FLJ22105 fis, clone H | 80.64  |
| 416975 | NM 004131 | Hs.1051   | granzyme B (granzyme 2, cytotoxic T-lymp | 79.09  |
| 421633 | AF121860  | Hs.106260 | sorting nexin 10                         | 71.52  |
| 442064 | AI422867  | Hs.88594  | ESTs                                     | 69.88  |
| 418310 | AA814100  | Hs.86693  | ESTs                                     | 67.94  |
| 423799 | AW026300  | Hs.132906 | 19A24 protein                            | 67.64  |
| 432886 | BE159028  | Hs.279704 | chromatin accessibility complex 1        | 63.24  |
| 456508 | AA502764  | Hs.123469 | ESTs, Weakly similar to AF208855 1 BM-01 | 63.18  |
| 432882 | NM 013257 | Hs.279696 | serum/glucocorticoid regulated kinase-ii | 62.33  |
| 454088 | AW062425  |           | gb:CM0-CT0042-090899-018-f01 CT0042 Homo | 61.62  |
| 430838 | N46664    | Hs.169395 | hypothetical protein FLJ12015            | 60.52  |
| 422363 | T55979    | Hs.115474 | replication factor C (activator 1) 3 (38 | 59.73  |
| 407748 | AL079409  | Hs.38176  | KIAA0606 protein; SCN Circadian Oscillat | 59.33  |
| 450800 | BE395161  | Hs.1390   | proteasome (prosome, macropain) subunit, | 59.00  |
| 441224 | AU076964  | Hs.7753   | calumenin                                | 58.27  |
| 408418 | AW963897  | Hs.44743  | KIAA1435 protein                         | 56.79  |
| 428001 | H97428    | Hs.219907 | ESTs, Moderately similar to Transforming | 56.45  |
| 456373 | BE247706  | Hs.89751  | membrane-spanning 4-domains, subfamily A | 56.29  |
| 420674 | NM 000055 | Hs.1327   | butyrylcholinesterase                    | 56.15  |
| 407856 | AA045281  | Hs.266175 | phosphoprotein associated with GEMs      | 55.82  |
| 420552 | AK000492  | Hs.98806  | hypothetical protein                     | 55.39  |
| 442355 | AA456539  | Hs.8262   | lysosomal-associated membrane protein 2  | 54.97  |
| 429747 | M87507    | Hs.2490   | caspace 1, apoptosis-related cysteine pr | 52.85  |
| 410174 | AA306007  | Hs.59461  | DKFZP434C245 protein                     | 52.00  |
| 437396 | BE140396  | Hs.21621  | hypothetical protein DKFZp762O076        | 51.97  |
| 409557 | BE182896  | Hs.3686   | ESTs                                     | 51.64  |
| 420301 | AA767526  | Hs.22030  | paired box gene 5 (B-cell lineage specif | 51.42  |
| 414403 | AW969551  | Hs.76064  | ribosomal protein L27a                   | 50.58  |
| 452958 | AA883929  | Hs.40527  | ESTs                                     | 50.21  |
| 458997 | AW937420  |           | ESTs                                     | 49.97  |
| 458079 | AI796870  | Hs.54277  | DNA segment on chromosome X (unique) 992 | 49.85  |
| 435905 | AW997484  | Hs.5003   | KIAA0456 protein                         | 48.76  |
| 424800 | AL035588  | Hs.153203 | MyoD family inhibitor                    | 48.33  |
| 426827 | AW067805  | Hs.172665 | methylentetrahydrofolate dehydrogenase   | 47.91  |
| 408548 | AA055449  | Hs.63187  | ESTs, Weakly similar to ALUC_HUMAN !!!!  | 47.45  |
| 420000 | AB036063  | Hs.94262  | p53-inducible ribonucleotide reductase s | 46.52  |
| 419485 | AA489023  | Hs.99807  | ESTs, Weakly similar to unnamed protein  | 45.79  |
| 451134 | AA318315  | Hs.25999  | hypothetical protein FLJ22195            | 45.52  |
| 430066 | AI929659  | Hs.237825 | signal recognition particle 72kD         | 45.45  |
| 417427 | M90391    | Hs.82127  | interleukin 16 (lymphocyte chemoattracta | 44.58  |
| 450447 | AF212223  | Hs.25010  | hypothetical protein P15-2               | 43.36  |
| 446019 | AI362520  |           | histone deacetylase 3                    | 43.03  |
| 430015 | AW768399  |           | ESTs                                     | 42.45  |
| 446880 | AI811807  | Hs.108646 | Homo sapiens cDNA FLJ14934 fis, clone PL | 42.36  |
| 409327 | L41162    | Hs.53563  | collagen, type IX, alpha 3               | 42.30  |
| 425390 | AI092634  | Hs.156114 | protein tyrosine phosphatase, non-recept | 41.42  |
| 411088 | BE247593  | Hs.145053 | ESTs                                     | 41.21  |
| 408527 | AL135018  | Hs.33074  | Homo sapiens, clone IMAGE:3606519, mRNA, | 40.94  |
| 441590 | AI623207  | Hs.190537 | ESTs                                     | 40.66  |

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|    |        |           |           |   |       |
|----|--------|-----------|-----------|---|-------|
|    | 457465 | AW301344  | Hs.122908 | DNA replication factor                    | 39.91 |
|    | 430280 | AA361258  | Hs.237868 | interleukin 7 receptor                    | 38.91 |
|    | 410700 | AA352335  | Hs.65641  | hypothetical protein FLJ20073             | 38.70 |
| 5  | 421282 | AA286914  | Hs.40782  | ESTs                                      | 38.55 |
|    | 448275 | BE514434  | Hs.20830  | kinesin-like 2                            | 38.00 |
|    | 453912 | AL121031  |           | SWI/SNF related, matrix associated, acti  | 37.94 |
|    | 414844 | AA296874  | Hs.77494  | deoxyguanosine kinase                     | 37.88 |
|    | 421305 | BE397354  | Hs.324830 | diphtheria toxin resistance protein requi | 37.70 |
| 10 | 439352 | BE614347  | Hs.169615 | hypothetical protein FLJ20989             | 37.64 |
|    | 409078 | AW327515  |           | ESTs                                      | 37.30 |
|    | 449845 | AW971183  | Hs.6019   | DnaJ (Hsp40) homolog, subfamily C, membe  | 37.27 |
|    | 444184 | T87841    | Hs.282990 | Human DNA sequence from clone RP1-28H20   | 37.21 |
|    | 445819 | AI767472  | Hs.146290 | ESTs, Weakly similar to putative p150 [H  | 37.21 |
| 15 | 451418 | BE387790  | Hs.26369  | hypothetical protein FLJ20287             | 37.00 |
|    | 433226 | AW503733  | Hs.9414   | KIAA1488 protein                          | 36.88 |
|    | 445784 | AI253155  | Hs.146065 | ESTs                                      | 35.36 |
|    | 454117 | BE410100  | Hs.40368  | adaptor-related protein complex 1, sigma  | 33.09 |
|    | 407756 | AA116021  | Hs.38260  | ubiquitin specific protease 18            | 32.05 |
| 20 | 447937 | AL109716  | Hs.20034  | Homo sapiens mRNA full length insert cDN  | 31.00 |
|    | 438549 | BE385801  | Hs.21858  | trinucleotide repeat containing 3         | 30.76 |
|    | 429083 | Y09397    | Hs.227817 | BCL2-related protein A1                   | 30.73 |
|    | 444670 | H58373    | Hs.332938 | hypothetical protein MGC5370              | 28.45 |
|    | 446839 | BE091926  | Hs.16244  | mitotic spindle coiled-coil related prot  | 27.62 |
| 25 | 433576 | BE080715  | Hs.161091 | ESTs                                      | 27.42 |
|    | 422173 | BE385828  | Hs.250619 | phorbol-in-like protein MDS019 (CEM15)    | 27.36 |
|    | 408962 | BE386436  | Hs.44317  | SRY (sex determining region Y)-box 10     | 26.66 |
|    | 442757 | AI739528  | Hs.28345  | ESTs                                      | 25.94 |
|    | 414646 | AA353776  | Hs.901    | CD48 antigen (B-cell membrane protein)    | 25.39 |
| 30 | 433675 | AW977653  | Hs.75319  | ribonucleotide reductase M2 polypeptide   | 24.55 |
|    | 438461 | AW075485  | Hs.286049 | phosphoserine aminotransferase            | 22.48 |
|    | 427581 | NM 014788 | Hs.179703 | KIAA0129 gene product                     | 22.15 |
|    | 435256 | AF193766  | Hs.13872  | cytokine-like protein C17                 | 20.61 |
|    | 409988 | N27687    | Hs.334334 | transcription factor AP-2 alpha (activat  | 19.79 |
|    | 444863 | AW384082  | Hs.104879 | serine (or cysteine) proteinase inhibito  | 19.73 |
| 35 | 417404 | NM 007350 | Hs.82101  | pleckstrin homology-like domain, family   | 19.27 |
|    | 458098 | BE550224  |           | metallothionein 1E (functional)           | 18.09 |
|    | 417018 | M16038    | Hs.80887  | v-yes-1 Yamaguchi sarcoma viral related   | 16.95 |
|    | 446054 | AB014537  | Hs.13604  | KIAA0637 gene product                     | 15.67 |
| 40 | 432606 | NM 002104 | Hs.3066   | granzyme K (serine protease, granzyme 3;  | 15.54 |
|    | 414696 | AF002020  | Hs.76918  | Niemann-Pick disease, type C1             | 15.06 |
|    | 457211 | AW972565  | Hs.32399  | ESTs, Weakly similar to S51797 vasodilat  | 14.89 |
|    | 414821 | M63835    | Hs.77424  | Fc fragment of IgG, high affinity Ia, re  | 14.84 |
|    | 422486 | BE514492  | Hs.117487 | gene near HD on 4p16.3 with homology to   | 14.61 |
| 45 | 424308 | AW975531  | Hs.154443 | minichromosome maintenance deficient (S.  | 14.12 |
|    | 421334 | BE297729  |           | gb:601175625F1 NIH_MGC_17 Homo sapiens c  | 13.94 |
|    | 422423 | AF283777  | Hs.116481 | CD72 antigen                              | 13.77 |
|    | 408996 | AI979168  | Hs.344096 | glycoprotein (transmembrane) nmb          | 13.33 |
|    | 416406 | D86961    | Hs.79299  | lipoma HMGIC fusion partner-like 2        | 12.76 |
| 50 | 427536 | BE277141  | Hs.115803 | gb:601178666F1 NIH_MGC_20 Homo sapiens c  | 12.76 |
|    | 423198 | M81933    | Hs.1634   | cell division cycle 25A                   | 12.66 |
|    | 430770 | AA765694  | Hs.123296 | ESTs                                      | 12.58 |
|    | 407833 | AW955632  | Hs.66666  | ESTs, Weakly similar to S19560 proline-r  | 12.09 |
|    | 430822 | AJ005371  | Hs.248017 | glyceraldehyde-3-phosphate dehydrogenase  | 11.46 |
| 55 | 424259 | AK001776  | Hs.143954 | hypothetical protein FLJ10914             | 10.58 |
|    | 446950 | AA305800  | Hs.5672   | hypothetical protein AF140225             | 10.04 |
|    | 420956 | AA351584  | Hs.100543 | Homo sapiens clone 24505 mRNA sequence    | 9.98  |
|    | 448356 | AL120837  | Hs.20993  | high-glucose-regulated protein 8          | 9.88  |
|    | 428799 | AI478619  | Hs.104677 | ESTs                                      | 9.56  |
|    | 437271 | AL137445  | Hs.28846  | Homo sapiens mRNA; cDNA DKFZp566O134 (fr  | 9.03  |
| 60 | 447769 | AW873704  | Hs.320831 | Homo sapiens cDNA FLJ14597 fis, clone NT  | 9.01  |
|    | 408393 | AW015318  | Hs.23165  | ESTs                                      | 8.99  |
|    | 407966 | AA295052  | Hs.38516  | Homo sapiens, clone MGC:15887, mRNA, com  | 8.99  |
|    | 450534 | AI570189  | Hs.25132  | KIAA0470 gene product                     | 8.91  |
| 65 | 410101 | AI338045  | Hs.203559 | hypothetical protein FLJ12701             | 8.90  |
|    | 417129 | AI381800  | Hs.300684 | calcitonin gene-related peptide-receptor  | 8.86  |
|    | 453507 | AF083217  | Hs.33085  | WD repeat domain 3                        | 8.68  |
|    | 442739 | NM 007274 | Hs.8679   | cytosolic acyl coenzyme A thioester hydr  | 8.46  |
|    | 456249 | AI206144  | Hs.82508  | HRHFB2206 protein                         | 8.38  |
| 70 | 437786 | BE142681  | Hs.155573 | polymerase (DNA directed), eta            | 8.35  |
|    | 448410 | AK000227  | Hs.21126  | hypothetical protein FLJ20220             | 8.20  |
|    | 442711 | AF151073  | Hs.8645   | hypothetical protein                      | 8.14  |
|    | 408405 | AK001332  | Hs.44572  | hypothetical protein FLJ10470             | 7.96  |
|    | 420208 | BE276055  | Hs.95972  | silver (mouse homolog) like               | 7.88  |
| 75 | 415929 | AA724373  | Hs.49344  | hypothetical protein FLJ11006             | 7.79  |
|    | 449217 | AA278536  | Hs.23262  | ribonuclease, RNase A family, k6          | 7.66  |
|    | 451239 | H24302    | Hs.23127  | ESTs                                      | 7.50  |
|    | 442426 | AI373062  | Hs.332938 | hypothetical protein MGC5370              | 7.40  |
| 80 | 447233 | AW246333  | Hs.17901  | Homo sapiens, clone IMAGE:3937015, mRNA,  | 7.39  |
|    | 439574 | AI469788  |           | ESTs                                      | 7.13  |
|    | 431360 | NM 000427 | Hs.251680 | loricrin                                  | 7.12  |
|    | 412438 | AI087928  | Hs.110741 | ESTs                                      | 6.96  |
|    | 452882 | AW972990  | Hs.196270 | folate transporter/carrier                | 6.87  |
|    | 436581 | AA725726  | Hs.180213 | ESTs                                      | 6.64  |

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|    | 431317 | AA502682  |           | gb:ng23d01.s1 NCI_CGAP_Ov2 Homo sapiens  | 6.63 |
|    | 443264 | BE221477  | Hs.132137 | ESTs, Moderately similar to A47582 B-cel | 6.58 |
|    | 412490 | AW803564  | Hs.288850 | Homo sapiens cDNA: FLJ22528 fis, clone H | 6.53 |
| 5  | 408367 | AK001178  | Hs.44424  | homolog of rat orphan transporter v7-3   | 6.52 |
|    | 413283 | R78669    | Hs.23756  | hypothetical protein similar to swine ac | 6.50 |
|    | 453878 | AW964440  | Hs.19025  | DC32                                     | 6.48 |
|    | 424148 | BE242274  | Hs.1741   | integrin, beta 7                         | 6.44 |
|    | 407876 | NM 004519 | Hs.40865  | potassium voltage-gated channel, KQT-lik | 6.44 |
| 10 | 409512 | AW979187  | Hs.293591 | melanoma differentiation associated prot | 6.39 |
|    | 427951 | AI826125  | Hs.43546  | ESTs                                     | 6.32 |
|    | 448664 | AI879317  | Hs.334691 | splicing factor 3a, subunit 1, 120kD     | 6.03 |
|    | 416640 | BE262478  | Hs.79404  | neuron-specific protein                  | 6.01 |
|    | 446830 | BE179030  |           | Human DNA sequence from clone RP5-1174N9 | 5.98 |
| 15 | 452629 | W02772    | Hs.180178 | Homo sapiens, clone IMAGE:3947276, mRNA, | 5.93 |
|    | 427390 | AI432163  | Hs.268231 | Homo sapiens cDNA: FLJ23111 fis, clone L | 5.73 |
|    | 427853 | AI569798  | Hs.98260  | ESTs                                     | 5.55 |
|    | 434398 | AA121098  | Hs.3838   | serum-inducible kinase (SNK)             | 5.54 |
|    | 450256 | AA286887  | Hs.24724  | MFH-amplified sequences with leucine-ric | 5.54 |
| 20 | 428524 | AA429772  |           | ESTs                                     | 5.53 |
|    | 431797 | BE169641  | Hs.270134 | hypothetical protein FLJ20280            | 5.50 |
|    | 418403 | D86978    | Hs.84790  | KIAA0225 protein                         | 5.50 |
|    | 411524 | AW850303  |           | gb:IL3-CT0219-191199-030-F09 CT0219 Homo | 5.47 |
| 25 | 426158 | NM 001982 | Hs.199067 | v-erb-b2 avian erythroblastic leukemia v | 5.40 |
|    | 443086 | AW977125  |           | sine oculis homeobox (Drosophila) homolo | 5.38 |
|    | 447735 | AA775268  | Hs.6127   | Homo sapiens cDNA: FLJ23020 fis, clone L | 5.38 |
|    | 406843 | AW196933  | Hs.119598 | ribosomal protein L3                     | 5.36 |
|    | 430594 | AK000790  | Hs.246885 | hypothetical protein FLJ20783            | 5.35 |
|    | 447674 | BE270640  | Hs.19192  | cyclin-dependent kinase 2                | 5.23 |
| 30 | 410491 | AA465131  | Hs.64001  | Homo sapiens clone 25218 mRNA sequence   | 5.23 |
|    | 420338 | AA825595  | Hs.88269  | Homo sapiens, clone MGC:17339, mRNA, com | 5.09 |
|    | 409264 | NM 014937 | Hs.52463  | KIAA0966 protein                         | 5.03 |
|    | 414734 | AA151712  | Hs.82572  | ESTs                                     | 5.01 |
|    | 426759 | AI590401  | Hs.21213  | ESTs                                     | 4.99 |
| 35 | 426793 | X89887    | Hs.172350 | HIR (histone cell cycle regulation defec | 4.98 |
|    | 428612 | AA770001  |           | ESTs                                     | 4.97 |
|    | 413550 | W03011    | Hs.306881 | MSTP043 protein                          | 4.92 |
|    | 447349 | AI375546  |           | gb:tc23d04.x1 Soares_tetus_Nb2HF8_       | 4.86 |
|    | 403328 |           |           | Target Exon                              | 4.85 |
| 40 | 452840 | AI097393  | Hs.43481  | hypothetical protein DKFZp564K192        | 4.83 |
|    | 439310 | AF086120  | Hs.102793 | ESTs                                     | 4.82 |
|    | 451281 | AI768965  | Hs.292708 | ESTs                                     | 4.82 |
|    | 431183 | NM 006855 | Hs.250696 | KDEL (Lys-Asp-Glu-Leu) endoplasmic retic | 4.81 |
|    | 427871 | AW992405  | Hs.59622  | Homo sapiens, clone IMAGE:3507281, mRNA, | 4.74 |
| 45 | 435963 | AF271212  | Hs.322901 | disrupter of silencing 10                | 4.67 |
|    | 418699 | BE539639  | Hs.173030 | ESTs, Weakly similar to ALU8_HUMAN ALU S | 4.66 |
|    | 414770 | BE257224  |           | Homo sapiens, clone IMAGE:3873720, mRNA  | 4.66 |
|    | 419628 | H67546    | Hs.49768  | ESTs                                     | 4.64 |
|    | 420258 | AA477514  | Hs.96247  | translin-associated factor X             | 4.63 |
| 50 | 446341 | AL040763  | Hs.310735 | ESTs, Moderately similar to ALU7_HUMAN A | 4.58 |
|    | 420267 | N37030    | Hs.173337 | ESTs                                     | 4.57 |
|    | 412228 | AW503785  | Hs.73792  | complement component (3d/Epstein Barr vi | 4.55 |
|    | 432888 | T86823    |           | gb:yd81a08.s1 Soares fetal liver spleen  | 4.55 |
|    | 453258 | AW293134  | Hs.32597  | ring finger protein (C3H2C3 type) 5      | 4.53 |
| 55 | 418340 | NM 013286 | Hs.84162  | chromosome 3p21.1 gene sequence          | 4.50 |
|    | 409038 | T97490    | Hs.50002  | small inducible cytokine subfamily A (Cy | 4.44 |
|    | 447484 | AA464839  | Hs.292565 | hypothetical protein FLJ14697            | 4.42 |
|    | 452036 | NM 003966 | Hs.27621  | sema domain, seven thrombospondin repeat | 4.41 |
|    | 405903 | K03121    |           | gb:Human glyceraldehyde-3-phosphate dehy | 4.40 |
| 60 | 405451 |           |           | dihydropyrimidinase-like 3               | 4.34 |
|    | 434203 | BE262677  | Hs.283558 | hypothetical protein PRO1855             | 4.33 |
|    | 450088 | AW292933  | Hs.254110 | ESTs                                     | 4.31 |
|    | 421535 | AB002359  | Hs.105478 | phosphoribosylformylglycinamide synthet  | 4.31 |
|    | 415912 | H08859    | Hs.206469 | ESTs, Weakly similar to ALU6_HUMAN ALU S | 4.30 |
| 65 | 451259 | NM 006052 | Hs.26146  | Down syndrome critical region gene 3     | 4.29 |
|    | 452548 | AL050321  | Hs.301532 | CRP2 binding protein                     | 4.28 |
|    | 432195 | AJ243669  | Hs.8127   | KIAA0144 gene product                    | 4.24 |
|    | 445101 | T75202    | Hs.12314  | Homo sapiens mRNA; cDNA DKFZp586C1019 (f | 4.22 |
|    | 425913 | AA365799  |           | SEC22, vesicle trafficking protein (S. c | 4.19 |
| 70 | 423494 | AW504365  | Hs.24143  | Wiskott-Aldrich syndrome protein interac | 4.18 |
|    | 442092 | AW578669  |           | hypothetical protein FLJ12439            | 4.16 |
|    | 424954 | NM 000546 | Hs.1846   | tumor protein p53 (Li-Fraumeni syndrome) | 4.05 |
|    | 427719 | AI393122  | Hs.134726 | ESTs                                     | 4.04 |
|    | 415310 | R16313    |           | gb:yf93h09.r1 Soares infant brain 1NIB H | 4.04 |
| 75 | 416058 | L08895    | Hs.78995  | MADS box transcription enhancer factor 2 | 4.03 |
|    | 427828 | AI024471  | Hs.98232  | ESTs                                     | 3.93 |
|    | 410079 | U94362    | Hs.58589  | glycogenin 2                             | 3.92 |
|    | 420265 | AA766209  | Hs.88087  | ESTs                                     | 3.92 |
|    | 426181 | AA371422  | Hs.334371 | hypothetical protein MGC13096            | 3.90 |
| 80 | 431639 | AK000680  | Hs.266175 | phosphoprotein associated with GEMs      | 3.89 |
|    | 410275 | U85658    | Hs.61796  | transcription factor AP-2 gamma (activat | 3.88 |
|    | 422150 | AI867118  |           | calpastatin                              | 3.87 |
|    | 429238 | NM 002849 | Hs.198288 | protein tyrosine phosphatase, receptor t | 3.86 |
|    | 418827 | BE327311  | Hs.47166  | HT021                                    | 3.84 |

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|    | 425050 | BE391854  | Hs.7970   | gb:601285394F1 NIH_MGC_44 Homo sapiens c  | 3.82 |
|    | 442271 | AF000652  | Hs.8180   | syndecan binding protein (syntenin)       | 3.81 |
|    | 410235 | AA082977  |           | gb:zn07h10.r1 Stratagene hNT neuron (937  | 3.79 |
| 5  | 408636 | BE294925  | Hs.46680  | CGI-12 protein                            | 3.78 |
|    | 424624 | AB032947  | Hs.151301 | Ca2+-dependent activator protein for secr | 3.76 |
|    | 411400 | AA311919  | Hs.69851  | nucleolar protein family A, member 1 (H/  | 3.74 |
|    | 458215 | AA928160  |           | gb:cn86f10.s1 Soares_NFL_T_GBC_S1 Homo s  | 3.73 |
|    | 452874 | AK001061  | Hs.30925  | hypothetical protein FLJ10199             | 3.72 |
|    | 442643 | U82756    |           | PRP4/STKWD splicing factor                | 3.70 |
| 10 | 447471 | AF039843  | Hs.18676  | sprouty (Drosophila) homolog 2            | 3.70 |
|    | 447644 | AW861622  | Hs.108646 | Homo sapiens cDNA FLJ14934 fis, clone PL  | 3.67 |
|    | 422616 | BE300330  | Hs.118725 | selenophosphate synthetase 2              | 3.64 |
|    | 433160 | AW207002  | Hs.134342 | TASP for testis-specific adriamycin sens  | 3.64 |
|    | 418180 | BE618087  | Hs.83724  | hypothetical protein MGC5466              | 3.62 |
| 15 | 423032 | AI684746  | Hs.119274 | RAS p21 protein activator (GTPase activa  | 3.62 |
|    | 425569 | AA359597  | Hs.301701 | Homo sapiens cDNA FLJ12073 fis, clone HE  | 3.62 |
|    | 412156 | H29487    | Hs.17110  | Homo sapiens mRNA; cDNA DKFZp434C2016 (f  | 3.61 |
|    | 417426 | NM 002291 | Hs.82124  | laminin, beta 1                           | 3.61 |
| 20 | 407188 | AA457592  |           | gb:aa92f11.s1 Stratagene fetal retina 93  | 3.61 |
|    | 426500 | NM 003378 | Hs.171014 | VGF nerve growth factor inducible         | 3.61 |
|    | 440760 | AK001145  | Hs.284216 | hypothetical protein FLJ10283             | 3.60 |
|    | 448481 | W15284    | Hs.74832  | ESTs                                      | 3.59 |
|    | 414111 | BE047679  | Hs.152982 | hypothetical protein FLJ13117             | 3.59 |
| 25 | 437852 | AW978107  | Hs.5884   | Homo sapiens mRNA; cDNA DKFZp586C0224 (f  | 3.59 |
|    | 409703 | NM 006187 | Hs.56009  | Z-5-oligoadenylate synthetase 3 (100 k    | 3.59 |
|    | 406981 | S71129    |           | acetylcholinesterase (YT blood group)     | 3.59 |
|    | 431586 | AW971100  | Hs.293189 | ESTs                                      | 3.58 |
|    | 415173 | AW501735  | Hs.180059 | ESTs                                      | 3.57 |
| 30 | 430512 | AF182294  | Hs.241578 | U6 snRNA-associated Sm-like protein LSM8  | 3.57 |
|    | 446126 | AW085909  |           | pleckstrin homology domain interacting p  | 3.57 |
|    | 409305 | AA070078  |           | gb:zm60f05.r1 Stratagene fibroblast (937  | 3.57 |
|    | 433867 | AK000596  | Hs.3618   | hippocalcin-like 1                        | 3.56 |
|    | 459721 | AI299050  | Hs.143835 | gb:qn14d12.x1 NCL_CGAP_Lu5 Homo sapiens   | 3.56 |
| 35 | 441412 | AI393657  | Hs.159750 | ESTs                                      | 3.55 |
|    | 416114 | AI695549  | Hs.183868 | glucuronidase, beta                       | 3.55 |
|    | 454870 | AW836081  |           | gb:PM0-LT0019-090300-002-e11 LT0019 Homo  | 3.54 |
|    | 443105 | X96753    | Hs.9004   | chondroitin sulfate proteoglycan 4 (mela  | 3.53 |
|    | 444680 | AI186671  | Hs.22670  | ESTs                                      | 3.51 |
| 40 | 413949 | AA316077  | Hs.75639  | Human TB1 gene mRNA, 3' end               | 3.51 |
|    | 437033 | AW248364  | Hs.5409   | RNA polymerase I subunit                  | 3.50 |
|    | 412141 | AI183838  | Hs.48938  | hypothetical protein FLJ21802             | 3.49 |
|    | 437158 | AW090198  |           | KIAA1150 protein                          | 3.48 |
|    | 432642 | BE297635  | Hs.3069   | heat shock 70kD protein 9B (mortalin-2)   | 3.47 |
| 45 | 440634 | AA921767  | Hs.132447 | ESTs                                      | 3.47 |
|    | 445652 | AL117473  | Hs.13036  | DKFZP727A071 protein                      | 3.46 |
|    | 429500 | X78565    | Hs.289114 | hexabrachion (tenascin C, cytotactin)     | 3.43 |
|    | 420460 | AA262331  | Hs.48376  | Homo sapiens clone HB-2 mRNA sequence     | 3.43 |
|    | 426141 | C05886    | Hs.293972 | ESTs                                      | 3.40 |
| 50 | 424321 | W74048    | Hs.1765   | lymphocyte-specific protein tyrosine kin  | 3.40 |
|    | 449209 | BE616830  | Hs.294145 | ESTs                                      | 3.39 |
|    | 408304 | AW810279  |           | gb:MR4-ST0125-151299-029-a09 ST0125 Homo  | 3.37 |
|    | 416561 | D87328    | Hs.79375  | holocarboxylase synthetase (biotin-[prop  | 3.35 |
|    | 422947 | AA306782  | Hs.122552 | G-2 and S-phase expressed 1               | 3.34 |
| 55 | 453005 | AW055308  | Hs.31803  | ESTs, Weakly similar to N-WASP [Hsapien   | 3.34 |
|    | 409430 | R21945    | Hs.346735 | splicing factor, arginine/serine-rich 5   | 3.32 |
|    | 417386 | AL037228  | Hs.82043  | D123 gene product                         | 3.32 |
|    | 440999 | AI951562  | Hs.126370 | ESTs, Weakly similar to CNE3_HUMAN COPIN  | 3.31 |
|    | 407516 | X64974    |           | gb:H.sapiens mRNA HTPCRH02 for olfactory  | 3.31 |
| 60 | 450065 | AL050107  | Hs.24341  | transcriptional co-activator with PDZ-bi  | 3.31 |
|    | 416902 | AA375634  | Hs.288974 | hypothetical protein FLJ12528             | 3.28 |
|    | 432878 | BE386490  | Hs.279663 | Pirin                                     | 3.28 |
|    | 443296 | AI765286  | Hs.313342 | ESTs                                      | 3.27 |
|    | 429954 | AI918130  | Hs.21374  | ESTs                                      | 3.25 |
| 65 | 428044 | AA093322  | Hs.301404 | RNA binding motif protein 3               | 3.25 |
|    | 425317 | AW205118  | Hs.210546 | interleukin 21 receptor                   | 3.25 |
|    | 418064 | BE387287  | Hs.83384  | S100 calcium-binding protein, beta (neur  | 3.25 |
|    | 432917 | NM 014125 | Hs.241517 | PRO0327 protein                           | 3.24 |
|    | 447871 | BE297946  | Hs.239052 | ESTs                                      | 3.24 |
| 70 | 414829 | AA321568  | Hs.77436  | pleckstrin                                | 3.24 |
|    | 426996 | AW968934  | Hs.173108 | Homo sapiens cDNA: FLJ21897 fis, clone H  | 3.23 |
|    | 416188 | BE157260  | Hs.79070  | v-myc avian myelocytomatosis viral oncog  | 3.22 |
|    | 429530 | AA454191  | Hs.99362  | Human DNA sequence from clone RP11-530N1  | 3.21 |
|    | 445174 | AV652850  | Hs.172004 | titin                                     | 3.19 |
| 75 | 459227 | AW167599  |           | ESTs                                      | 3.19 |
|    | 439039 | AI656707  | Hs.48713  | ESTs                                      | 3.15 |
|    | 418803 | U50079    | Hs.88556  | histone deacetylase 1                     | 3.15 |
|    | 420005 | AW271106  | Hs.133294 | ESTs                                      | 3.15 |
| 80 | 422511 | AU076442  | Hs.117938 | collagen, type XVII, alpha 1              | 3.14 |
|    | 452480 | AI903526  |           | gb:RC-BT031-090199-063 BT031 Homo sapien  | 3.14 |
|    | 445701 | AF055581  | Hs.13131  | lymphocyte adaptor protein                | 3.14 |
|    | 410678 | BE540516  | Hs.293732 | hypothetical protein MGC3195              | 3.14 |
|    | 458664 | AI300427  |           | gb:qo18h07.x1 NCL_CGAP_Lu5 Homo sapiens   | 3.13 |
|    | 436315 | BE390513  | Hs.27935  | hypothetical protein MGC4837              | 3.13 |

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|    |        |           |           |  |      |
|----|--------|-----------|-----------|--|------|
|    | 430441 | BE398091  |           | desmoplakin (DPI, DPII)                  | 3.12 |
|    | 435080 | AI831760  | Hs.155111 | hypothetical protein FLJ14428            | 3.12 |
|    | 425606 | U52112    | Hs.158331 | renin-binding protein                    | 3.11 |
| 5  | 432978 | AF126743  | Hs.279884 | DNAJ domain-containing                   | 3.11 |
|    | 452826 | BE245286  | Hs.301636 | peroxisomal biogenesis factor 6          | 3.10 |
|    | 446627 | AI973016  | Hs.15725  | hypothetical protein SBB148              | 3.10 |
|    | 427647 | W19744    | Hs.180059 | Homo sapiens cDNA FLJ20653 fis, clone KA | 3.09 |
|    | 417211 | T97617    | Hs.269092 | ESTs                                     | 3.08 |
|    | 448140 | AF146761  | Hs.20450  | BCM-like membrane protein precursor      | 3.08 |
| 10 | 448752 | AA593867  | Hs.300842 | KIAA1608 protein                         | 3.07 |
|    | 416355 | H49875    | Hs.268906 | ESTs                                     | 3.07 |
|    | 425345 | AU077297  | Hs.155894 | protein tyrosine phosphatase, non-recept | 3.07 |
|    | 410321 | Y12860    | Hs.62245  | solute carrier family 25 (mitochondrial  | 3.07 |
|    | 411395 | AA889673  | Hs.7542   | KIAA1802 protein                         | 3.07 |
| 15 | 416065 | BE267931  | Hs.78996  | proliferating cell nuclear antigen       | 3.06 |
|    | 432343 | NM 002960 | Hs.2961   | S100 calcium-binding protein A3          | 3.06 |
|    | 457991 | BE539951  | Hs.306996 | Homo sapiens, clone IMAGE:3447073, mRNA, | 3.05 |
|    | 433201 | AB040896  | Hs.21104  | KIAA1463 protein                         | 3.03 |
|    | 416178 | AI808527  | Hs.192822 | serologically defined breast cancer anti | 3.02 |
| 20 | 411975 | AI916058  | Hs.144583 | ESTs                                     | 3.01 |
|    | 448719 | AA033627  | Hs.21858  | trinucleotide repeat containing 3        | 3.00 |
|    | 419870 | AW403911  | Hs.266175 | phosphoprotein associated with GEMs      | 3.00 |
|    | 409601 | AF237621  | Hs.80828  | keratin 1 (epidermolytic hyperkeratosis) | 2.94 |
| 25 | 415668 | AW957684  | Hs.306814 | hypothetical protein FLJ21889            | 2.93 |
|    | 453256 | AI565587  | Hs.32556  | KIAA0379 protein                         | 2.81 |
|    | 436856 | AI469355  | Hs.127310 | ESTs                                     | 2.75 |
|    | 417880 | BE241595  | Hs.82848  | selectin L (lymphocyte adhesion molecule | 2.60 |
|    | 408209 | NM 004454 | Hs.43697  | ets variant gene 5 (ets-related molecule | 2.59 |
| 30 | 440457 | BE387593  | Hs.21321  | Homo sapiens clone FLB9213 PRO2474 mRNA, | 2.55 |
|    | 415314 | N88802    | Hs.5422   | glycoprotein M6B                         | 2.51 |
|    | 434276 | AF123659  | Hs.93605  | leucine zipper, putative tumor suppresso | 2.50 |
|    | 424085 | NM 002914 | Hs.139226 | replication factor C (activator 1) 2 (40 | 2.48 |
|    | 410600 | AW575742  |           | ESTs, Moderately similar to S65657 alpha | 2.48 |
| 35 | 439180 | AI393742  | Hs.199067 | v-erb-b2 avian erythroblastic leukemia v | 2.43 |
|    | 444809 | BE207568  | Hs.208219 | oculospantin                             | 2.39 |
|    | 453837 | AL138387  | Hs.256126 | baculoviral IAP repeat-containing 7 (liv | 2.39 |
|    | 410290 | AA402307  | Hs.322844 | hypothetical protein DKFZp564A176        | 2.37 |
|    | 411358 | R47479    | Hs.94761  | KIAA1691 protein                         | 2.35 |
| 40 | 427550 | BE242818  | Hs.311609 | nuclear RNA helicase, DECD variant of DE | 2.34 |
|    | 426312 | AF026939  | Hs.181874 | interferon-induced protein with tetratri | 2.29 |
|    | 448569 | BE382657  | Hs.21486  | signal transducer and activator of trans | 2.27 |
|    | 418661 | NM 001949 | Hs.1189   | E2F transcription factor 3               | 2.24 |
|    | 459373 | BE408266  | Hs.301406 | hypothetical protein PP3501              | 2.21 |
| 45 | 417437 | U52682    | Hs.82132  | interferon regulatory factor 4           | 2.21 |
|    | 436700 | AI693690  | Hs.301406 | hypothetical protein PP3501              | 2.18 |
|    | 450690 | AA296696  | Hs.333418 | FXFD domain-containing ion transport reg | 2.15 |
|    | 432800 | BE391046  | Hs.278962 | AIM-1 protein                            | 2.15 |
|    | 421773 | W69233    | Hs.112457 | ESTs                                     | 2.09 |
| 50 | 409415 | AA579258  | Hs.6083   | Homo sapiens cDNA: FLJ21028 fis, clone C | 2.03 |
|    | 433364 | AI075407  | Hs.296083 | ESTs, Moderately similar to I54374 gene  | 2.02 |
|    | 412609 | Z48804    | Hs.74124  | ocular albinism 1 (Nettleship-Falls)     | 2.01 |
|    | 443950 | NM 001425 | Hs.9999   | epithelial membrane protein 3            | 2.01 |
|    | 451537 | R56631    | Hs.26550  | retinoid X receptor, gamma               | 2.00 |
| 55 | 427080 | AW068287  | Hs.301175 | ras-related C3 botulinum toxin substrate | 1.96 |
|    | 413190 | AA151802  | Hs.40368  | adaptor-related protein complex 1, sigma | 1.94 |
|    | 412926 | AI879076  | Hs.75061  | macrophage myristoylated alanine-rich C  | 1.91 |
|    | 453779 | N35187    | Hs.43388  | 28kD interferon responsive protein       | 1.86 |
|    | 453107 | NM 016113 | Hs.279746 | vanilloid receptor-like protein 1        | 1.86 |
| 60 | 430637 | BE160081  | Hs.256290 | S100 calcium-binding protein A11 (calgiz | 1.86 |
|    | 408561 | AI308037  | Hs.84120  | hypothetical protein MGC13016            | 1.84 |
|    | 413171 | AA318325  | Hs.75219  | tyrosinase-related protein 1             | 1.83 |
|    | 406016 |           |           | Target Exon                              | 1.82 |
|    | 446644 | NM 003272 | Hs.15791  | transmembrane 7 superfamily member 1 (up | 1.81 |
| 65 | 431836 | AF178532  | Hs.271411 | beta-site APP-cleaving enzyme 2          | 1.77 |
|    | 439496 | BE616501  | Hs.32343  | Homo sapiens, Similar to RIKEN cDNA 1110 | 1.77 |
|    | 447604 | AW089933  | Hs.301342 | hypothetical protein MGC4342             | 1.76 |
|    | 438866 | U44385    | Hs.325495 | tissue inhibitor of metalloproteinase 2  | 1.74 |
|    | 440672 | AF083811  | Hs.7345   | MAD1 (mitotic arrest deficient, yeast, h | 1.70 |
| 70 | 416091 | AF295370  | Hs.283082 | defensin, beta 3                         | 1.69 |
|    | 446291 | BE397753  | Hs.14623  | interferon, gamma-inducible protein 30   | 1.67 |
|    | 422532 | AL008726  | Hs.118126 | protective protein for beta-galactosidas | 1.67 |
|    | 418918 | X07871    | Hs.89476  | CD2 antigen (p50), sheep red blood cell  | 1.67 |
|    | 412580 | AA113262  | Hs.17901  | Homo sapiens, clone IMAGE:3937015, mRNA, | 1.67 |
| 75 | 448258 | BE386983  | Hs.343214 | hypothetical protein FLJ20396            | 1.66 |
|    | 414945 | BE076358  | Hs.77667  | lymphocyte antigen 6 complex, locus E    | 1.66 |
|    | 425262 | D87119    | Hs.155418 | GS3955 protein                           | 1.65 |
|    | 439237 | AW408158  | Hs.318893 | ESTs, Weakly similar to A47582 B-cell gr | 1.64 |
|    | 427923 | AW274357  | Hs.301406 | hypothetical protein PP3501              | 1.63 |
| 80 | 424825 | AF207069  | Hs.153357 | procollagen-lysine, 2-oxoglutarate 5-dio | 1.62 |
|    | 411859 | AW194364  | Hs.94814  | interleukin-4 induced gene-1 protein (FI | 1.60 |
|    | 445982 | BE410233  | Hs.13501  | pescadillo (zebrafish) homolog 1, conti  | 1.58 |
|    | 412939 | AW411491  | Hs.75069  | eukaryotic translation elongation factor | 1.58 |
|    | 417237 | H86385    | Hs.81737  | palmitoyl-protein thioesterase 2         | 1.56 |



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|    |             |                                       |   |  |      |
|----|-------------|---------------------------------------|---|--|------|
| 5  | 412856      | BE386745                              | Hs.74631  | basigin (OK blood group)                 | 1.56 |
|    | 447200      | BE543146                              | Hs.281434   | Homo sapiens cDNA FLJ14028 fis, clone HE | 1.54 |
|    | 409614      | BE297412                              | Hs.55189  | hypothetical protein                     | 1.53 |
|    | 450663      | H43540                                | Hs.25292  | ribonuclease H1, large subunit           | 1.53 |
|    | 423397      | NM 001838                             | Hs.1652   | chemokine (C-C motif) receptor 7         | 1.49 |
|    | 425535      | AB007937                              | Hs.158287   | KIAA0468 gene product                    | 1.48 |
|    | 409340      | BE174629                              | Hs.321130   | hypothetical protein MGC2771             | 1.46 |
|    | 446755      | AW451473                              | Hs.16134  | serine/threonine kinase 10               | 1.46 |
| 10 | 454429      | BE273437                              | Hs.301406   | hypothetical protein PP3501              | 1.46 |
|    | 425722      | AI659076                              | Hs.97031  | hypothetical protein MGC13047            | 1.45 |
|    | 414509      | AW161311                              | Hs.76294  | CD63 antigen (melanoma 1 antigen)        | 1.44 |
|    | 452203      | X57522                                |   | transporter 1, ATP-binding cassette, sub | 1.43 |
|    | 436378      | AJ227874                              | Hs.99244  | ESTs                                     | 1.42 |
|    | 424218      | AF031824                              | Hs.143212   | cystatin F (leukocystatin)               | 1.42 |
| 15 | 436456      | AW292677                              | Hs.248122   | G protein-coupled receptor 24            | 1.42 |
|    | 439740      | AL365512                              | Hs.6657   | hypothetical protein bK1048E9.5          | 1.42 |
|    | 429359      | W00482                                | Hs.2399   | matrix metalloproteinase 14 (membrane-in | 1.42 |
|    | 427634      | AI399745                              | Hs.18449  | hypothetical protein MGC10820            | 1.40 |
| 20 | 403409      |                                       |   | NM_005929.Homo sapiens antigen p97 (mela | 1.40 |
|    | 434262      | AF121858                              | Hs.12169  | sorting nexin 8                          | 1.34 |
|    | 413566      | AW604451                              | Hs.285814   | sprouty (Drosophila) homolog 4           | 1.32 |
|    | 427730      | AW250549                              | Hs.180577   | granulin                                 | 1.32 |
|    | 411742      | AW247593                              | Hs.71819  | eukaryotic translation initiation factor | 1.31 |
| 25 | 450395      | BE048545                              | Hs.161757   | ESTs                                     | 1.30 |
|    | 413291      | NM 006278                             | Hs.75268  | sialyltransferase 4C (beta-galactosidase | 1.26 |
|    | 442609      | AL020996                              | Hs.8518   | selenoprotein N                          | 1.24 |
|    | 416929      | N20535                                |   | melastatin 1                             | 1.21 |
|    | 421975      | AW961017                              | Hs.6459   | hypothetical protein FLJ11856            | 1.21 |
|    | 454478      | AW805749                              |   | superoxide dismutase 2, mitochondrial    | 1.20 |
| 30 | 437723      | AI672731                              | Hs.13256  | ESTs                                     | 1.18 |
|    | 416350      | AF188625                              | Hs.189507   | phospholipase A2, group IID              | 1.08 |
| 35 | TABLE 48B:  |                                       |   |  |      |
|    | Pkey:       | Unique Eos probaset identifier number |   |  |      |
|    | CAT number: | Gene cluster number                   |   |  |      |
|    | Accession:  | Genbank accession numbers             |   |  |      |
| 40 | Pkey        | CAT Number                            | Accession   |  |      |
|    | 430540      | 713_2                                 | BC017171 BC012195 NM_007126 AF100752 AL137377 Z70768 BM474865 BG754806 AU124376 BG757203 BG764420 BG775028 BG824418           |  |      |
| 45 |             |                                       | BM045810 AU120387 BG770238 BG686740 BC913323 BI759980 BG395998 BM048875 BE881070 BE313689 BE879144 BM309834 AW245847          |  |      |
|    |             |                                       | AI770171 BF196861 BE856897 AA63876 AI375927 AA648810 AA948193 AA490916 AI459893 AI458188 AI240408 AI191843 AI131029 AW768399  |  |      |
|    |             |                                       | AI365196 AW337984 AW026150 BE466591 BE674599 AI818438 AA772197 AI651927 AW151143 BI198825 BG819083 BM458764 BE903567          |  |      |
|    |             |                                       | BE732715 BM043200 BE900263 BE900706 BE731097 BE390023 BG875384 BF996406 BF988930 BM475542 AW246215 BE501897 BE903610          |  |      |
|    |             |                                       | BE561530 BE560537 BE903782 BE732947 BI227204 BG761305 BE262642 BE391848 BE382475 BG008258 BI547991 BI459099 BE391391 BE259420 |  |      |
|    |             |                                       | BE298109 AW245422 AI423847 AI914618 H80534 BE301004 AL531791 AI435581 BF793112 AL577303 AA373265 BE746965 BF743630 BE879296   |  |      |
|    |             |                                       | AI359493 BM018598 AI689260 AW072450 F20201 AW151405 AW517572 AA773468 BG259694 BE391163 BG621529 AI421728 BG767231 BM462953   |  |      |
|    |             |                                       | BG340524 W52648 AA113434 BE785431 BI041981 BG832385 BG253168 BG759470 BF369329 BF981332 BE259418 BE785738 BI091658 N72512     |  |      |
|    |             |                                       | W58732 W85690 BG958989 AI205206 H19721 W17051 W77958 BI262010 AA844319 W74143 W72214 N85194 BE734033 BG164099 AA931069        |  |      |
|    |             |                                       | F13645 R41394 AK025758 BG180977 BE349455 AA812018 AA740241 AI027722 AI150356 AA886395 AW977627 BE220225 AA884082 AW518114     |  |      |
| 50 |             |                                       | AI243844 AA809493 AA481029 AA825718 AI347866 AI431670 AA814436 AI251109 R07704 AA765606 AA724593 AI918399 AI537550 AA491103   |  |      |
|    |             |                                       | AW008188 R07703 AA989120 AA746235 AW028983 AA789102 AU185751 AW971465 AA489681 AW971893 AW612086 BE077936 BI860809            |  |      |
|    |             |                                       | BE002760 BG746251 BE962912 BM454584 AL134894 BF104082 H80591  |  |      |
|    | 454088      | 1007145_1                             | AW062425 AW062411   |  |      |
| 55 | 458997      | 11847_4                               | BM453041 AA760783 BE218582 AI340046 AW166131 BF515854 AI630296 AA461307 AI090881 AW023059 AA155797 AA115486 AL597396          |  |      |
|    |             |                                       | AW889004 AW937420 AA137082 AA013374 BG619478 BG401839   |  |      |
|    | 446019      | 658727_1                              | AI362520 D25917 AI670784 AI742347 AW269789 AI270700 AW610541 AW793036 AW793035 AW610540 AW362220 AW362166 AW362214            |  |      |
|    |             |                                       | AW362225 AW362228 AL119827  |  |      |
| 60 | 430015      | 713_2                                 | BC017171 BC012195 NM_007126 AF100752 AL137377 Z70768 BM474865 BG754806 AU124376 BG757203 BG764420 BG775028 BG824418           |  |      |
|    |             |                                       | BM045810 AU120387 BG770238 BG686740 BG913323 BI759980 BG395998 BM048875 BE881070 BE313689 BE879144 BM309834 AW245847          |  |      |
|    |             |                                       | AI770171 BF196861 BE856897 AA63876 AI375927 AA648810 AA948193 AA490916 AI459893 AI458188 AI240408 AI191843 AI131029 AW768399  |  |      |
|    |             |                                       | AI365196 AW337984 AW026150 BE466591 BE674599 AI818438 AA772197 AI651927 AW151143 BI198825 BG819083 BM458764 BE903567          |  |      |
|    |             |                                       | BE732715 BM043200 BE900263 BE900706 BE731097 BE390023 BG875384 BF996406 BF988930 BM475542 AW246215 BE501897 BE903610          |  |      |
|    |             |                                       | BE561530 BE560537 BE903782 BE732947 BI227204 BG761305 BE262642 BE391848 BE382475 BG008258 BI547991 BI459099 BE391391 BE259420 |  |      |
|    |             |                                       | BE298109 AW245422 AI423847 AI914618 H80534 BE301004 AL531791 AI435581 BF793112 AL577303 AA373265 BE746965 BF743630 BE879296   |  |      |
| 65 |             |                                       | AI359493 BM018598 AI689260 AW072450 F20201 AW151405 AW517572 AA773468 BG259694 BE391163 BG621529 AI421728 BG767231 BM462953   |  |      |
|    |             |                                       | BG340524 W52648 AA113434 BE785431 BI041981 BG832385 BG253168 BG759470 BF369329 BF981332 BE259418 BE785738 BI091658 N72512     |  |      |
|    |             |                                       | W58732 W85690 BG958989 AI205206 H19721 W17051 W77958 BI262010 AA844319 W74143 W72214 N85194 BE734033 BG164099 AA931069        |  |      |
|    |             |                                       | F13645 R41394 AK025758 BG180977 BE349455 AA812018 AA740241 AI027722 AI150356 AA886395 AW977627 BE220225 AA884082 AW518114     |  |      |
| 70 |             |                                       | AI243844 AA809493 AA481029 AA825718 AI347866 AI431670 AA814436 AI251109 R07704 AA765606 AA724593 AI918399 AI537550 AA491103   |  |      |
|    |             |                                       | AW008188 R07703 AA989120 AA746235 AW028983 AA789102 AU185751 AW971465 AA489681 AW971893 AW612086 BE077936 BI860809            |  |      |
|    |             |                                       | BE002760 BG746251 BE962912 BM454584 AL134894 BF104082 H80591  |  |      |
|    | 453912      | 32562_3                               | BM472224 BI966849 BI966735 AW973032 BI962894 BI963048 AA548765 AI926504 AA041551 AW043754 AI086702 AW008105 AA974849 AW614893 |  |      |
|    |             |                                       | AA553737 AA916996 AW262982 AI580591 BF726843 AV693312 W35325 AA039927 BG460936 AW388482 AW388420 BF374777 W01360 N94710       |  |      |
|    |             |                                       | H87967  |  |      |
| 75 | 409078      | 744783_1                              | AW327515 AW327774 AW327571  |  |      |
|    | 458098      | 23945_1                               | AI082245 BE467534 AI797130 BE467063 BE467767 BE218421 AI694996 BE327781 BE327407 BE833829 AA989054 AA459718 BE833855 BE550224 |  |      |
|    |             |                                       | AA832519 AF086393 AV733386 BE465409 N29245 W07677 AA482971 BE503548 H18151 AA461301 W79223 W74510 AI090689 AL600773 AL600781  |  |      |
|    |             |                                       | N46003 R28075 R34182 BE071550 AW885857 AI276145 AI276696 H97808 N20540 AI468553   |  |      |
|    | 421334      | 267495_1                              | BG758353 AA287401 BE295646 AL040858   |  |      |
| 80 | 439574      | 689966_1                              | BG532820 AW246001 AI469788 AI350090 AI446788 BE549330 W84862 AA837988   |  |      |
|    | 431317      | 997174_1                              | AW970601 AW613399 AA503435 AA502682 N91138  |  |      |

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|    |              |  |   |
|----|--------------|--|---|
|    | 446830       | 41421_1  | BC020595 BI488430 BG168023 BE179030 AW294203 BF849776 AA459064 AI917452 AW403072 W27419 BF914568 BF798468 AW370558 T35055<br>AW370623 AA399232 AA214221 AW802987 BF902228 AW370622 BF819597 AW370567 BF914313 AW954040 BF060706 AA194237 T25074 C01285<br>BI489433  |
| 5  | 428524       | 1382184_1  | AI208080 AA442862 AA429772  |
|    | 411524       | 1089114_1  | AW850587 AW850589 AW850318 AW850303   |
|    | 443086       | 25669_4  | BE896316 BG819393 AA187888 AW753122   |
|    | 428612       | 1383189_1  | AA770001 AA431112 AA432126  |
| 10 | 447349       | 1063443_1  | BE743847 AW809603 BM469626 AI375546   |
|    | 414770       | 41721_1  | AK056926 BG473673 BG482256 AL135566 AW419211 BF949370 AL120313 AV703730 H82569 BG012696 R27084 AA304583 BM452908 BF516419<br>BF515687 BG036572 BG696740 AW953552 AW859437 AA306038 AI754064 AA608729 AA664163 H65119 AW272606 BF942099 AW130468<br>BI089467 BG821499 AA152403 BF310450 BF314240 BG830310 BF803223 BG764269 BE542645 BE259142 R26953 BE257224 BG475461 BF677821<br>R33048  |
|    | 432888       | 2155976_1  | T86823 AA570737 AI821425 AA569589 AI732232  |
| 15 | 425913       | 4123_2   | AV703649 AW959818 AI582119 AI523459 AI674473 AW663543 AA825476 AI935231 BF742805 AA426156 AI253626 AA846477 AI024230 BF221780<br>AI493027 AW006841 AA814699 H99650 AI088977 AA442691 AI783526 BF207915 AI752847 AA782635 AI978980 AA788634 BG119454 BF678528<br>AI627829 BG993975 AV701283  |
|    | 442092       | 22756_2  | BM449821 BM069895 BM023170 AW025563 BG152606 BM023452 AI862106 BG959957   |
| 20 | 415310       | 1869807_1  | R16313 Z45351 R14838 F05290 R14821 R16277   |
|    | 422150       | 782_1  | BI086421 BF059136 AW003898 BF446659 AI632891 AI628067 AI703179 AI961149 BF111022 AW614154 BE674215 AA687350 AA779426 BF591963<br>AW243344 AI356530 AI492508 AI694049 AI090422 AA465307 AI273387 BE674625 AW271971 AA969153 AW468593 AA984014 AI817491 AA970258<br>AI914450 AI018697 AW577591 AW577616 AA382201 AW954455 AI867266 AI707995 AI337384 BF208406 BF037100 BF223433 BF195517 BE673984<br>BF224124 BE813387 BG036579 BI553906 AA304995 AW361269 AW754160 AW361276 AI067118 AW805555 AW361284 AW954458<br>AW958551 BG681507 H79011 AW205696 AW134957 AA747667 AW753296 BF939060 AW958549 BF910827 BG573750 BG168639   |
| 25 | 410235       | 2930253_1  | AA082977 AA082955   |
|    | 458215       | 540112_3   | BE176902 BE177058   |
|    | 442643       | 2736_1   | BC001588 BC007424 AF016369 NM_004697 BI756186 BE257019 BG500792 BI862776 AL121371 BG574833 AA703250 AA179511 AW052006<br>AI280150 AI914000 AI358319 AI081204 AI082594 AA992449 AI470821 AI655744 AW237529 AA678858 AI984430 BF433055 BE467594 BE467573<br>AA035630 AI289987 AI184802 AI681391 AW592416 AI138377 AI139266 AA961714 AI800163 AA418751 AW451928 AA658676 AI273444 AI494387<br>BE046912 AI276555 BF196021 AA700055 AA609305 AA772596 AI635758 AI635749 H95459 AW610290 BE464994 AA527136 BF374802 AI800175<br>AW195227 AI189676 BF802049 AL513632 AL554911 AL538845 BE297273 AA315321 BM451920 BE269268 BE292835 BE018128 BG575713<br>BM041095 BG677009 AL039691 BF995709 BE735586 BE296453 BG393609 BG824453 AL567522 AI745257 AW388641 AW301265 AI141144<br>AW029280 AU149362 AU152328 AA418960 AL121009 AI890398 AL528748 H13050 T47086 BI000575 BF334914 BF109661 R44450 H13259 T47087<br>AW388646 BF305834 AL577515 BM041600 BE889299 BF239768   |
| 30 | 446126       | 610_2  | BF946219 BF946218 BF851494 AL536879 AA457150 AI590194 AI582629 AA464515 AA916242 AA337109 AA336509 N46906 AA336322 AA336407<br>AA337222 AA319240 BI026817 BI027058 AL536880 AI693827 AA651730 AI701013 BM068789 AW339506 AA293021 BF891108 AI458885 AW361203<br>AW974652 AI761251 AI655763 AA628063 BE047125 AW085916 AI129587 N52070 AW172361 AA052951 AW085909 AI000008 AA962570 AI371342<br>AI364207 AA464514 AI962506 AI824603 AW376300 AA058439 AW361192 AV656660 N50282 BF820514 BF891008 H40784 BF891112 BE708029<br>AW043567 AA056762   |
| 35 | 409305       | 109927_1   | AA071475 AA112236 AA070648 AA071243 AA081725 AA085187 AA070078  |
| 40 | 454870       | 2170_9   | AW836081 BF854404 AW578594 AW578581 BF507971 AW196760 AA779923 AA707233 AI655913 AA948295 AW089222 AW291883   |
|    | 437158       | 59575_1  | AL050068 AA160485 AW173544 AW296506 AW439860 AI521563 AI702529 AI393606 AW138323 AA570109 H19504 BM021968 BF063327 BF593552<br>AA630766 AI597717 AI807128 AA523012 AI356250 AW451857 AA974203 AI762577 BF512552 AW007307 BE675286 AW450502 AA962057<br>AW516069 AI582546 BF221924 BF222543 AI801808 AW468599 AW000736 AI866625 AW235356 BM021837 AA911956 AI680606 W86516 T03370<br>AW511634 H41653 AI468349 H19588 AW090198 AW043993 R39847  |
| 45 | 408304       | 646409_1   | AW810279 BE146684 AW810193 AW810515 AW178835 AW810516 BE146689 AW178842 BE146693 BE146694 AW810208 AW810258 AW810447<br>AW810443 AW810330 AW810211 AW810328 AW810327 AW810288 AW810265 AW810257 AW810263 AW810567 AW178838 AW810323 AW810358<br>AW810281 AW810321 AW178837 AW810635 BE062400 AW810198 AW810325 AW810513 BE062434 BE146679 AW810441 AW846649 AW810536<br>AW178857 AW810185 BE146653 AW810636 AW810322 BE146674 AW810359 AW810293 AW810472 AW178852 AW810356 AW810514 AW810289<br>BE146652 AW810566   |
| 50 | 459227       | 639802_1   | AW167599 AI971179 AI934948  |
|    | 452480       | 3144986_1  | AI903574 AI903572 AI903526 AI903571   |
|    | 458664       | 2139033_1  | BF432937 R07053 AI300427 W57876   |
|    | 430441       | 1438_6   | BG108218 BE560548 AW380115 BE269629 AI911518 AW380113 AA902964 AA455001 AI276529 AI685597 AA970496 D61084 AW380068 AW380080<br>R00283 C15236 AW327776 D80759  |
| 55 | 410600       | 497855_1   | BF347859 AW499616 AA191322 AW499617 AL601010 AW575742 AA729043 BE463447 AA086179 BE549623 AI335824 AW408712 BM149172  |
|    | 452203       | 2630_1   | BC014081 NM_000593 X57522 L21208 L21207 L21206 L21205 L21204 AL561404 AL564623 AL560492 AL556882 AL541576 AL550654 BI823519<br>BI770023 AL554969 BI489906 AI304693 AW295947 BM146642 X57521 BG820143 BE898390 F06770 F12630 BM423610 AL561518 BM009470<br>BG742981 AA279685 AA847441 AA313737 BF172639 BF897216 BF914190 BF903647 S70277 AI569694 AW073296 AI361433 AA564544 AA487429<br>BE858232 AA838610 AI539114 AI719375 AI829129 BG057675 AI423422 AU158860 BE300655 AW170777 AA586956 AL571889 AL556850 AL576404<br>AL582800 BI256544 BF342301 BG875994 AA054458 AA353161 AI940434 BE816522 AL577636 AI479650 AW150377 AU154395 AW951271 AI032220<br>AI819778 AI346733 AW771150 AW512525 AI249904 AA279809 AI352549 AW512517 BG056280 AA521222 BE271141 AL581932 AL541575 BI819184<br>AV660190 AL556475 AI620020 AW089888 AW079179 Z21518 AA687601 F04651 AI783961 T57198 AI433367 T78652 AL554968 AA365648 AL582619<br>BE874601 BF804669 AL574458 BM145502 AI266514 AI538823 AI475625 AA948210 AA884054 AA487637 AA031844 AA535221 AW794256<br>AW361447 BE788505 AI682892 AA830989 AA862356 AA653084 BM009154 AA135727 H05927 H23433 R42244 N79997 AW365655 AW366601<br>AA678742 AL556474 AA135770 BE774050 BF914200 H88457 AA627746 BI560216 BI753586 |
| 60 | 416929       | 14596_3  | BC017849 BC005892 N42983 BF691239 N42991 N29240 N40292 N33322 N33330 N20535   |
| 65 | 454478       | 4273_16  | AW796921 AW798102 AW805749 AW805872 BF985060 AW794380 BF380449 AW794466 AW794538  |
| 70 | TABLE 48C:   |  |   |
|    | Pkey:        | Unique number corresponding to an Eos probeset   |   |
|    | Ref:         | Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA<br>sequence of human chromosome 22" Dunham, et al. (1999) <u>Nature</u> 402:489-495. |   |
|    | Strand:      | Indicates DNA strand from which exons were predicted.  |   |
| 75 | Nt_position: | Indicates nucleotide positions of predicted exons.   |   |
|    | Pkey         | Ref  | Strand  |
|    | 403328       | 8469086  | Minus   |
|    | 405451       | 7622517  | Minus   |
|    | 406015       | 8272661  | Plus  |
| 80 | 403409       | 9438598  | Plus  |

TABLE 49A: ABOUT 1127 GENES UPREGULATED IN PRIMARY MELANOMA AND/OR MELANOMA METASTASES RELATIVE TO NORMAL BODY TISSUES

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Table 49A lists about 1127 genes upregulated in primary melanoma and/or melanoma metastases relative to normal body tissues. These genes were selected from 59680 probesets on the Eos/Affymetrix Hu03 Genechip array. Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

5 Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigeneID: Unigene number  
 Unigene Title: Unigene gene title  
 10 R1: 90th percentile of primary melanoma and melanoma metastasis AIs divided by the 90th percentile of normal tissue AIs  
 R2: 90th percentile of primary melanoma and melanoma metastasis AIs divided by the 90th percentile of normal tissue AIs, where the 15th percentile of normal tissue AIs was subtracted from both the numerator and denominator  
 R3: 90th percentile of primary melanoma and melanoma metastasis AIs divided by the 90th percentile of heart, liver, lung, and kidney AIs

| Pkey   | ExAccn    | UnigeneID | Unigene Title                             | R1    | R2    | R3    |
|--------|-----------|-----------|---|-------|-------|-------|
| 452838 | U65011    | Hs.30743  | preferentially expressed antigen in meta  | 14.05 | 11.83 | 14.05 |
| 426555 | NM_000372 | Hs.2053   | tyrosinase (oculocutaneous albinism IA)   | 13.15 | 13.27 | 13.15 |
| 430377 | NM_001922 | Hs.301865 | dopachrome tautomerase (dopachrome della  | 11.77 | 7.43  | 11.77 |
| 420208 | BE276055  | Hs.95972  | silver (mouse homolog) like               | 10.53 | 19.95 | 10.27 |
| 431360 | NM_000427 | Hs.251580 | loricrin                                  | 9.78  | 7.09  | 0.89  |
| 430822 | AJ005371  | Hs.248017 | glyceraldehyde-3-phosphate dehydrogenase  | 9.40  | 7.20  | 8.84  |
| 422168 | AA586894  | Hs.112408 | S100 calcium-binding protein A7 (psorias  | 8.03  | 10.27 | 12.84 |
| 419628 | H67546    | Hs.49768  | ESTs                                      | 7.56  | 8.92  | 6.49  |
| 438549 | BE386801  | Hs.21858  | trinucleotide repeat containing 3         | 7.52  | 5.47  | 16.47 |
| 430686 | NM_001942 | Hs.2633   | desmoglein 1                              | 6.06  | 4.13  | 3.31  |
| 409601 | AF237621  | Hs.80828  | keratin 1 (epidermolytic hyperkeratosis)  | 5.86  | 9.22  | 0.77  |
| 429170 | NM_001394 | Hs.2359   | dual specificity phosphatase 4            | 5.84  | 3.46  | 5.84  |
| 428227 | AA321649  | Hs.2248   | small inducible cytokine subfamily B (Cy  | 5.82  | 3.94  | 5.82  |
| 414812 | X72755    | Hs.77367  | monokine induced by gamma interferon      | 5.81  | 3.33  | 6.79  |
| 453344 | BE349075  | Hs.44571  | ESTs                                      | 5.78  | 3.07  | 5.99  |
| 425088 | AA663372  | Hs.169395 | hypothetical protein FLJ12015             | 5.60  | 3.92  | 5.60  |
| 402075 |           |           | ENSP00000251056*:Plasma membrane calcium  | 5.12  | 4.22  | 5.12  |
| 416975 | NM_004131 | Hs.1051   | granzyme B (granzyme 2, cytotoxic T-lymp  | 5.09  | 3.33  | 4.14  |
| 420602 | AF060877  | Hs.99236  | regulator of G-protein signalling 20      | 5.06  | 5.78  | 5.06  |
| 426600 | NM_003378 | Hs.171014 | VGF nerve growth factor inducible         | 5.04  | 6.77  | 9.42  |
| 430838 | N46664    | Hs.169395 | hypothetical protein FLJ12015             | 5.03  | 3.06  | 5.03  |
| 417542 | J04129    | Hs.82269  | progesterone-associated endometrial prote | 4.93  | 8.13  | 5.41  |
| 425234 | AW152225  | Hs.165909 | ESTs, Weakly similar to I38022 hypotheti  | 4.78  | 2.93  | 4.78  |
| 408962 | BE386436  | Hs.44317  | SRY (sex determining region Y)-box 10     | 4.75  | 3.28  | 5.30  |
| 410361 | BE391804  | Hs.62661  | guanylate binding protein 1, interferon-  | 4.70  | 3.11  | 4.70  |
| 429903 | AL134197  | Hs.93597  | cyclin-dependent kinase 5, regulatory su  | 4.68  | 2.27  | 4.68  |
| 407756 | AA116021  | Hs.38260  | ubiquitin specific protease 18            | 4.65  | 3.21  | 3.31  |
| 417166 | AA431323  | Hs.42146  | ESTs                                      | 4.56  | 5.23  | 4.56  |
| 421773 | W69233    | Hs.112457 | ESTs                                      | 4.52  | 11.11 | 0.96  |
| 442711 | AF151073  | Hs.8645   | hypothetical protein                      | 4.37  | 3.70  | 4.30  |
| 457211 | AW972565  | Hs.32399  | ESTs, Weakly similar to S51797 vasodilat  | 4.37  | 3.08  | 6.75  |
| 428513 | BE220806  | Hs.184697 | Homo sapiens clone 23785 mRNA sequence    | 4.32  | 2.61  | 4.32  |
| 447937 | AL109716  | Hs.20034  | Homo sapiens mRNA full length insert cDN  | 4.31  | 3.13  | 4.31  |
| 451099 | R52795    | Hs.25954  | interleukin 13 receptor, alpha 2          | 4.28  | 2.89  | 2.17  |
| 433658 | L03678    | Hs.156110 | immunoglobulin kappa constant             | 4.18  | 2.68  | 5.92  |
| 420301 | AA767526  | Hs.22030  | paired box gene 5 (B-cell lineage specif  | 4.16  | 2.57  | 4.16  |
| 433447 | U29195    | Hs.3281   | neuronal pentraxin II                     | 4.15  | 2.26  | 6.46  |
| 446341 | AL040763  | Hs.310735 | ESTs, Moderately similar to ALU7_HUMAN A  | 4.10  | 4.04  | 4.64  |
| 408380 | AF123050  | Hs.44532  | diubiquitin                               | 4.02  | 2.46  | 5.33  |
| 421379 | Y15221    | Hs.103982 | small inducible cytokine subfamily B (Cy  | 4.02  | 3.48  | 3.19  |
| 421633 | AF121860  | Hs.106260 | sorting nexin 10                          | 4.01  | 2.61  | 3.36  |
| 454117 | BE410100  | Hs.40368  | adaptor-related protein complex 1, sigma  | 3.96  | 2.68  | 3.96  |
| 417355 | D13168    | Hs.82002  | endothelin receptor type B                | 3.95  | 2.46  | 3.66  |
| 420267 | N37030    | Hs.173337 | ESTs                                      | 3.88  | 3.87  | 3.88  |
| 412228 | AW503785  | Hs.73792  | complement component (3d/Epstein Barr vi  | 3.81  | 3.04  | 7.94  |
| 427528 | AU077143  | Hs.179565 | minichromosome maintenance deficient (S   | 3.79  | 2.23  | 3.79  |
| 405451 |           |           | dihydropyrimidinase-like 3                | 3.78  | 3.74  | 4.06  |
| 449078 | AK001256  | Hs.22975  | KIAA1576 protein                          | 3.76  | 2.83  | 3.76  |
| 423799 | AW026300  | Hs.132906 | 19A24 protein                             | 3.75  | 2.36  | 3.75  |
| 456373 | BE247706  | Hs.89751  | membrane-spanning 4-domains, subfamily A  | 3.73  | 2.59  | 6.97  |
| 444863 | AW384082  | Hs.104879 | serine (or cysteine) proteinase inhibito  | 3.72  | 2.15  | 3.92  |
| 427666 | AI791495  | Hs.180142 | calmodulin-like skin protein (CLSP)       | 3.69  | 4.17  | 1.18  |
| 415817 | U88967    | Hs.78867  | protein tyrosine phosphatase, receptor-t  | 3.64  | 2.08  | 3.64  |
| 422423 | AF283777  | Hs.116481 | CD72 antigen                              | 3.64  | 2.94  | 3.64  |
| 419956 | AL137939  | Hs.40096  | cadherin 19, type 2                       | 3.56  | 2.22  | 4.68  |
| 420338 | AA825595  | Hs.88269  | Homo sapiens, clone MGC:17339, mRNA, com  | 3.55  | 2.96  | 4.70  |
| 412140 | AA219691  | Hs.73625  | RAB6 interacting, kinesin-like (rabkines  | 3.54  | 1.96  | 3.54  |
| 458079 | AI796870  | Hs.54277  | DNA segment on chromosome X (unique) 992  | 3.53  | 2.18  | 3.27  |
| 444381 | BE387335  | Hs.283713 | ESTs, Weakly similar to S64054 hypotheti  | 3.48  | 2.83  | 11.00 |
| 449722 | BE280074  | Hs.23960  | cyclin B1                                 | 3.48  | 2.10  | 4.64  |
| 438380 | T06430    | Hs.6194   | chondroitin sulfate proteoglycan BEHAB/b  | 3.47  | 3.90  | 4.98  |
| 452744 | AI267652  | Hs.246107 | Homo sapiens mRNA; cDNA DKFZp434E082 (fr  | 3.45  | 2.38  | 3.45  |
| 447210 | AF035269  | Hs.17752  | phosphatidylserine-specific phospholipas  | 3.44  | 3.83  | 2.09  |
| 428804 | AK000713  | Hs.193736 | hypothetical protein FLJ20706             | 3.43  | 2.39  | 3.43  |
| 407846 | AA426202  | Hs.40403  | Cbp/p300-interacting transactivator, wit  | 3.41  | 4.33  | 5.41  |
| 423605 | AF047826  | Hs.129887 | cadherin 19, type 2                       | 3.40  | 1.97  | 4.06  |
| 421508 | NM_004833 | Hs.105115 | absent in melanoma 2                      | 3.38  | 2.77  | 5.46  |
| 428001 | H97428    | Hs.219907 | ESTs, Moderately similar to Transforming  | 3.36  | 2.41  | 3.36  |
| 430770 | AA766694  | Hs.123296 | ESTs                                      | 3.36  | 2.08  | 3.83  |
| 445784 | AI253155  | Hs.146065 | ESTs                                      | 3.32  | 2.02  | 3.80  |

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|    |        |           |           |  |      |      |       |
|----|--------|-----------|-----------|--|------|------|-------|
| 5  | 414646 | AA353776  | Hs.901    | CD48 antigen (B-cell membrane protein)   | 3.32 | 1.87 | 3.76  |
|    | 448966 | AW372914  | Hs.86149  | phosphoinositol 3-phosphate-binding prot | 3.31 | 2.10 | 3.31  |
|    | 441224 | AU076964  | Hs.7753   | calumenin                                | 3.28 | 2.04 | 3.28  |
|    | 428242 | H55709    | Hs.2250   | leukemia inhibitory factor (cholinergic  | 3.26 | 2.43 | 3.56  |
|    | 413385 | M34455    | Hs.840    | indoleamine-pyrrole 2,3 dioxygenase      | 3.24 | 2.94 | 2.85  |
| 10 | 416636 | N32536    | Hs.42645  | solute carrier family 16 (monocarboxylic | 3.23 | 1.84 | 3.87  |
|    | 415668 | AW957684  | Hs.306814 | hypothetical protein FLJ21889            | 3.22 | 3.10 | 3.13  |
|    | 442757 | AI739528  | Hs.28345  | ESTs                                     | 3.22 | 3.41 | 1.45  |
|    | 426317 | AA312350  | Hs.169294 | transcription factor 7 (T-cell specific, | 3.18 | 2.50 | 3.18  |
|    | 432874 | W94322    | Hs.279651 | melanoma inhibitory activity             | 3.18 | 5.31 | 4.55  |
| 15 | 412561 | NM_002286 | Hs.74011  | lymphocyte-activation gene 3             | 3.17 | 3.09 | 4.28  |
|    | 443983 | H04482    | Hs.163724 | ESTs                                     | 3.16 | 2.21 | 3.16  |
|    | 429732 | U20158    | Hs.2488   | lymphocyte cytosolic protein 2 (SH2 doma | 3.14 | 1.74 | 3.25  |
|    | 422363 | T55979    | Hs.115474 | replication factor C (activator 1) 3 (38 | 3.14 | 2.07 | 3.33  |
|    | 422424 | AI186431  | Hs.296638 | prostate differentiation factor          | 3.10 | 3.20 | 2.15  |
| 20 | 435256 | AF193766  | Hs.13872  | cytokine-like protein C17                | 3.10 | 2.23 | 3.10  |
|    | 401747 |           |           | Homo sapiens keratin 17 (KRT17)          | 3.10 | 2.10 | 3.02  |
|    | 447674 | BE270640  | Hs.19192  | cyclin-dependent kinase 2                | 3.08 | 3.08 | 4.00  |
|    | 419870 | AW403911  | Hs.266175 | phosphoprotein associated with GEMs      | 3.07 | 3.16 | 3.07  |
|    | 432878 | BE386490  | Hs.279663 | Pirrin                                   | 3.06 | 2.92 | 4.20  |
| 25 | 401454 |           |           | NM_014226*Homo sapiens renal tumor anti  | 3.05 | 1.96 | 3.05  |
|    | 410079 | U94362    | Hs.58589  | glycogenin 2                             | 3.01 | 2.26 | 3.27  |
|    | 426501 | AW043782  | Hs.293616 | ESTs                                     | 3.01 | 2.00 | 3.68  |
|    | 418310 | AA814100  | Hs.86693  | ESTs                                     | 3.00 | 2.35 | 6.76  |
|    | 422283 | AW411307  | Hs.114311 | CDC45 (cell division cycle 45, S.carevis | 2.96 | 2.31 | 3.78  |
| 30 | 422309 | U79745    | Hs.114924 | solute carrier family 16 (monocarboxylic | 2.96 | 2.49 | 4.74  |
|    | 408418 | AW963897  | Hs.44743  | KIAA1435 protein                         | 2.94 | 1.80 | 2.94  |
|    | 432882 | NM_013257 | Hs.279696 | serum/glucocorticoid regulated kinase-li | 2.93 | 1.74 | 2.93  |
|    | 416640 | BE262478  | Hs.79404  | neuron-specific protein                  | 2.93 | 2.78 | 3.09  |
|    | 443264 | BE221477  | Hs.132137 | ESTs, Moderately similar to A47582 B-cel | 2.92 | 2.35 | 4.27  |
| 35 | 410491 | AA485131  | Hs.64001  | Homo sapiens clone 25218 mRNA sequence   | 2.91 | 2.83 | 3.84  |
|    | 405545 |           |           | Target Exon                              | 2.90 | 2.44 | 2.90  |
|    | 451537 | R56631    | Hs.26550  | retinoid X receptor, gamma               | 2.90 | 4.09 | 3.40  |
|    | 439926 | AW014875  | Hs.137007 | ESTs                                     | 2.90 | 2.43 | 2.90  |
|    | 406673 | M34996    | Hs.198253 | major histocompatibility complex, class  | 2.89 | 3.22 | 1.44  |
| 40 | 418007 | M13509    | Hs.83169  | matrix metalloproteinase 1 (interstitial | 2.89 | 3.90 | 2.89  |
|    | 440065 | W03476    | Hs.266331 | hypothetical protein MG04595             | 2.89 | 4.40 | 3.05  |
|    | 442739 | NM_007274 | Hs.8679   | cytosolic acyl coenzyme A thioester hydr | 2.88 | 2.36 | 4.54  |
|    | 424620 | AA101043  | Hs.151254 | kallikrein 7 (chymolytic, stratum corn   | 2.86 | 3.23 | 1.95  |
|    | 407856 | AA045281  | Hs.266175 | phosphoprotein associated with GEMs      | 2.84 | 1.84 | 2.84  |
| 45 | 430540 | AW245422  |           | Homo sapiens cDNA: FLJ22105 fis, clone H | 2.84 | 1.80 | 2.92  |
|    | 424153 | AA451737  | Hs.141496 | MAGE-like 2                              | 2.84 | 2.26 | 2.84  |
|    | 420798 | W93774    | Hs.99936  | keratin 10 (epidermolytic hyperkeratosis | 2.81 | 2.91 | 0.83  |
|    | 431317 | AA502682  |           | gb:ng23d01.s1 NCI_CGAP_Ov2 Homo sapiens  | 2.81 | 2.17 | 2.96  |
|    | 424800 | AL035588  | Hs.153203 | MyoD family inhibitor                    | 2.80 | 2.06 | 4.10  |
| 50 | 448111 | AA053496  | Hs.20315  | interferon-induced protein with tetratri | 2.79 | 1.85 | 2.42  |
|    | 431183 | NM_006855 | Hs.250696 | KDEL (Lys-Asp-Glu-Leu) endoplasmic retic | 2.78 | 2.34 | 6.53  |
|    | 448719 | AA033627  | Hs.21858  | trinucleotide repeat containing 3        | 2.78 | 3.75 | 4.01  |
|    | 427951 | AI826125  | Hs.43546  | ESTs                                     | 2.78 | 1.99 | 2.70  |
|    | 453912 | AL121031  |           | SWI/SNF related, matrix associated, acli | 2.77 | 2.28 | 2.77  |
| 55 | 426711 | AA383471  | Hs.343800 | conserved gene amplified in osteosarcoma | 2.75 | 1.98 | 2.75  |
|    | 409430 | R21945    | Hs.346735 | splicing factor, arginine/serine-rich 5  | 2.74 | 3.18 | 3.60  |
|    | 409041 | AB033025  | Hs.50081  | Hypothetical protein, XP_051860 (KIAA119 | 2.72 | 2.24 | 2.72  |
|    | 442117 | AW664964  | Hs.128899 | ESTs; hypothetical protein for IMAGE:447 | 2.72 | 2.31 | 3.59  |
|    | 420552 | AK000492  | Hs.98806  | hypothetical protein                     | 2.72 | 1.85 | 2.72  |
| 60 | 409103 | AF251237  | Hs.112208 | XAGE-1 protein                           | 2.72 | 2.18 | 2.72  |
|    | 439963 | AW247529  | Hs.6793   | platelet-activating factor acetylhydrola | 2.71 | 2.20 | 4.48  |
|    | 413171 | AA318325  | Hs.75219  | tyrosinase-related protein 1             | 2.71 | 5.74 | 2.62  |
|    | 436700 | AI693690  | Hs.301406 | hypothetical protein PP3501              | 2.71 | 3.37 | 3.32  |
|    | 419098 | AA234041  | Hs.87271  | ESTs                                     | 2.70 | 3.53 | 1.35  |
| 65 | 436608 | AA628980  | Hs.192371 | down syndrome critical region protein DS | 2.69 | 2.48 | 2.69  |
|    | 418067 | AI127958  | Hs.83393  | cystatin E/M                             | 2.68 | 3.04 | 0.56  |
|    | 439453 | BE264974  | Hs.6566   | thyroid hormone receptor interactor 13   | 2.67 | 2.36 | 3.16  |
|    | 437723 | AI672731  | Hs.13256  | ESTs                                     | 2.66 | 2.16 | 2.66  |
|    | 411252 | AB018549  | Hs.69328  | MD-2 protein                             | 2.66 | 1.81 | 2.66  |
| 70 | 424321 | W74048    | Hs.1765   | lymphocyte-specific protein tyrosine kin | 2.66 | 2.43 | 3.92  |
|    | 453837 | AL138387  | Hs.256126 | baculoviral IAP repeat-containing 7 (liv | 2.65 | 3.71 | 2.80  |
|    | 434826 | AF155661  | Hs.22265  | pyruvate dehydrogenase phosphatase       | 2.64 | 1.85 | 4.72  |
|    | 414696 | AF002020  | Hs.76918  | Niemann-Pick disease, type C1            | 2.64 | 2.07 | 2.64  |
|    | 444371 | BE540274  | Hs.239    | forkhead box M1                          | 2.64 | 2.82 | 4.46  |
| 75 | 436291 | BE568452  | Hs.344037 | protein regulator of cytokinesis 1       | 2.63 | 1.81 | 2.95  |
|    | 439310 | AF086120  | Hs.102793 | ESTs                                     | 2.62 | 2.38 | 10.12 |
|    | 420218 | AW958037  |           | ribosomal protein L4                     | 2.62 | 2.80 | 2.62  |
|    | 438746 | AI885815  | Hs.184727 | Human melanoma-associated antigen p97 (m | 2.60 | 3.27 | 2.12  |
|    | 432828 | AB042326  | Hs.287402 | chondroitin 4-sulfotransferase           | 2.60 | 2.67 | 3.03  |
| 80 | 408367 | AK001178  | Hs.44424  | homolog of rat orphan transporter v7-3   | 2.59 | 3.22 | 2.59  |
|    | 408527 | AL135018  | Hs.33074  | Homo sapiens, clone IMAGE:3606519, mRNA, | 2.58 | 1.69 | 2.05  |
|    | 444809 | BE207568  | Hs.208219 | oculopainin                              | 2.58 | 2.77 | 2.88  |
|    | 432886 | BE159028  | Hs.279704 | chromatin accessibility complex 1        | 2.58 | 1.83 | 2.58  |
|    | 434276 | AF123659  | Hs.93605  | leucine zipper, putative tumor suppresso | 2.55 | 3.70 | 3.28  |
|    | 412326 | R07566    | Hs.73817  | small inducible cytokine A3 (homologous  | 2.55 | 2.14 | 1.62  |
|    | 410174 | AA306007  | Hs.59461  | DKFZP434C245 protein                     | 2.55 | 2.07 | 2.55  |
|    | 447735 | AA775268  | Hs.6127   | Homo sapiens cDNA: FLJ23020 fis, clone L | 2.54 | 2.17 | 4.01  |

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|    |        |           |           |  |      |      |      |
|----|--------|-----------|-----------|--|------|------|------|
| 5  | 422173 | BE385828  | Hs.250619 | phorbol-like protein MDS019 (CEM15)      | 2.53 | 1.68 | 3.16 |
|    | 418506 | AA084248  | Hs.85339  | G protein-coupled receptor 39            | 2.53 | 2.74 | 3.93 |
|    | 437396 | BE140396  | Hs.21621  | hypothetical protein DKFZp762C0076       | 2.52 | 1.62 | 3.17 |
|    | 448140 | AF146761  | Hs.20450  | BCM-like membrane protein precursor      | 2.51 | 2.67 | 1.88 |
|    | 442426 | AI373062  | Hs.332938 | hypothetical protein MGC5370             | 2.51 | 2.08 | 4.57 |
| 10 | 417427 | M90391    | Hs.82127  | interleukin 16 (lymphocyte chemoattracta | 2.51 | 1.74 | 2.68 |
|    | 427581 | NM_014788 | Hs.179703 | KIAA0129 gene product                    | 2.51 | 1.67 | 2.24 |
|    | 432800 | BE391046  | Hs.278962 | AIM-1 protein                            | 2.51 | 5.55 | 2.42 |
|    | 408996 | AI979168  | Hs.344096 | glycoprotein (transmembrane) nmb         | 2.50 | 1.95 | 2.41 |
|    | 410326 | AI368909  | Hs.47650  | ESTs                                     | 2.50 | 2.85 | 2.63 |
| 15 | 452833 | BE559681  | Hs.30736  | KIAA0124 protein                         | 2.50 | 3.14 | 3.07 |
|    | 410016 | AA297977  | Hs.57907  | small inducible cytokine subfamily A (Cy | 2.49 | 3.38 | 2.91 |
|    | 429083 | Y09397    | Hs.227817 | BCL2-related protein A1                  | 2.48 | 1.85 | 2.70 |
|    | 418460 | M26315    | Hs.85258  | CD8 antigen, alpha polypeptide (p32)     | 2.48 | 2.33 | 2.99 |
|    | 409142 | AL136877  | Hs.50758  | SMC4 (structural maintenance of chromoso | 2.47 | 1.88 | 4.14 |
| 20 | 412970 | AB026436  | Hs.177534 | dual specificity phosphatase 10          | 2.46 | 2.00 | 0.98 |
|    | 401780 |           |           | NM_005557: Homo sapiens keratin 16 (foca | 2.44 | 2.30 | 1.39 |
|    | 416426 | AA180256  | Hs.210473 | Homo sapiens cDNA FLJ14872 fs, clone PL  | 2.44 | 1.57 | 0.88 |
|    | 432606 | NM_002104 | Hs.30066  | granzyme K (serine protease, granzyme 3; | 2.42 | 1.91 | 2.56 |
|    | 417880 | BE241595  | Hs.82848  | selectin L (lymphocyte adhesion molecule | 2.42 | 2.31 | 4.27 |
| 25 | 415929 | AA724373  | Hs.49344  | hypothetical protein FLJ11006            | 2.41 | 2.73 | 2.41 |
|    | 415752 | BE314524  | Hs.78776  | putative transmembrane protein           | 2.41 | 2.07 | 3.41 |
|    | 409703 | NM_006187 | Hs.56009  | 2'-5'-oligoadenylate synthetase 3 (100 k | 2.41 | 2.34 | 3.26 |
|    | 414004 | AA737033  | Hs.7155   | ESTs, Moderately similar to 2115357A TYK | 2.40 | 1.65 | 2.40 |
|    | 453857 | AL080235  | Hs.35861  | DKFZP586E1621 protein                    | 2.40 | 2.18 | 8.13 |
| 30 | 410290 | AA402307  | Hs.322844 | hypothetical protein DKFZp564A176        | 2.40 | 2.88 | 2.46 |
|    | 403328 |           |           | Target Exon                              | 2.39 | 2.00 | 1.95 |
|    | 427540 | R12014    | Hs.20976  | ESTs                                     | 2.39 | 1.73 | 3.24 |
|    | 449523 | NM_000579 | Hs.54443  | chemokine (C-C motif) receptor 5         | 2.39 | 1.96 | 2.39 |
|    | 433848 | AF095719  | Hs.93764  | carboxypeptidase A4                      | 2.38 | 2.45 | 2.65 |
| 35 | 438501 | Z44110    | Hs.86149  | phosphoinositol 3-phosphate-binding prot | 2.38 | 1.85 | 2.65 |
|    | 430066 | AI929659  | Hs.237825 | signal recognition particle 72kD         | 2.38 | 1.60 | 2.79 |
|    | 447343 | AA256641  | Hs.236894 | ESTs, Highly similar to S02392 alpha-2-m | 2.37 | 1.99 | 6.23 |
|    | 450447 | AF212223  | Hs.25010  | hypothetical protein P15-2               | 2.37 | 1.72 | 3.24 |
|    | 458997 | AW937420  |           | ESTs                                     | 2.37 | 1.57 | 3.27 |
| 40 | 451446 | AI826288  | Hs.171637 | hypothetical protein MGC2628             | 2.35 | 1.90 | 2.39 |
|    | 408838 | AI669535  | Hs.40369  | ESTs                                     | 2.35 | 1.59 | 2.71 |
|    | 448275 | BE514434  | Hs.20830  | kinesin-like 2                           | 2.35 | 2.19 | 2.35 |
|    | 424148 | BE242274  | Hs.1741   | integrin, beta 7                         | 2.35 | 1.89 | 3.07 |
|    | 410700 | AA352335  | Hs.65641  | hypothetical protein FLJ20073            | 2.35 | 1.65 | 2.35 |
| 45 | 409105 | AW467539  | Hs.255877 | ESTs                                     | 2.35 | 2.50 | 2.35 |
|    | 452882 | AW972990  | Hs.196270 | folate transporter/carrier               | 2.34 | 2.12 | 2.90 |
|    | 425606 | U52112    | Hs.158331 | renin-binding protein                    | 2.34 | 2.69 | 1.69 |
|    | 433576 | BE080715  | Hs.161091 | ESTs                                     | 2.34 | 3.74 | 2.34 |
|    | 423494 | AW504365  | Hs.24143  | Wiskott-Aldrich syndrome protein interac | 2.34 | 2.08 | 4.48 |
| 50 | 431620 | AA126109  | Hs.264981 | 2'-5'-oligoadenylate synthetase 2 (69-71 | 2.33 | 2.43 | 2.66 |
|    | 436614 | AW104388  | Hs.149091 | ESTs                                     | 2.33 | 3.37 | 2.33 |
|    | 425289 | AW139342  | Hs.155530 | interferon, gamma-inducible protein 16   | 2.33 | 1.67 | 4.28 |
|    | 426827 | AW067805  | Hs.172655 | methylene/tetrahydrofolate dehydrogenase | 2.33 | 1.58 | 0.40 |
|    | 430015 | AW768399  |           | ESTs                                     | 2.33 | 1.76 | 2.33 |
| 55 | 421282 | AA286914  | Hs.40782  | ESTs                                     | 2.32 | 1.65 | 2.49 |
|    | 447737 | AK000643  | Hs.19404  | DKFZP564L0862 protein                    | 2.32 | 2.16 | 1.48 |
|    | 432540 | AI821517  | Hs.105866 | ESTs                                     | 2.32 | 1.58 | 2.35 |
|    | 418064 | BE387287  | Hs.83384  | S100 calcium-binding protein, beta (neur | 2.32 | 2.46 | 9.99 |
|    | 414829 | AA321588  | Hs.77436  | pleckstrin                               | 2.32 | 1.91 | 2.32 |
| 60 | 425390 | AI092634  | Hs.156114 | protein tyrosine phosphatase, non-recept | 2.31 | 1.63 | 2.31 |
|    | 448569 | BE382657  | Hs.21486  | signal transducer and activator of trans | 2.31 | 2.79 | 2.41 |
|    | 428819 | AL135623  | Hs.193914 | KIAA0575 gene product                    | 2.30 | 1.60 | 2.95 |
|    | 409512 | AW979187  | Hs.293591 | melanoma differentiation associated prot | 2.30 | 1.95 | 3.66 |
|    | 425231 | AA527161  |           | ESTs                                     | 2.28 | 1.96 | 2.36 |
| 65 | 416091 | AF295370  | Hs.283082 | defensin, beta 3                         | 2.28 | 2.76 | 2.18 |
|    | 418478 | U38945    | Hs.1174   | cyclin-dependent kinase inhibitor 2A (me | 2.27 | 2.88 | 2.46 |
|    | 427719 | AI393122  | Hs.134726 | ESTs                                     | 2.27 | 1.88 | 2.29 |
|    | 431830 | Y16645    | Hs.271387 | small inducible cytokine subfamily A (Cy | 2.27 | 2.16 | 4.09 |
|    | 457465 | AW301344  | Hs.122908 | DNA replication factor                   | 2.26 | 2.23 | 2.26 |
| 70 | 431639 | AK000680  | Hs.266175 | phosphoprotein associated with GEMs      | 2.26 | 2.13 | 3.16 |
|    | 442485 | BE092285  | Hs.29724  | hypothetical protein FLJ13187            | 2.26 | 1.75 | 2.84 |
|    | 424687 | J05070    | Hs.151738 | matrix metalloproteinase 9 (gelatinase B | 2.26 | 3.38 | 2.56 |
|    | 449317 | AW293413  | Hs.132906 | 19A24 protein                            | 2.26 | 2.04 | 2.73 |
|    | 429922 | Z97630    | Hs.226117 | H1 histone family, member 0              | 2.26 | 1.59 | 2.38 |
| 75 | 441362 | BE614410  | Hs.23044  | RAD51 (S. cerevisiae) homolog (E coli Re | 2.25 | 1.86 | 3.07 |
|    | 425388 | AA329384  | Hs.156110 | immunoglobulin kappa constant            | 2.25 | 1.91 | 2.25 |
|    | 417282 | AA195203  |           | RAB5C, member RAS oncogene family        | 2.25 | 2.23 | 3.20 |
|    | 406687 | M31126    |           | matrix metalloproteinase 11 (stromelysin | 2.24 | 2.69 | 2.78 |
|    | 437862 | AW978107  | Hs.5884   | Homo sapiens mRNA; cDNA DKFZp586C0224 (f | 2.23 | 2.20 | 2.51 |
| 80 | 408015 | AW136771  | Hs.244349 | epidermal differentiation complex protei | 2.23 | 4.59 | 2.47 |
|    | 442503 | AF147078  | Hs.150853 | p53-responsive gene 5                    | 2.23 | 3.62 | 0.85 |
|    | 429747 | M87507    | Hs.2490   | caspase 1, apoptosis-related cysteine pr | 2.22 | 1.60 | 1.69 |
|    | 424825 | AF207069  | Hs.153357 | procollagen-lysine, 2-oxoglutarate 5-cio | 2.22 | 5.53 | 2.46 |
|    | 417693 | AW959741  | Hs.40368  | adaptor-related protein complex 1, sigma | 2.21 | 2.40 | 4.37 |
|    | 422947 | AA306782  | Hs.122552 | G-2 and S-phase expressed 1              | 2.21 | 2.06 | 2.32 |
|    | 445875 | AF070524  | Hs.13410  | Homo sapiens clone 24453 mRNA sequence   | 2.20 | 2.69 | 2.91 |
|    | 417366 | BE185289  | Hs.1076   | small proline-rich protein 1B (cornifin) | 2.20 | 2.26 | 3.79 |

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|    |        |           |           |   |      |      |      |
|----|--------|-----------|-----------|---|------|------|------|
|    | 450065 | AL050107  | Hs.24341  | transcriptional co-activator with PDZ-bi  | 2.20 | 1.96 | 2.44 |
|    | 423397 | NM_001838 | Hs.1652   | chemokine (C-C motif) receptor 7          | 2.20 | 3.28 | 2.99 |
|    | 427051 | BE178110  | Hs.173374 | Homo sapiens cDNA FLJ10500 fis, clone NT  | 2.20 | 1.98 | 3.40 |
| 5  | 418203 | X54942    | Hs.83758  | CDC28 protein kinase 2                    | 2.20 | 1.44 | 2.31 |
|    | 409354 | N68188    | Hs.159472 | Homo sapiens cDNA: FLJ22224 fis, clone H  | 2.18 | 2.44 | 2.70 |
|    | 418941 | AA452970  | Hs.239527 | E1B-55kDa-associated protein 5            | 2.18 | 1.75 | 2.70 |
|    | 424723 | BE409813  | Hs.152337 | protein arginine N-methyltransferase 3(h  | 2.18 | 1.55 | 2.44 |
|    | 430132 | AA204686  | Hs.234149 | hypothetical protein FLJ20647             | 2.18 | 1.43 | 2.37 |
| 10 | 452194 | AI694413  |           | Ubiquitin-like protein FAT107??? - diubiq | 2.17 | 3.07 | 1.76 |
|    | 417933 | X02308    | Hs.82962  | thymidylate synthetase                    | 2.17 | 1.86 | 4.15 |
|    | 420137 | AA306478  | Hs.95327  | CD3D antigen, delta polypeptide (TIT3 co  | 2.17 | 2.38 | 2.91 |
|    | 425317 | AW205118  | Hs.210546 | interleukin 21 receptor                   | 2.17 | 2.02 | 2.22 |
|    | 447769 | AW873704  | Hs.320831 | Homo sapiens cDNA FLJ14597 fis, clone NT  | 2.16 | 1.87 | 2.49 |
|    | 407748 | AL079409  | Hs.38176  | KIAA0606 protein; SCN Circadian Oscillat  | 2.16 | 1.55 | 2.26 |
| 15 | 452958 | AA883929  | Hs.40527  | ESTs                                      | 2.15 | 1.56 | 2.84 |
|    | 440325 | NM_003812 | Hs.7164   | a disintegrin and metalloproteinase doma  | 2.15 | 1.76 | 2.97 |
|    | 426153 | AF057169  | Hs.182771 | vitelliform macular dystrophy (Best dise  | 2.15 | 1.85 | 2.75 |
|    | 430580 | AA806105  | Hs.300697 | immunoglobulin heavy constant gamma 3 (G  | 2.14 | 1.88 | 4.49 |
|    | 451952 | AL120173  | Hs.301663 | ESTs                                      | 2.13 | 2.08 | 2.13 |
| 20 | 450534 | AI570189  | Hs.25132  | KIAA0470 gene product                     | 2.12 | 1.67 | 3.41 |
|    | 449217 | AA278536  | Hs.23262  | ribonuclease, RNase A family, k6          | 2.12 | 1.75 | 2.27 |
|    | 432734 | AA837396  | Hs.263925 | LIS1-interacting protein NUDE1, rat homo  | 2.12 | 2.14 | 2.49 |
|    | 413190 | AA151802  | Hs.40368  | adaptor-related protein complex 1, sigma  | 2.12 | 2.46 | 2.67 |
| 25 | 443991 | NM_002250 | Hs.10082  | potassium intermediate/small conductance  | 2.12 | 2.16 | 2.82 |
|    | 429624 | AA458648  | Hs.99476  | ESTs, Weakly similar to 13131848 alpha1   | 2.11 | 2.01 | 0.68 |
|    | 447178 | AW594641  | Hs.192417 | ESTs                                      | 2.10 | 2.52 | 2.10 |
|    | 423017 | AW178761  | Hs.227948 | serine (or cysteine) proteinase inhibito  | 2.10 | 1.52 | 4.01 |
|    | 452110 | T47667    | Hs.28005  | Homo sapiens cDNA FLJ11309 fis, clone PL  | 2.10 | 1.53 | 2.10 |
| 30 | 436797 | AA731491  | Hs.334477 | hypothetical protein MGC14879             | 2.10 | 1.55 | 2.41 |
|    | 453256 | AI565587  | Hs.32556  | KIAA0379 protein                          | 2.09 | 2.13 | 2.89 |
|    | 405547 |           |           | NM_018833*:Homo sapiens transporter 2, A  | 2.09 | 2.61 | 2.09 |
|    | 434203 | BE262677  | Hs.283558 | hypothetical protein PRO1855              | 2.09 | 1.76 | 4.10 |
|    | 412609 | Z48804    | Hs.74124  | ocular albinism 1 (Nettleship-Falls)      | 2.09 | 3.91 | 2.38 |
| 35 | 414821 | M63835    | Hs.77424  | Fc fragment of IgG, high affinity Ia, re  | 2.09 | 1.62 | 1.28 |
|    | 417576 | AA339449  | Hs.82285  | phosphoribosylglycinamide formyltransfer  | 2.08 | 1.86 | 2.08 |
|    | 447377 | X77343    | Hs.334334 | transcription factor AP-2 alpha           | 2.08 | 2.83 | 2.08 |
|    | 423198 | M81933    | Hs.1634   | cell division cycle 25A                   | 2.08 | 1.66 | 2.23 |
|    | 433068 | NM_006456 | Hs.288215 | sialyltransferase                         | 2.08 | 1.94 | 2.60 |
| 40 | 409038 | T97490    | Hs.50002  | small inducible cytokine subfamily A (Cy  | 2.07 | 1.91 | 3.62 |
|    | 452392 | L20815    | Hs.507    | comeodesmosin                             | 2.07 | 3.96 | 0.97 |
|    | 403532 |           |           | NM_024638:Homo sapiens hypothetical prot  | 2.07 | 1.88 | 2.68 |
|    | 439859 | AW292872  | Hs.124554 | ESTs                                      | 2.07 | 1.72 | 2.22 |
|    | 428484 | AF104032  | Hs.184601 | solute carrier family 7 (cationic amino   | 2.07 | 2.26 | 4.22 |
| 45 | 442643 | U82756    |           | PRP4/STK/WD splicing factor               | 2.07 | 1.74 | 1.90 |
|    | 426312 | AF026939  | Hs.181874 | interferon-induced protein with tetratri  | 2.06 | 2.08 | 1.43 |
|    | 409988 | N27687    | Hs.334334 | transcription factor AP-2 alpha (activat  | 2.06 | 2.12 | 2.06 |
|    | 408548 | AA055449  | Hs.63187  | ESTs, Weakly similar to ALUC_HUMAN !!!    | 2.06 | 1.65 | 2.91 |
|    | 442271 | AF000652  | Hs.8180   | syndecan binding protein (syntenin)       | 2.06 | 1.97 | 2.42 |
| 50 | 414142 | AW368397  | Hs.334485 | hemicentin (fibulin 6)                    | 2.05 | 2.44 | 2.05 |
|    | 420931 | AF044197  | Hs.100431 | small inducible cytokine B subfamily (Cy  | 2.05 | 2.37 | 2.05 |
|    | 450325 | AI935962  | Hs.91973  | ESTs                                      | 2.05 | 1.67 | 1.82 |
|    | 424090 | X99699    | Hs.139262 | XIAP associated factor-1                  | 2.05 | 1.56 | 1.99 |
|    | 438209 | AL120659  | Hs.6111   | aryl-hydrocarbon receptor nuclear trans   | 2.04 | 1.52 | 2.07 |
| 55 | 413794 | AF234532  | Hs.61638  | myosin X                                  | 2.04 | 2.02 | 2.11 |
|    | 414945 | BE076358  | Hs.77667  | lymphocyte antigen 6 complex, locus E     | 2.04 | 4.57 | 1.64 |
|    | 425580 | L11144    | Hs.1907   | galanin                                   | 2.04 | 1.67 | 2.26 |
|    | 420052 | AA418850  | Hs.44410  | ESTs                                      | 2.03 | 1.90 | 2.21 |
|    | 415947 | U04045    | Hs.78934  | mutS (E. coli) homolog 2 (colon cancer,   | 2.03 | 1.53 | 2.31 |
| 60 | 416406 | D86961    | Hs.79299  | lipoma HMGIC fusion partner-like 2        | 2.02 | 1.73 | 2.02 |
|    | 426759 | AI590401  | Hs.21213  | ESTs                                      | 2.02 | 1.86 | 5.47 |
|    | 432435 | BE218886  | Hs.282070 | ESTs                                      | 2.02 | 1.39 | 1.67 |
|    | 444184 | T87841    | Hs.282990 | Human DNA sequence from clone RP1-28H20   | 2.02 | 1.57 | 2.02 |
|    | 421574 | AJ000152  | Hs.105924 | defensin, beta 2                          | 2.02 | 2.22 | 2.15 |
| 65 | 411358 | R47479    | Hs.94761  | KIAA1691 protein                          | 2.01 | 2.55 | 1.75 |
|    | 408209 | NM_004454 | Hs.43697  | ets variant gene 5 (ets-related molecule  | 2.01 | 2.58 | 2.39 |
|    | 409262 | AK000631  | Hs.52256  | hypothetical protein FLJ20524             | 2.01 | 1.50 | 2.01 |
|    | 400750 |           |           | Target Exon                               | 2.01 | 1.73 | 2.09 |
|    | 439496 | BE616501  | Hs.32343  | Homo sapiens, Similar to RIKEN cDNA 1110  | 2.01 | 2.42 | 0.78 |
| 70 | 420460 | AA262331  | Hs.48376  | Homo sapiens clone HB-2 mRNA sequence     | 2.01 | 1.65 | 1.72 |
|    | 446839 | BE091926  | Hs.16244  | mitotic spindle coiled-coil related prot  | 2.01 | 1.61 | 1.03 |
|    | 427647 | W19744    | Hs.180059 | Homo sapiens cDNA FLJ20653 fis, clone KA  | 2.00 | 2.11 | 2.33 |
|    | 436200 | R51386    | Hs.124881 | ESTs                                      | 2.00 | 1.89 | 2.24 |
|    | 414175 | AI308876  | Hs.103849 | hypothetical protein DKFZp761D112         | 1.99 | 1.50 | 1.99 |
| 75 | 420005 | AW271106  | Hs.133294 | ESTs                                      | 1.99 | 2.03 | 2.59 |
|    | 417848 | AA206581  | Hs.116586 | ESTs, Weakly similar to JC5314 CDC28/cdc  | 1.99 | 1.42 | 2.17 |
|    | 435545 | AA687415  | Hs.28107  | ESTs                                      | 1.99 | 1.89 | 1.99 |
|    | 443426 | AF098158  | Hs.93329  | chromosome 20 open reading frame 1        | 1.99 | 2.23 | 3.44 |
|    | 444342 | NM_014398 | Hs.10887  | similar to lysosome-associated membrane   | 1.99 | 2.05 | 0.32 |
| 80 | 453905 | NM_002314 | Hs.36566  | LIM domain kinase 1                       | 1.98 | 2.48 | 2.79 |
|    | 453884 | AA355925  | Hs.36232  | KIAA0186 gene product                     | 1.98 | 1.93 | 1.98 |
|    | 459373 | BE408266  | Hs.301406 | hypothetical protein PP3501               | 1.98 | 2.22 | 1.91 |
|    | 422809 | AK001379  | Hs.121028 | hypothetical protein FLJ10549             | 1.98 | 1.68 | 1.98 |
|    | 452840 | AI097393  | Hs.43481  | hypothetical protein DKFZp564K192         | 1.98 | 1.67 | 2.18 |

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|    |        |           |           |  |      |      |      |
|----|--------|-----------|-----------|--|------|------|------|
| 5  | 409178 | BE393948  | Hs.50915  | kallikrein 5                             | 1.98 | 3.76 | 1.37 |
|    | 420691 | AW504814  | Hs.287379 | Homo sapiens mRNA for FLJ00111 protein,  | 1.98 | 1.90 | 2.63 |
|    | 414020 | NM_002984 | Hs.75703  | small inducible cytokine A4 (homologous  | 1.97 | 1.88 | 1.23 |
|    | 443105 | X96753    | Hs.9004   | chondroitin sulfate proteoglycan 4 (mela | 1.97 | 1.95 | 5.55 |
|    | 413450 | Z99716    | Hs.75372  | N-acetylgalactosaminidase, alpha-        | 1.97 | 1.77 | 1.97 |
| 10 | 431574 | AW572659  | Hs.261373 | hypothetical protein dJ434O14.3          | 1.97 | 1.73 | 3.89 |
|    | 408561 | AI308037  | Hs.84120  | hypothetical protein MGC13016            | 1.97 | 2.89 | 2.08 |
|    | 421866 | M24470    | Hs.1435   | guanosine monophosphate reductase        | 1.97 | 1.95 | 2.65 |
|    | 405506 |           |           | Target Exon                              | 1.96 | 1.72 | 2.27 |
|    | 412490 | AW803564  | Hs.288850 | Homo sapiens cDNA: FLJ22528 fis, clone H | 1.96 | 1.74 | 2.35 |
| 15 | 437379 | AL359575  | Hs.23765  | Homo sapiens mRNA: cDNA DKFZp547M123 (fr | 1.95 | 2.09 | 2.77 |
|    | 448356 | AL120837  | Hs.20993  | high-glucose-regulated protein 8         | 1.95 | 1.66 | 2.58 |
|    | 453931 | AL121278  | Hs.25144  | ESTs                                     | 1.95 | 2.38 | 1.95 |
|    | 424308 | AW975531  | Hs.154443 | minichromosome maintenance deficient (S. | 1.95 | 1.63 | 2.82 |
|    | 429547 | AW0009166 | Hs.99376  | FGENESH predicted novel secreted protein | 1.94 | 2.02 | 1.35 |
| 20 | 442064 | AI422667  | Hs.88594  | ESTs                                     | 1.94 | 1.49 | 2.21 |
|    | 400533 |           |           | ENSP00000209376*.PRED65 protein (Fragmen | 1.94 | 1.69 | 1.94 |
|    | 448752 | AA593867  | Hs.300842 | KIAA1608 protein                         | 1.94 | 1.71 | 2.40 |
|    | 408636 | BE294925  | Hs.46680  | CGI-12 protein                           | 1.94 | 1.69 | 2.93 |
|    | 439569 | AW602166  | Hs.222399 | CEGP1 protein                            | 1.93 | 1.62 | 3.21 |
| 25 | 405779 |           |           | NM_005367:Homo sapiens melanoma antigen, | 1.93 | 1.83 | 1.99 |
|    | 444670 | H58373    | Hs.332938 | hypothetical protein MGC5370             | 1.93 | 1.97 | 1.93 |
|    | 446950 | AA305800  | Hs.5672   | hypothetical protein AF140225            | 1.93 | 1.56 | 1.61 |
|    | 409185 | AW961601  | Hs.252406 | hypothetical protein FLJ12296 similar to | 1.93 | 2.12 | 2.63 |
|    | 409098 | AA132672  | Hs.7984   | pleckstrin homology, Sec7 and coiled/coi | 1.92 | 2.12 | 2.51 |
| 30 | 413916 | N49813    | Hs.75615  | apolipoprotein C-II                      | 1.92 | 1.98 | 0.22 |
|    | 429609 | AF002246  | Hs.210863 | cell adhesion molecule with homology to  | 1.92 | 1.65 | 6.39 |
|    | 402994 |           |           | NM_002463*:Homo sapiens myxovirus (influ | 1.92 | 2.45 | 1.89 |
|    | 425722 | AI659076  | Hs.97031  | hypothetical protein MGC13047            | 1.92 | 2.69 | 2.30 |
|    | 421958 | AA357185  | Hs.109918 | ras homolog gene family, member H        | 1.92 | 2.10 | 2.93 |
| 35 | 412584 | X54870    | Hs.74085  | DNA segment on chromosome 12 (unique) 24 | 1.91 | 1.57 | 1.91 |
|    | 415402 | AA164687  | Hs.177576 | mannosyl (alpha-1,3)-glycoprotein beta-  | 1.91 | 1.44 | 1.68 |
|    | 430280 | AA361258  | Hs.237868 | interleukin 7 receptor                   | 1.90 | 1.52 | 1.14 |
|    | 426251 | M24283    | Hs.168383 | intercellular adhesion molecule 1 (CD54) | 1.90 | 2.16 | 1.21 |
|    | 440773 | AA352702  | Hs.37747  | Homo sapiens, Similar to RIKEN cDNA 2700 | 1.90 | 1.84 | 2.07 |
| 40 | 427923 | AW274357  | Hs.301406 | hypothetical protein PP3501              | 1.90 | 4.26 | 1.70 |
|    | 426470 | AA528794  | Hs.128644 | ESTs                                     | 1.90 | 2.69 | 2.04 |
|    | 409557 | BE182896  | Hs.3686   | ESTs                                     | 1.90 | 2.01 | 1.90 |
|    | 429714 | BE561801  | Hs.2484   | T-cell leukemia/lymphoma 1A              | 1.90 | 2.49 | 2.52 |
|    | 428125 | AA393071  | Hs.182579 | leucine aminopeptidase                   | 1.89 | 1.89 | 1.49 |
| 45 | 427634 | AI399745  | Hs.18449  | hypothetical protein MGC10820            | 1.89 | 3.59 | 1.71 |
|    | 452874 | AK001061  | Hs.30925  | hypothetical protein FLJ10199            | 1.89 | 1.67 | 1.45 |
|    | 418883 | BE387036  | Hs.1211   | acid phosphatase 5, tartrate resistant   | 1.89 | 2.55 | 1.39 |
|    | 448243 | AW369771  |           | integrin, beta 8                         | 1.89 | 1.96 | 1.89 |
|    | 416114 | AI695549  | Hs.183868 | glucuronidase, beta                      | 1.89 | 1.70 | 1.10 |
| 50 | 425935 | Z98200    | Hs.163724 | HSPC019 protein                          | 1.88 | 1.86 | 2.04 |
|    | 440672 | AF083811  | Hs.7345   | MAD1 (mitotic arrest deficient, yeast, h | 1.88 | 4.16 | 1.78 |
|    | 430171 | AF086289  | Hs.234766 | skin-specific protein                    | 1.87 | 2.70 | 0.75 |
|    | 407366 | AF026942  | Hs.17518  | gb:Homo sapiens cig33 mRNA, partial sequ | 1.87 | 2.25 | 1.87 |
|    | 454294 | AB000734  | Hs.50640  | JAK binding protein                      | 1.87 | 1.98 | 1.46 |
| 55 | 417370 | T28651    | Hs.82030  | tryptophanyl-tRNA synthetase             | 1.87 | 2.73 | 1.71 |
|    | 409417 | AA156247  | Hs.104879 | serine (or cysteine) proteinase inhibito | 1.87 | 1.79 | 2.72 |
|    | 401781 |           |           | Target Exon                              | 1.87 | 1.88 | 1.16 |
|    | 440590 | AI863446  | Hs.266308 | mosaic serine protease                   | 1.86 | 1.79 | 1.13 |
|    | 428450 | NM_014791 | Hs.184339 | KIAA0175 gene product                    | 1.86 | 1.72 | 4.39 |
| 60 | 433675 | AW977653  | Hs.75319  | ribonucleotide reductase M2 polypeptide  | 1.86 | 1.81 | 1.86 |
|    | 429323 | NM_001649 | Hs.2391   | apical protein, Xenopus laevis-like      | 1.86 | 1.57 | 1.86 |
|    | 433001 | AF217513  | Hs.279905 | clone HQ0310 PRO0310p1                   | 1.85 | 1.71 | 5.82 |
|    | 453107 | NM_016113 | Hs.279746 | vanilloid receptor-like protein 1        | 1.85 | 2.75 | 1.84 |
|    | 430441 | BE398091  |           | desmoplakin (DPI, DPII)                  | 1.85 | 1.80 | 2.79 |
| 65 | 417512 | X76534    | Hs.82226  | glycoprotein (transmembrane) nmb         | 1.85 | 1.80 | 1.86 |
|    | 423673 | BE003054  | Hs.1695   | matrix metalloproteinase 12 (macrophage  | 1.85 | 1.94 | 1.85 |
|    | 431958 | X63629    | Hs.2877   | cadherin 3, type 1, P-cadherin (placenta | 1.85 | 1.72 | 2.52 |
|    | 414737 | AI160386  | Hs.125087 | ESTs                                     | 1.84 | 1.90 | 1.84 |
|    | 439979 | AW600291  | Hs.6823   | hypothetical protein FLJ10430            | 1.84 | 1.57 | 1.84 |
| 70 | 428311 | NM_005651 | Hs.183671 | tryptophan 2,3-dioxygenase               | 1.84 | 1.41 | 0.12 |
|    | 412141 | AI183838  | Hs.48938  | hypothetical protein FLJ21802            | 1.84 | 1.70 | 3.15 |
|    | 428515 | AF030339  | Hs.286229 | plexin C1                                | 1.84 | 1.66 | 1.84 |
|    | 427914 | AA417350  | Hs.20575  | ESTs                                     | 1.84 | 2.32 | 2.17 |
|    | 439352 | BE514347  | Hs.169615 | hypothetical protein FLJ20989            | 1.84 | 1.55 | 1.84 |
| 75 | 413278 | BE563085  | Hs.833    | interferon-stimulated protein, 15 kDa    | 1.83 | 3.20 | 1.75 |
|    | 435080 | AI831760  | Hs.155111 | hypothetical protein FLJ14428            | 1.83 | 1.62 | 1.47 |
|    | 407966 | AA295052  | Hs.38516  | Homo sapiens, clone MGC:15887, mRNA, com | 1.83 | 1.58 | 2.11 |
|    | 421535 | AB002359  | Hs.105478 | phosphoribosylformylglycinamide syntha   | 1.83 | 1.73 | 2.18 |
|    | 433029 | NM_014322 | Hs.279926 | opsin 3 (encephalopsin)                  | 1.83 | 1.96 | 1.83 |
| 80 | 426158 | NM_001982 | Hs.199067 | v-erb-b2 avian erythroblastic leukemia v | 1.83 | 1.61 | 2.46 |
|    | 426890 | AA393167  | Hs.41294  | ESTs                                     | 1.82 | 2.44 | 1.82 |
|    | 411027 | AF072099  | Hs.67846  | leukocyte immunoglobulin-like receptor,  | 1.82 | 2.24 | 2.01 |
|    | 441859 | AW194364  | Hs.94814  | ESTs, Weakly similar to FIG1 MOUSE FIG-1 | 1.82 | 2.72 | 2.16 |
|    | 447435 | AA249439  | Hs.27027  | hypothetical protein DKFZp762H1311       | 1.82 | 1.50 | 1.82 |
|    | 448357 | N20169    | Hs.108923 | RAB38, member RAS oncogene family        | 1.82 | 2.52 | 1.76 |
|    | 420674 | NM_000055 | Hs.1327   | butyrylcholinesterase                    | 1.82 | 1.43 | 0.68 |
|    | 439219 | N33883    | Hs.41322  | ESTs                                     | 1.82 | 1.88 | 2.43 |

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|    |        |           |           |  |      |      |      |
|----|--------|-----------|-----------|--|------|------|------|
|    | 432810 | AA863400  |           | ESTs                                     | 1.82 | 1.43 | 1.82 |
|    | 417404 | NM_007350 | Hs.82101  | pleckstrin homology-like domain, family  | 1.82 | 1.98 | 1.82 |
|    | 447484 | AA464839  | Hs.292566 | hypothetical protein FLJ14697            | 1.82 | 1.63 | 1.82 |
| 5  | 436456 | AW292677  | Hs.248122 | G protein-coupled receptor 24            | 1.82 | 2.80 | 2.18 |
|    | 418918 | X07871    | Hs.89476  | CD2 antigen (p50), sheep red blood cell  | 1.82 | 2.28 | 2.00 |
|    | 424755 | AB033094  | Hs.152925 | KIAA1268 protein                         | 1.82 | 1.85 | 1.62 |
|    | 436315 | BE390513  | Hs.27935  | hypothetical protein MGC4837             | 1.82 | 1.74 | 5.18 |
|    | 420783 | AI659838  | Hs.99923  | lectin, galactoside-binding, soluble, 7  | 1.81 | 1.87 | 0.80 |
|    | 417105 | X60992    | Hs.81226  | CD6 antigen                              | 1.81 | 1.88 | 2.03 |
| 10 | 423961 | D13666    | Hs.136348 | perostin (OSF-2os)                       | 1.81 | 1.73 | 2.45 |
|    | 446019 | AI362520  |           | histone deacetylase 3                    | 1.81 | 1.39 | 2.24 |
|    | 412580 | AA113262  | Hs.17901  | Homo sapiens, clone IMAGE:3937015, mRNA, | 1.81 | 3.05 | 1.58 |
|    | 409415 | AA579258  | Hs.6083   | Homo sapiens cDNA: FLJ21028 fis, clone C | 1.80 | 2.00 | 1.78 |
|    | 453684 | AK001922  | Hs.34578  | alpha2,3-sialyltransferase               | 1.80 | 1.98 | 1.22 |
| 15 | 446921 | AB012113  | Hs.16530  | small inducible cytokine subfamily A (Cy | 1.80 | 1.56 | 1.71 |
|    | 453779 | N35187    | Hs.43388  | 28kD interferon responsive protein       | 1.80 | 2.42 | 2.04 |
|    | 434706 | AI656291  | Hs.116394 | ESTs                                     | 1.80 | 1.58 | 1.80 |
|    | 416065 | BE267931  | Hs.78996  | proliferating cell nuclear antigen       | 1.80 | 1.79 | 2.51 |
|    | 453331 | AI240665  |           | ESTs                                     | 1.79 | 1.43 | 2.33 |
| 20 | 429412 | NM_006235 | Hs.2407   | POU domain, class 2, associating factor  | 1.79 | 1.46 | 4.46 |
|    | 428784 | Y12851    | Hs.193470 | purinergic receptor P2X, ligand-gated io | 1.79 | 2.30 | 1.79 |
|    | 453507 | AF083217  | Hs.33085  | WD repeat domain 3                       | 1.79 | 1.49 | 1.51 |
|    | 452826 | BE245286  | Hs.301636 | peroxisomal biogenesis factor 6          | 1.79 | 1.57 | 2.00 |
| 25 | 439237 | AW408158  | Hs.318893 | ESTs, Weakly similar to A47582 B-cell gr | 1.79 | 2.26 | 2.22 |
|    | 406672 | M26041    | Hs.198253 | major histocompatibility complex, class  | 1.79 | 1.76 | 1.78 |
|    | 431009 | BE149762  | Hs.48956  | gap junction protein, beta 6 (connexin 3 | 1.79 | 1.43 | 3.32 |
|    | 452698 | NM_001295 | Hs.301921 | chemokine (C-C motif) receptor 1         | 1.78 | 1.66 | 1.29 |
|    | 424954 | NM_000546 | Hs.1846   | tumor protein p53 (Li-Fraumeni syndrome) | 1.78 | 1.73 | 2.35 |
| 30 | 436378 | AJ227874  | Hs.99244  | ESTs                                     | 1.78 | 1.84 | 1.78 |
|    | 421778 | AA428000  | Hs.283072 | actin related protein 2/3 complex, subun | 1.78 | 1.66 | 3.67 |
|    | 421948 | L42583    | Hs.334309 | keratin 6A                               | 1.78 | 1.74 | 3.00 |
|    | 414915 | NM_002462 | Hs.76391  | myxovirus (influenza) resistance 1, homo | 1.77 | 2.27 | 2.13 |
|    | 437317 | AA748613  | Hs.311977 | ESTs, Highly similar to SWI/SNF related, | 1.77 | 1.98 | 2.32 |
| 35 | 427318 | AF186081  | Hs.175783 | zinc transporter                         | 1.77 | 1.61 | 0.92 |
|    | 418403 | D86978    | Hs.84790  | KIAA0225 protein                         | 1.76 | 1.49 | 2.24 |
|    | 421433 | AI829192  | Hs.22380  | ESTs                                     | 1.76 | 1.49 | 2.52 |
|    | 450728 | AW162923  | Hs.25363  | presenilin 2 (Alzheimer disease 4)       | 1.76 | 1.74 | 1.76 |
|    | 428655 | H05769    | Hs.188757 | Homo sapiens, clone MGC:5564, mRNA, comp | 1.76 | 1.43 | 1.76 |
| 40 | 427536 | BE277141  | Hs.115803 | gb:601178666F1 NIH_MGC_20 Homo sapiens c | 1.76 | 2.12 | 1.76 |
|    | 433364 | AI075407  | Hs.296083 | ESTs, Moderately similar to I54374 gene  | 1.76 | 1.86 | 1.48 |
|    | 401994 |           |           | Target Exon                              | 1.75 | 1.44 | 1.75 |
|    | 418299 | AA279530  | Hs.83968  | integrin, beta 2 (antigen CD18 (p95), ly | 1.75 | 1.69 | 1.79 |
|    | 408633 | AW963372  | Hs.46677  | PRO2000 protein                          | 1.75 | 1.46 | 1.88 |
| 45 | 429978 | AA249027  |           | ribosomal protein S6                     | 1.75 | 1.60 | 1.92 |
|    | 450690 | AA296696  | Hs.333418 | FXVD domain-containing ion transport reg | 1.75 | 2.13 | 2.03 |
|    | 456967 | AW004056  | Hs.168357 | T-box 2                                  | 1.74 | 1.95 | 1.42 |
|    | 417866 | AW067903  | Hs.82772  | collagen, type XI, alpha 1               | 1.74 | 2.64 | 2.01 |
|    | 428746 | AW503820  | Hs.192861 | Spi-B transcription factor (Spi-1/PU.1 r | 1.74 | 2.82 | 2.31 |
| 50 | 432642 | BE297635  | Hs.3069   | heat shock 70kD protein 9B (mortalin-2)  | 1.74 | 1.51 | 1.62 |
|    | 429505 | AW820035  | Hs.278679 | a disintegrin and metalloproteinase doma | 1.73 | 1.54 | 3.15 |
|    | 412851 | AI826502  | Hs.97269  | ESTs                                     | 1.73 | 1.67 | 1.05 |
|    | 453953 | AW408337  | Hs.36972  | CD7 antigen (p41)                        | 1.73 | 2.22 | 2.28 |
|    | 430413 | AW842182  | Hs.241392 | small inducible cytokine A5 (RANTES)     | 1.73 | 2.05 | 1.47 |
| 55 | 419485 | AA489023  | Hs.99807  | ESTs, Weakly similar to unnamed protein  | 1.73 | 1.71 | 1.73 |
|    | 447217 | BE465754  | Hs.17778  | neuropilin 2                             | 1.73 | 1.62 | 4.70 |
|    | 437673 | AW665665  | Hs.153034 | ESTs                                     | 1.72 | 1.55 | 2.10 |
|    | 437879 | BE262082  | Hs.5894   | hypothetical protein FLJ10305            | 1.72 | 2.50 | 1.80 |
|    | 448410 | AK000227  | Hs.21126  | hypothetical protein FLJ20220            | 1.72 | 1.48 | 3.98 |
| 60 | 413313 | NM_002047 | Hs.283108 | glycyl-tRNA synthetase                   | 1.72 | 2.19 | 1.82 |
|    | 452203 | X57522    |           | transporter 1, ATP-binding cassette, sub | 1.72 | 2.68 | 1.68 |
|    | 443950 | NM_001425 | Hs.99999  | epithelial membrane protein 3            | 1.71 | 2.17 | 2.24 |
|    | 403969 |           |           | ENSP00000034663:Zinc finger protein 131  | 1.71 | 1.31 | 1.71 |
|    | 450832 | AW970602  | Hs.105421 | ESTs                                     | 1.71 | 1.33 | 2.38 |
| 65 | 453005 | AW055308  | Hs.31803  | ESTs, Weakly similar to N-WASP [H.sapien | 1.71 | 1.67 | 1.95 |
|    | 439783 | AI125760  | Hs.24835  | hypothetical protein FLJ14594            | 1.71 | 2.10 | 2.20 |
|    | 418678 | NM_001327 | Hs.167379 | cancer/testis antigen (NY-ESO-1)         | 1.71 | 3.86 | 1.76 |
|    | 432259 | BE269103  | Hs.274201 | 60S acidic ribosomal protein PO          | 1.71 | 1.85 | 1.94 |
|    | 420340 | NM_000734 | Hs.97087  | CD32 antigen, zeta polypeptide (TtT3 com | 1.71 | 2.12 | 1.98 |
| 70 | 428289 | M26301    | Hs.2253   | complement component 2                   | 1.71 | 2.46 | 0.76 |
|    | 424006 | AF054815  | Hs.137548 | CD84 antigen (leukocyte antigen)         | 1.70 | 1.70 | 2.78 |
|    | 440039 | Z46188    | Hs.6874   | KIAA0472 protein                         | 1.70 | 2.24 | 1.60 |
|    | 406646 | M33600    | Hs.308026 | major histocompatibility complex, class  | 1.70 | 2.27 | 1.33 |
|    | 425367 | BE271188  | Hs.155975 | protein tyrosine phosphatase, receptor t | 1.70 | 2.77 | 2.07 |
| 75 | 420286 | AI796395  | Hs.111377 | ESTs                                     | 1.70 | 1.50 | 3.21 |
|    | 430255 | AK000703  | Hs.323822 | Homo sapiens mRNA for KIAA1551 protein,  | 1.69 | 1.44 | 1.69 |
|    | 445247 | AW274290  | Hs.153997 | ESTs                                     | 1.69 | 2.57 | 1.65 |
|    | 436965 | Z11894    | Hs.156110 | gb:H.sapiens rearranged mRNA for immunog | 1.69 | 1.52 | 3.13 |
|    | 410257 | BE244044  | Hs.61469  | hypothetical protein                     | 1.69 | 1.99 | 1.97 |
| 80 | 424663 | NM_002351 | Hs.151544 | SH2 domain protein 1A, Duncan's disease  | 1.69 | 1.76 | 1.69 |
|    | 427792 | M63928    | Hs.180841 | tumor necrosis factor receptor superfam  | 1.69 | 1.98 | 2.48 |
|    | 458098 | BE550224  |           | metallothionein 1E (functional)          | 1.68 | 1.83 | 1.68 |
|    | 425397 | JO4088    | Hs.156346 | topoisomerase (DNA) II alpha (170kD)     | 1.68 | 1.57 | 4.09 |
|    | 421485 | AA243499  | Hs.104800 | hypothetical protein FLJ10134            | 1.68 | 1.64 | 0.68 |



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|    |        |           |           |  |      |      |      |
|----|--------|-----------|-----------|--|------|------|------|
| 5  | 421563 | NM_006433 | Hs.105806 | granulysin                               | 1.68 | 2.24 | 1.55 |
|    | 448775 | AB025237  | Hs.388    | nudix (nucleoside diphosphate linked moi | 1.68 | 1.98 | 2.05 |
|    | 451418 | BE387790  | Hs.26369  | hypothetical protein FLJ20287            | 1.68 | 1.35 | 1.68 |
|    | 440457 | BE387593  | Hs.21321  | Homo sapiens clone FLB9213 PRO2474 mRNA, | 1.68 | 1.88 | 1.63 |
|    | 438866 | U44385    | Hs.325495 | tissue inhibitor of metalloproteinase 2  | 1.67 | 2.54 | 1.90 |
| 10 | 401760 |           |           | Target Exon                              | 1.67 | 1.93 | 1.61 |
|    | 422158 | L10343    | Hs.112341 | protease inhibitor 3, skin-derived (SKAL | 1.67 | 1.85 | 4.25 |
|    | 446644 | NM_003272 | Hs.15791  | transmembrane 7 superfamily member 1 (up | 1.67 | 1.94 | 1.48 |
|    | 415701 | NM_003878 | Hs.78619  | gamma-glutamyl hydrolase (conjugase, fol | 1.67 | 1.65 | 0.90 |
|    | 450293 | N36754    | Hs.171118 | hypothetical protein FLJ00026            | 1.67 | 1.54 | 1.95 |
| 15 | 412856 | BE386745  | Hs.74631  | basigin (OK blood group)                 | 1.67 | 2.71 | 1.47 |
|    | 439318 | AW837046  | Hs.6527   | G protein-coupled receptor 56            | 1.66 | 1.82 | 1.19 |
|    | 424399 | A1905687  |           | A1905687:IL-BT095-190199-019 BT095 Homo  | 1.66 | 3.65 | 0.44 |
|    | 432355 | AA534416  | Hs.162185 | ESTs, Weakly similar to S42799 gap prec  | 1.66 | 1.98 | 1.45 |
|    | 427239 | BE270447  |           | ubiquitin carrier protein                | 1.66 | 2.94 | 1.92 |
| 20 | 425262 | D87119    | Hs.155418 | GS3955 protein                           | 1.66 | 2.36 | 1.66 |
|    | 413869 | NM_000878 | Hs.75596  | interleukin 2 receptor, beta             | 1.66 | 1.86 | 1.90 |
|    | 406698 | X03068    | Hs.73931  | major histocompatibility complex, class  | 1.65 | 2.05 | 1.31 |
|    | 446217 | A1651594  | Hs.99709  | ESTs                                     | 1.65 | 1.98 | 1.77 |
|    | 400222 |           |           | NM_002082*:Homo sapiens G protein-couple | 1.65 | 1.74 | 1.81 |
| 25 | 432468 | AW402155  | Hs.3003   | CD3E antigen, epsilon polypeptide (TIT3  | 1.65 | 2.50 | 1.77 |
|    | 417237 | H86385    | Hs.81737  | palmitoyl-protein thioesterase 2         | 1.65 | 2.89 | 1.57 |
|    | 433012 | NM_004045 | Hs.279910 | ATX1 (antioxidant protein 1, yeast) homo | 1.64 | 2.76 | 1.26 |
|    | 446291 | BE397753  | Hs.14623  | interferon, gamma-inducible protein 30   | 1.64 | 1.96 | 1.24 |
|    | 433867 | AK000596  | Hs.3618   | hippocalcin-like 1                       | 1.64 | 1.47 | 1.00 |
| 30 | 433671 | AW138797  | Hs.132906 | 19A24 protein                            | 1.64 | 2.17 | 1.96 |
|    | 418371 | M13560    | Hs.84298  | CD74 antigen (invariant polypeptide of m | 1.64 | 2.18 | 1.43 |
|    | 432336 | NM_002759 | Hs.274382 | protein kinase, interferon-inducible dou | 1.64 | 1.47 | 1.64 |
|    | 409264 | NM_014937 | Hs.52463  | KIAA0966 protein                         | 1.64 | 1.46 | 4.89 |
|    | 431836 | AF178532  | Hs.271411 | beta-site APP-cleaving enzyme 2          | 1.64 | 2.58 | 1.79 |
| 35 | 414586 | AA306160  | Hs.16488  | lymphocyte cytosolic protein 1 (L-plasti | 1.63 | 1.72 | 1.88 |
|    | 418117 | A1922013  | Hs.83496  | linker for activation of T cells         | 1.63 | 1.98 | 1.99 |
|    | 448304 | BE622768  | Hs.290356 | mesoderm development candidate 1         | 1.63 | 1.67 | 1.86 |
|    | 425535 | AB007937  | Hs.158287 | KIAA0468 gene product                    | 1.63 | 2.56 | 1.97 |
|    | 453258 | AW293134  | Hs.32597  | ring finger protein (C3H2C3 type) 6      | 1.63 | 1.46 | 2.43 |
| 40 | 420000 | AB036063  | Hs.94262  | p53-inducible ribonucleotide reductase s | 1.63 | 1.34 | 1.94 |
|    | 447321 | AW271217  | Hs.281434 | Homo sapiens cDNA FLJ14028 fis, clone HE | 1.63 | 1.96 | 1.77 |
|    | 422192 | AA305159  | Hs.113019 | fts485                                   | 1.62 | 1.45 | 1.62 |
|    | 450701 | H39960    | Hs.288467 | hypothetical protein XP_098151 (leucine- | 1.62 | 2.23 | 1.53 |
|    | 419381 | AB023420  | Hs.90093  | heat shock 70kD protein 4                | 1.62 | 1.57 | 2.38 |
| 45 | 424779 | AL046851  | Hs.153053 | CD37 antigen                             | 1.62 | 1.92 | 2.10 |
|    | 413283 | R78669    | Hs.23756  | hypothetical protein similar to swine ac | 1.62 | 1.41 | 1.12 |
|    | 414907 | X90725    | Hs.77597  | polo (Drosophila)-like kinase            | 1.62 | 2.03 | 2.13 |
|    | 414159 | AW511414  | Hs.257352 | apolipoprotein L, 6                      | 1.62 | 1.89 | 1.32 |
|    | 410055 | AJ250839  | Hs.58241  | gene for serine/threonine protein kinase | 1.62 | 1.81 | 1.27 |
| 50 | 428179 | AI127772  | Hs.279696 | serum/glucocorticoid regulated kinase-li | 1.62 | 1.50 | 2.13 |
|    | 436251 | BE515065  | Hs.296585 | nucleolar protein (KKE/D repeat)         | 1.61 | 1.71 | 2.02 |
|    | 451708 | AI306536  | Hs.60975  | ESTs                                     | 1.61 | 2.31 | 1.70 |
|    | 418113 | AI272141  | Hs.83484  | SRY (sex determining region Y)-box 4     | 1.61 | 1.53 | 2.50 |
|    | 410600 | AW575742  |           | ESTs, Moderately similar to S65657 alpha | 1.61 | 1.83 | 1.69 |
| 55 | 436873 | N23874    | Hs.50477  | RAB27A, member RAS oncogene family       | 1.61 | 1.56 | 1.61 |
|    | 440201 | AL359588  | Hs.7041   | hypothetical protein DKFZp762B226        | 1.61 | 1.58 | 1.85 |
|    | 414368 | W70171    | Hs.75939  | uridine monophosphate kinase             | 1.61 | 1.59 | 2.75 |
|    | 454429 | BE273437  | Hs.301406 | hypothetical protein PP3501              | 1.61 | 3.54 | 1.52 |
|    | 422257 | NM_001716 | Hs.113916 | Burkitt lymphoma receptor 1, GTP-binding | 1.61 | 2.15 | 1.54 |
| 60 | 426437 | BE076537  | Hs.169895 | ubiquitin-conjugating enzyme E2L 6       | 1.60 | 2.01 | 1.36 |
|    | 408826 | AF216077  | Hs.48376  | Homo sapiens clone HB-2 mRNA sequence    | 1.60 | 2.00 | 1.60 |
|    | 414761 | AJ077228  | Hs.77256  | enhancer of zeste (Drosophila) homolog 2 | 1.60 | 1.38 | 2.23 |
|    | 429612 | AF062649  | Hs.252587 | pituitary tumor-transforming 1           | 1.60 | 1.78 | 2.59 |
|    | 411263 | BE297802  | Hs.69360  | kinesin-like 6 (mitotic centromere-assoc | 1.60 | 1.78 | 2.07 |
| 65 | 417324 | AW265494  |           | ESTs                                     | 1.60 | 2.48 | 1.91 |
|    | 430325 | AF004562  | Hs.239356 | syntaxin binding protein 1               | 1.60 | 1.74 | 2.53 |
|    | 431797 | BE169641  | Hs.270134 | hypothetical protein FLJ20280            | 1.60 | 1.46 | 2.46 |
|    | 434449 | AW953484  | Hs.3849   | hypothetical protein FLJ22041 similar to | 1.60 | 1.81 | 3.00 |
|    | 443378 | AW392550  | Hs.9280   | proteasome (prosome, macropain) subunit, | 1.59 | 1.88 | 1.68 |
| 70 | 417437 | U52682    | Hs.82132  | interferon regulatory factor 4           | 1.59 | 1.90 | 2.26 |
|    | 437949 | U78519    | Hs.41654  | ESTs, Weakly similar to A46010 X-linked  | 1.59 | 2.14 | 1.59 |
|    | 401797 |           |           | Target Exon                              | 1.59 | 1.82 | 1.78 |
|    | 449720 | AA311152  | Hs.288708 | hypothetical protein FLJ21562            | 1.59 | 1.45 | 4.69 |
|    | 424971 | AA479005  | Hs.154036 | tumor suppressing subtransferable candid | 1.59 | 1.82 | 1.68 |
| 75 | 415474 | NM_014252 | Hs.78457  | solute carrier family 25 (mitochondrial  | 1.58 | 1.51 | 0.30 |
|    | 430017 | AA263172  | Hs.35     | protein tyrosine phosphatase, non-recept | 1.58 | 1.72 | 2.46 |
|    | 422515 | AW500470  | Hs.117950 | multifunctional polypeptide similar to S | 1.58 | 1.85 | 1.94 |
|    | 434094 | AA305599  | Hs.238205 | hypothetical protein PRO2013             | 1.58 | 1.25 | 2.09 |
|    | 428844 | AW972635  | Hs.301904 | hypothetical protein FLJ12671            | 1.58 | 1.72 | 1.80 |
| 80 | 440942 | AW246547  | Hs.17901  | Homo sapiens, clone IMAGE:3937015, mRNA, | 1.58 | 2.60 | 1.58 |
|    | 419596 | BE379320  | Hs.91448  | MKP-1 like protein tyrosine phosphatase  | 1.58 | 1.84 | 1.22 |
|    | 401151 |           |           | Target Exon                              | 1.58 | 2.43 | 1.60 |
|    | 441590 | A1623207  | Hs.190537 | ESTs                                     | 1.58 | 1.40 | 1.58 |
|    | 418677 | S83308    | Hs.87224  | SRY (sex determining region Y)-box 5     | 1.58 | 1.68 | 1.58 |
|    | 416448 | L13210    | Hs.79339  | lectin, galactoside-binding, soluble, 3  | 1.58 | 2.28 | 1.60 |
|    | 418739 | AA310964  | Hs.88012  | SHP2 interacting transmembrane adaptor   | 1.58 | 2.14 | 2.10 |
|    | 418216 | AA662240  | Hs.283099 | AF15q14 protein                          | 1.57 | 1.46 | 1.57 |

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|    |        |           |           |  |      |      |      |
|----|--------|-----------|-----------|--|------|------|------|
|    | 427700 | AA262294  | Hs.180383 | dual specificity phosphatase 6           | 1.57 | 1.42 | 0.88 |
|    | 436485 | X59135    | Hs.156110 | immunoglobulin kappa constant            | 1.57 | 1.49 | 2.69 |
|    | 404872 |           |           | ENSP00000243173*:DJ1109J22.1 (novel home | 1.57 | 1.46 | 1.36 |
| 5  | 408212 | AA297567  | Hs.43728  | hypothetical protein                     | 1.57 | 1.55 | 2.73 |
|    | 414699 | AI815523  | Hs.76930  | synuclein, alpha (non A4 component of am | 1.57 | 1.36 | 1.57 |
|    | 444006 | BE395085  | Hs.10086  | type I transmembrane protein Fn14        | 1.57 | 1.70 | 1.13 |
|    | 432946 | U60899    | Hs.279854 | mannosidase, alpha, class 2B, member 1   | 1.57 | 1.75 | 1.57 |
|    | 417929 | R27219    | Hs.74647  | Human T-cell receptor active alpha-chain | 1.57 | 2.26 | 2.10 |
| 10 | 431629 | AU077025  | Hs.265827 | interferon, alpha-inducible protein (clo | 1.57 | 2.09 | 1.57 |
|    | 402876 |           |           | NM_022161*:Homo sapiens livin inhibitor- | 1.56 | 2.28 | 1.45 |
|    | 439627 | BE621702  | Hs.29076  | hypothetical protein FLJ21841            | 1.56 | 2.97 | 1.54 |
|    | 414839 | X63692    | Hs.77462  | DNA (cytosine-5)-methyltransferase 1     | 1.56 | 1.75 | 1.88 |
|    | 450663 | H43540    | Hs.25292  | ribonuclease H1, large subunit           | 1.56 | 2.76 | 1.67 |
| 15 | 425818 | AB021225  | Hs.159581 | matrix metalloproteinase 17 (membrane-in | 1.56 | 2.36 | 1.83 |
|    | 422765 | AW409701  | Hs.1578   | baculoviral IAP repeat-containing 5 (sur | 1.56 | 1.78 | 2.06 |
|    | 456508 | AA502764  | Hs.123469 | ESTs, Weakly similar to AF208855 1 BM-01 | 1.56 | 1.32 | 2.70 |
|    | 453613 | F06838    |           | ESTs                                     | 1.56 | 1.76 | 1.84 |
|    | 428379 | X06026    | Hs.2259   | CD3G antigen, gamma polypeptide (TfT3 co | 1.56 | 1.43 | 1.56 |
| 20 | 429500 | X78565    | Hs.289114 | hexabrachion (tenascin C, cytotoxic)     | 1.56 | 1.47 | 3.15 |
|    | 444652 | BE513613  | Hs.11538  | actin related protein 2/3 complex, subun | 1.56 | 2.01 | 1.56 |
|    | 420842 | AI083668  | Hs.50601  | hypothetical protein MGC10986            | 1.55 | 2.24 | 1.90 |
|    | 447513 | AW955776  | Hs.313500 | ESTs, Moderately similar to ALU7_HUMAN A | 1.55 | 1.24 | 3.07 |
|    | 408901 | AK001330  | Hs.48855  | hypothetical protein FLJ10468            | 1.55 | 1.79 | 2.17 |
| 25 | 437669 | AI358105  | Hs.123164 | ESTs, Weakly similar to match to ESTs AA | 1.55 | 1.83 | 1.96 |
|    | 439437 | AI207788  | Hs.343628 | sialyltransferase 4B (beta-galactosidase | 1.55 | 1.63 | 2.20 |
|    | 418835 | AL023694  | Hs.88977  | hypothetical protein dJ511E16.2          | 1.55 | 1.73 | 1.50 |
|    | 448633 | AA311426  | Hs.21635  | tubulin, gamma 1                         | 1.54 | 2.02 | 1.67 |
|    | 447763 | BE619911  | Hs.115803 | hypothetical protein                     | 1.54 | 2.52 | 1.52 |
| 30 | 430223 | NM_002514 | Hs.235935 | nephroblastoma overexpressed gene        | 1.54 | 1.54 | 3.03 |
|    | 448258 | BE386983  | Hs.343214 | hypothetical protein FLJ20396            | 1.54 | 1.97 | 1.53 |
|    | 440165 | AW014718  | Hs.7753   | calumenin                                | 1.54 | 1.53 | 2.55 |
|    | 433376 | AI249361  | Hs.74122  | caspase 4, apoptosis-related cysteine pr | 1.54 | 1.34 | 1.69 |
|    | 445982 | BE410233  | Hs.13501  | pescadillo (zebrafish) homolog 1, contai | 1.54 | 2.21 | 1.54 |
| 35 | 419741 | NM_007019 | Hs.93002  | ubiquitin carrier protein E2-C           | 1.54 | 2.50 | 1.94 |
|    | 416926 | H03109    | Hs.263395 | HT018 protein                            | 1.54 | 1.41 | 2.01 |
|    | 431630 | NM_002204 | Hs.265829 | integrin, alpha 3 (antigen CD49C, alpha  | 1.54 | 1.89 | 1.23 |
|    | 442159 | AW163390  | Hs.278554 | heterochromatin-like protein 1           | 1.54 | 1.93 | 1.79 |
|    | 420421 | AF281133  | Hs.343589 | exosome component Rrp41                  | 1.53 | 2.47 | 1.61 |
| 40 | 406973 | M34996    | Hs.198253 | major histocompatibility complex, class  | 1.53 | 1.62 | 1.19 |
|    | 422530 | AW972300  | Hs.118110 | bone marrow stromal cell antigen 2       | 1.53 | 1.74 | 1.37 |
|    | 423420 | AI571364  | Hs.128382 | Homo sapiens mRNA; cDNA DKFZp7611224 (f  | 1.53 | 2.49 | 1.59 |
|    | 429359 | W00482    | Hs.2399   | matrix metalloproteinase 14 (membrane-in | 1.53 | 2.72 | 1.54 |
|    | 429837 | NM_003896 | Hs.225939 | sialyltransferase 9 (CMP-NeuAc:lactosyl  | 1.53 | 1.64 | 2.40 |
| 45 | 412939 | AW411491  | Hs.75069  | eukaryotic translation elongation factor | 1.52 | 1.98 | 0.98 |
|    | 410678 | BE540516  | Hs.293732 | hypothetical protein MGC3195             | 1.52 | 1.39 | 2.17 |
|    | 431186 | NM_012249 | Hs.250697 | ras-like protein                         | 1.52 | 1.91 | 1.82 |
|    | 406868 | AA505445  | Hs.300697 | immunoglobulin heavy constant gamma 3 (G | 1.52 | 1.57 | 1.82 |
|    | 422532 | AL008726  | Hs.118126 | protective protein for beta-galactosidas | 1.51 | 2.08 | 1.19 |
| 50 | 413063 | AL035737  | Hs.75184  | chitinase 3-like 1 (cartilage glycoprote | 1.51 | 1.50 | 0.67 |
|    | 417308 | H60720    | Hs.81892  | KIAA0101 gene product                    | 1.51 | 1.42 | 7.41 |
|    | 424902 | NM_003866 | Hs.153687 | inositol polyphosphate-4-phosphatase, ty | 1.51 | 2.75 | 1.51 |
|    | 405204 |           |           | NM_002085*:Homo sapiens growth factor re | 1.51 | 1.44 | 1.53 |
|    | 424481 | R19453    | Hs.1787   | proteolipid protein 1 (Pelizaeus-Merzbac | 1.51 | 1.92 | 2.32 |
| 55 | 422516 | BE258862  | Hs.117950 | multifunctional polypeptide similar to S | 1.50 | 1.61 | 1.47 |
|    | 418827 | BE327311  | Hs.47166  | HT021                                    | 1.50 | 1.35 | 3.53 |
|    | 427550 | BE242818  | Hs.311609 | nuclear RNA helicase, DECD variant of DE | 1.50 | 1.55 | 2.09 |
|    | 432992 | BE270472  | Hs.279900 | HSPC015 protein                          | 1.50 | 1.82 | 0.82 |
|    | 442432 | BE093589  | Hs.38178  | hypothetical protein FLJ23468            | 1.50 | 1.34 | 4.87 |
| 60 | 413566 | AW604451  | Hs.285814 | sprouty (Drosophila) homolog 4           | 1.50 | 3.05 | 1.51 |
|    | 422616 | BE300330  | Hs.118725 | selenophosphate synthetase 2             | 1.50 | 1.36 | 0.46 |
|    | 431222 | X56777    | Hs.273790 | zona pellucida glycoprotein 3A (sperm re | 1.50 | 2.05 | 1.78 |
|    | 421861 | S78798    | Hs.108966 | phosphatidylinositol-4-phosphate 5-kinas | 1.49 | 1.52 | 2.62 |
|    | 422684 | BE561617  | Hs.119192 | H2A histone family, member 2             | 1.49 | 1.53 | 2.02 |
| 65 | 452363 | AI582743  | Hs.94953  | Homo sapiens, Similar to complement comp | 1.49 | 2.02 | 1.41 |
|    | 411825 | AK000334  |           | hypothetical protein FLJ20327            | 1.49 | 2.55 | 1.38 |
|    | 409425 | U40462    | Hs.54452  | zinc finger protein, subfamily 1A, 1 (lk | 1.49 | 1.77 | 1.49 |
|    | 431070 | AW408164  | Hs.249184 | transcription factor 19 (SC1)            | 1.49 | 1.79 | 1.75 |
|    | 427080 | AW068287  | Hs.301175 | ras-related C3 botulinum toxin substrate | 1.49 | 1.57 | 2.14 |
| 70 | 440676 | NM_004987 | Hs.112378 | LIM and senescent cell antigen-like doma | 1.49 | 1.42 | 1.46 |
|    | 411296 | BE207307  | Hs.10114  | growth suppressor 1                      | 1.49 | 1.74 | 1.50 |
|    | 442894 | W02112    | Hs.8836   | parvin, beta                             | 1.49 | 2.25 | 1.51 |
|    | 416361 | AW204907  | Hs.6872   | ESTs, Weakly similar to CA13_HUMAN COLLA | 1.49 | 2.06 | 1.89 |
|    | 424162 | AA336229  | Hs.93135  | ESTs, Weakly similar to ALU2_HUMAN ALU S | 1.49 | 1.59 | 1.65 |
| 75 | 447131 | NM_004585 | Hs.17466  | retinoic acid receptor responder (tazaro | 1.49 | 2.00 | 1.22 |
|    | 427759 | BE245578  | Hs.2200   | perforin 1 (pore forming protein)        | 1.49 | 2.12 | 1.41 |
|    | 422846 | BE513934  | Hs.1583   | neutrophil cytosolic factor 1 (47kD, chr | 1.49 | 1.61 | 1.67 |
|    | 417007 | AF224741  | Hs.80768  | chloride channel 7                       | 1.48 | 1.94 | 1.71 |
|    | 421924 | BE514514  | Hs.109606 | coronin, actin-binding protein, 1A       | 1.48 | 1.68 | 1.67 |
| 80 | 422241 | Y00062    | Hs.170121 | protein tyrosine phosphatase, receptor t | 1.48 | 1.43 | 2.25 |
|    | 410741 | Z11695    | Hs.324473 | mitogen-activated protein kinase 1       | 1.48 | 1.37 | 3.17 |
|    | 447471 | AF039843  | Hs.18676  | sprouty (Drosophila) homolog 2           | 1.48 | 1.35 | 1.46 |
|    | 427247 | AW504221  | Hs.174103 | integrin, alpha L (antigen CD11A (p180), | 1.47 | 1.58 | 1.48 |
|    | 442945 | AI024849  | Hs.131853 | ESTs                                     | 1.47 | 1.73 | 1.38 |

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|    |        |           |           |  |      |      |      |
|----|--------|-----------|-----------|--|------|------|------|
| 5  | 447200 | BE543146  | Hs.281434 | Homo sapiens cDNA FLJ14028 fis, clone HE   | 1.47 | 1.89 | 1.60 |
|    | 424085 | NM_002914 | Hs.139226 | replication factor C (activator 1) 2 (40   | 1.47 | 2.03 | 1.47 |
|    | 422867 | L32137    | Hs.1584   | cartilage oligomeric matrix protein (pse   | 1.47 | 1.86 | 1.93 |
|    | 416350 | AF188625  | Hs.189507 | phospholipase A2, group IID                | 1.47 | 2.92 | 1.49 |
|    | 458207 | T28472    | Hs.7655   | U2 small nuclear ribonucleoprotein auxil   | 1.47 | 1.61 | 1.73 |
| 10 | 447940 | D86982    | Hs.20060  | KIAA0229 protein                           | 1.47 | 1.93 | 1.72 |
|    | 446106 | AA377165  | Hs.44833  | ESTs                                       | 1.47 | 1.56 | 1.63 |
|    | 425811 | AL039104  | Hs.159557 | karyopherin alpha 2 (RAG cohort 1, impor   | 1.47 | 1.78 | 1.84 |
|    | 432615 | AA557191  | Hs.55028  | ESTs, Weakly similar to I54374 gene NF2    | 1.47 | 2.04 | 1.47 |
|    | 435099 | AC004770  | Hs.4756   | flap structure-specific endonuclease 1     | 1.47 | 1.76 | 1.83 |
| 15 | 402294 |           |           | Target Exon                                | 1.47 | 1.27 | 1.46 |
|    | 430147 | R60704    | Hs.234434 | hairly/enhancer-of-split related with YRP  | 1.46 | 2.00 | 1.59 |
|    | 414324 | Y14768    | Hs.890    | lymphotoxin beta (TNF superfamily, membe   | 1.46 | 1.58 | 2.15 |
|    | 400270 |           |           | NM_000026*:Homo sapiens adenylosuccinate   | 1.46 | 1.42 | 2.32 |
|    | 414806 | D14594    | Hs.77329  | phosphatidylserine synthase 1              | 1.46 | 2.07 | 1.40 |
| 20 | 419625 | U91516    | Hs.182885 | nuclear factor of kappa light polypeptid   | 1.45 | 1.78 | 1.53 |
|    | 430594 | AK000790  | Hs.246885 | hypothetical protein FLJ20783              | 1.45 | 1.31 | 0.90 |
|    | 419556 | U29615    | Hs.91093  | chitinase 1 (chitotriosidase)              | 1.45 | 2.13 | 1.46 |
|    | 453350 | AI917771  | Hs.61790  | hypothetical protein FLJ23338              | 1.45 | 2.00 | 1.39 |
|    | 448412 | AI219083  | Hs.42532  | ESTs, Moderately similar to ALU8_HUMAN A   | 1.45 | 1.37 | 3.17 |
| 25 | 411619 | AI418609  | Hs.71040  | hypothetical protein FLJ20425              | 1.45 | 1.39 | 3.01 |
|    | 424218 | AF031824  | Hs.143212 | cystatin F (leukocystatin)                 | 1.45 | 1.82 | 1.44 |
|    | 450395 | BE048545  | Hs.161757 | ESTs                                       | 1.45 | 2.40 | 1.33 |
|    | 438555 | AI222089  | Hs.143878 | Homo sapiens mRNA for FLJ00024 protein,    | 1.45 | 1.91 | 1.65 |
|    | 422497 | D29642    | Hs.1528   | KIAA0053 gene product                      | 1.45 | 1.94 | 1.49 |
| 30 | 400991 |           |           | Target Exon                                | 1.45 | 2.10 | 1.42 |
|    | 431779 | AW971178  | Hs.268571 | apolipoprotein C-I                         | 1.45 | 1.53 | 0.42 |
|    | 424618 | L29472    | Hs.1802   | major histocompatibility complex, class    | 1.44 | 1.96 | 1.86 |
|    | 423032 | AI684746  | Hs.119274 | RAS p21 protein activator (GTPase activa   | 1.44 | 1.34 | 3.36 |
|    | 424232 | AB015982  | Hs.143460 | protein kinase C, nu                       | 1.44 | 1.28 | 2.94 |
| 35 | 438291 | BE514605  | Hs.289092 | Homo sapiens cDNA: FLJ22380 fis, clone H   | 1.44 | 1.63 | 1.45 |
|    | 445745 | AB007924  | Hs.13245  | KIAA0455 gene product                      | 1.44 | 1.17 | 1.52 |
|    | 449209 | BE616830  | Hs.294145 | ESTs                                       | 1.44 | 1.35 | 2.48 |
|    | 410129 | BE244074  | Hs.58831  | regulator of Fas-induced apoptosis         | 1.44 | 2.10 | 1.79 |
|    | 401284 |           |           | Target Exon                                | 1.44 | 1.71 | 1.44 |
| 40 | 422675 | BE018517  | Hs.119140 | eukaryotic translation initiation factor   | 1.44 | 1.68 | 1.45 |
|    | 433020 | AI375726  | Hs.279918 | hypothetical protein                       | 1.44 | 1.37 | 2.02 |
|    | 420042 | AW015140  | Hs.161723 | ESTs                                       | 1.44 | 2.02 | 1.29 |
|    | 453878 | AW964440  | Hs.19025  | DC32                                       | 1.44 | 1.69 | 1.44 |
|    | 427268 | X78520    | Hs.174139 | chloride channel 3                         | 1.44 | 1.45 | 1.96 |
| 45 | 417386 | AL037228  | Hs.82043  | D123 gene product                          | 1.43 | 1.32 | 2.81 |
|    | 409197 | N54706    | Hs.303025 | chromosome 11 open reading frame 24        | 1.43 | 1.80 | 1.17 |
|    | 411009 | W37572    | Hs.285864 | ESTs                                       | 1.43 | 1.57 | 1.72 |
|    | 433160 | AW207002  | Hs.134342 | TASP for testis-specific adriamycin sens   | 1.43 | 1.36 | 1.49 |
|    | 416084 | L16991    | Hs.79006  | deoxythymidylate kinase (thymidylate kin   | 1.43 | 2.15 | 1.57 |
| 50 | 407826 | AA128423  | Hs.40300  | calpain 3, (p94)                           | 1.43 | 1.61 | 1.69 |
|    | 439070 | AI733278  | Hs.7621   | ESTs                                       | 1.43 | 2.10 | 1.40 |
|    | 444090 | S69115    | Hs.10306  | natural killer cell group 7 sequence       | 1.43 | 2.09 | 1.24 |
|    | 420162 | BE378432  | Hs.95577  | cyclin-dependent kinase 4                  | 1.43 | 2.13 | 1.54 |
|    | 442591 | AW292797  |           | hypothetical protein MGC10772              | 1.43 | 2.11 | 1.61 |
| 55 | 451668 | Z43948    | Hs.326444 | cartilage acidic protein 1                 | 1.43 | 1.49 | 1.16 |
|    | 423639 | AB037826  | Hs.130411 | KIAA1405 protein                           | 1.42 | 2.08 | 1.51 |
|    | 426234 | BE314534  | Hs.168159 | apoptosis regulator                        | 1.42 | 1.57 | 1.31 |
|    | 424263 | N77640    | Hs.1757   | L1 cell adhesion molecule (hydrocephalus   | 1.42 | 1.88 | 1.63 |
|    | 430294 | AI538226  | Hs.32976  | guanine nucleotide binding protein 4       | 1.42 | 1.46 | 3.18 |
| 60 | 447126 | AW150632  | Hs.170307 | Rai guanine nucleotide exchange factor R   | 1.42 | 1.36 | 1.38 |
|    | 432241 | AI937060  | Hs.6298   | KIAA1151 protein                           | 1.42 | 1.58 | 1.98 |
|    | 412471 | M63193    | Hs.73946  | endothelial cell growth factor 1 (platelet | 1.41 | 2.09 | 1.29 |
|    | 434262 | AF121858  | Hs.12169  | sorting nexin 8                            | 1.41 | 3.07 | 1.41 |
|    | 432238 | AL133057  | Hs.274135 | Homo sapiens mRNA; cDNA DKFZp434K1815 (f   | 1.41 | 1.82 | 1.43 |
| 65 | 402474 |           |           | NM_004079:Homo sapiens cathepsin S (CTSS   | 1.41 | 1.32 | 1.24 |
|    | 419897 | X90826    | Hs.93649  | upstream transcription factor 2, c-fos l   | 1.41 | 1.69 | 1.80 |
|    | 417621 | AV654694  | Hs.82316  | interferon-induced, hepatitis C-associat   | 1.41 | 1.22 | 1.74 |
|    | 424441 | X14850    | Hs.147097 | H2A histone family, member X               | 1.41 | 1.74 | 2.15 |
|    | 406663 | U24683    |           | immunoglobulin heavy constant mu           | 1.41 | 1.51 | 2.03 |
| 70 | 409614 | BE297412  | Hs.55189  | hypothetical protein                       | 1.41 | 1.54 | 2.20 |
|    | 443885 | H91806    | Hs.15284  | ESTs                                       | 1.41 | 1.19 | 1.41 |
|    | 412276 | BE262621  | Hs.73798  | macrophage migration inhibitory factor (   | 1.40 | 1.88 | 1.24 |
|    | 425179 | AJ224442  | Hs.155020 | putative methyltransferase                 | 1.40 | 1.84 | 1.47 |
|    | 418699 | BE539639  | Hs.173030 | ESTs, Weakly similar to ALU8_HUMAN ALU S   | 1.40 | 1.27 | 2.79 |
| 75 | 432403 | AA550815  | Hs.124840 | ESTs                                       | 1.40 | 1.83 | 1.44 |
|    | 417389 | BE260964  | Hs.82045  | midkine (neurite growth-promoting factor   | 1.40 | 1.65 | 2.51 |
|    | 422596 | AF063611  | Hs.118633 | 2'-5'-oligoadenylate synthetase-like       | 1.40 | 2.57 | 1.44 |
|    | 435292 | N20514    | Hs.172965 | ESTs                                       | 1.40 | 1.91 | 1.43 |
|    | 419424 | BE041820  | Hs.38516  | Homo sapiens, clone MGC:15887, mRNA, com   | 1.39 | 1.57 | 1.37 |
| 80 | 425068 | AL048716  | Hs.154387 | KIAA0103 gene product                      | 1.39 | 1.27 | 3.18 |
|    | 426020 | AL110195  | Hs.166017 | microphthalmia-associated transcription    | 1.39 | 2.26 | 1.40 |
|    | 427740 | BE242604  | Hs.180616 | CD36 antigen (collagen type I receptor,    | 1.39 | 1.76 | 0.99 |
|    | 403022 |           |           | C21000178*:gil7341207lgblAAAF61215.1JAF22  | 1.39 | 1.74 | 1.36 |
|    | 416111 | AA033813  | Hs.79018  | chromatin assembly factor 1, subunit A (   | 1.39 | 1.72 | 1.39 |
|    | 410103 | AW903666  |           | gb:CM4-NN1032-280300-122-b02 NN1032 Homo   | 1.39 | 1.46 | 1.34 |
|    | 439180 | AI393742  | Hs.199067 | v-erb-b2 avian erythroblastic leukemia v   | 1.39 | 1.35 | 1.79 |
|    | 414057 | AI815559  | Hs.75730  | signal recognition particle receptor (d    | 1.39 | 1.49 | 1.17 |

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|    |        |           |           |  |      |      |      |
|----|--------|-----------|-----------|--|------|------|------|
|    | 416511 | NM_006762 | Hs.79356  | Lysosomal-associated multispanning membr | 1.39 | 1.52 | 1.44 |
|    | 423984 | AF163825  | Hs.136713 | pre-B lymphocyte gene 3                  | 1.39 | 3.02 | 1.52 |
|    | 448484 | BE613340  | Hs.334725 | Homo sapiens, Similar to RIKEN cDNA 9430 | 1.38 | 1.81 | 1.39 |
|    | 436856 | AI469355  | Hs.127310 | ESTs                                     | 1.38 | 1.35 | 0.99 |
| 5  | 437179 | AA393508  |           | serologically defined colon cancer antig | 1.38 | 1.26 | 4.14 |
|    | 437912 | BE278594  | Hs.5912   | F-box only protein 7                     | 1.38 | 2.03 | 1.40 |
|    | 448664 | AI879317  | Hs.334691 | splicing factor 3a, subunit 1, 120kD     | 1.38 | 1.52 | 1.38 |
|    | 439981 | AI348408  | Hs.124675 | ESTs, Weakly similar to T14742 hypothi   | 1.38 | 1.48 | 1.38 |
|    | 432812 | AI935412  | Hs.50162  | ESTs                                     | 1.38 | 1.43 | 2.18 |
| 10 | 406826 | AW516005  | Hs.84298  | CD74 antigen [invariant polypeptide of m | 1.38 | 1.87 | 1.28 |
|    | 446962 | AI351421  | Hs.279709 | muscle specific ring finger protein 1    | 1.38 | 1.46 | 2.23 |
|    | 408787 | NM_014784 | Hs.47822  | Rho guanine exchange factor (GEF) 11     | 1.38 | 1.98 | 1.50 |
|    | 428044 | AA093322  | Hs.301404 | RNA binding motif protein 3              | 1.38 | 1.29 | 2.04 |
|    | 412926 | AI879076  | Hs.75061  | macrophage myristoylated alanine-rich C  | 1.38 | 1.52 | 2.62 |
| 15 | 418255 | AW135405  | Hs.37251  | ESTs                                     | 1.38 | 1.44 | 1.75 |
|    | 419745 | AF042001  | Hs.93005  | slug (chicken homolog), zinc finger prot | 1.37 | 1.51 | 1.37 |
|    | 448977 | X91809    | Hs.22698  | regulator of G-protein signalling 19     | 1.37 | 1.98 | 1.45 |
|    | 422609 | Z46023    | Hs.118721 | sialidase 1 (lysosomal sialidase)        | 1.37 | 1.75 | 1.31 |
|    | 435458 | F11872    | Hs.4892   | Homo sapiens clone 24841 mRNA sequence   | 1.37 | 1.38 | 2.80 |
| 20 | 425081 | X74794    | Hs.154443 | minichromosome maintenance deficient (S. | 1.37 | 1.61 | 1.62 |
|    | 429849 | U33053    | Hs.2499   | protein kinase C-like 1                  | 1.37 | 1.71 | 1.45 |
|    | 407103 | AA424881  | Hs.256301 | hypothetical protein MGC13170            | 1.37 | 1.62 | 1.82 |
|    | 452923 | BE276018  | Hs.288940 | five-span transmembrane protein M83      | 1.37 | 1.86 | 1.37 |
|    | 453941 | U39817    | Hs.36820  | Bloom syndrome                           | 1.37 | 1.59 | 1.37 |
| 25 | 446755 | AW451473  | Hs.16134  | serine/threonine kinase 10               | 1.37 | 1.82 | 1.48 |
|    | 439755 | AW748482  | Hs.77873  | B7 homolog 3                             | 1.36 | 2.10 | 1.35 |
|    | 447630 | AI660149  | Hs.44855  | lymphoid enhancer-binding factor 1       | 1.36 | 1.79 | 1.67 |
|    | 413821 | AA844126  | Hs.55964  | ESTs, Weakly similar to C4HU complement  | 1.36 | 1.91 | 1.39 |
|    | 445823 | AI478563  | Hs.145519 | FKSG87 protein                           | 1.36 | 1.29 | 0.33 |
| 30 | 456760 | AW961251  | Hs.127828 | guanine nucleotide binding protein (G pr | 1.36 | 1.33 | 2.01 |
|    | 402542 |           |           | Target Exon                              | 1.36 | 1.66 | 1.46 |
|    | 451050 | AW937420  |           | ESTs                                     | 1.36 | 2.00 | 1.36 |
|    | 444501 | AW247624  | Hs.11342  | ninjurin 1                               | 1.36 | 1.59 | 1.14 |
| 35 | 413291 | NM_006278 | Hs.75268  | sialyltransferase 4C (beta-galactosidase | 1.36 | 2.55 | 1.42 |
|    | 438129 | AA778647  |           | gb:af87d03.s1 Soares_testis_NHT Homo sap | 1.36 | 1.46 | 1.32 |
|    | 428398 | AI249368  | Hs.98558  | ESTs                                     | 1.36 | 1.25 | 4.95 |
|    | 439704 | AW020018  | Hs.293267 | ESTs                                     | 1.36 | 1.84 | 1.48 |
|    | 428782 | X12830    | Hs.193400 | interleukin 6 receptor                   | 1.36 | 1.27 | 0.58 |
| 40 | 437316 | AI683454  | Hs.46801  | GCN5 (general control of amino-acid synt | 1.35 | 2.10 | 1.29 |
|    | 439246 | AI498072  |           | membrane-associated tyrosine- and threon | 1.35 | 1.81 | 1.63 |
|    | 403409 |           |           | NM_005929:Homo sapiens antigen p97 (mela | 1.35 | 1.64 | 1.35 |
|    | 446342 | BE298665  | Hs.14846  | Homo sapiens mRNA; cDNA DKFZp564D016 (fr | 1.35 | 1.37 | 2.33 |
|    | 437740 | AA810265  | Hs.122915 | ESTs                                     | 1.35 | 1.91 | 1.35 |
| 45 | 423973 | AF038461  | Hs.136574 | arachidonate 12-lipoxygenase, 12R type   | 1.35 | 1.53 | 1.10 |
|    | 421506 | BE302796  | Hs.105097 | thymidine kinase 1, soluble              | 1.35 | 1.89 | 1.57 |
|    | 457760 | AA668123  | Hs.134170 | ESTs                                     | 1.35 | 2.03 | 1.43 |
|    | 439769 | AA448828  | Hs.30596  | Homo sapiens mRNA full length insert cDN | 1.35 | 2.06 | 1.41 |
|    | 406824 | AW515961  | Hs.84298  | CD74 antigen (invariant polypeptide of m | 1.35 | 1.77 | 1.27 |
| 50 | 429852 | AB010445  | Hs.225948 | small inducible cytokine subfamily A (Cy | 1.35 | 1.52 | 0.51 |
|    | 421777 | BE562088  | Hs.108196 | HSPC037 protein                          | 1.34 | 1.65 | 1.61 |
|    | 400328 | X87344    |           | transporter 2, ATP-binding cassette, sub | 1.34 | 1.77 | 1.02 |
|    | 421445 | AA913059  | Hs.104433 | Homo sapiens, clone IMAGE:4054868, mRNA  | 1.34 | 1.77 | 1.15 |
|    | 428977 | AK001404  | Hs.194698 | cyclin B2                                | 1.34 | 1.53 | 1.82 |
| 55 | 418283 | S79895    | Hs.83942  | cathepsin K (pseudosynthesis)            | 1.34 | 1.33 | 3.45 |
|    | 425848 | BE242709  | Hs.159637 | valyl-tRNA synthetase 2                  | 1.34 | 2.11 | 1.32 |
|    | 431211 | M86849    | Hs.323733 | gap junction protein, beta 2, 26kD (conn | 1.34 | 1.27 | 1.97 |
|    | 422758 | AF152329  | Hs.284180 | protocadherin gamma subfamily C, 3       | 1.34 | 1.61 | 1.75 |
|    | 421579 | NM_002975 | Hs.105927 | stem cell growth factor; lymphocyte secr | 1.34 | 1.75 | 1.81 |
| 60 | 416374 | NM_001154 | Hs.300711 | annexin A5                               | 1.34 | 1.68 | 1.55 |
|    | 451092 | AI207256  | Hs.13765  | Homo sapiens mRNA for FLJ00074 protein,  | 1.34 | 1.87 | 0.81 |
|    | 424778 | AA251048  | Hs.153042 | lymphocyte antigen 9                     | 1.34 | 1.94 | 1.42 |
|    | 421703 | AI936513  | Hs.1416   | Fc fragment of IgE, low affinity II, rec | 1.33 | 2.19 | 1.48 |
|    | 416700 | AW498958  | Hs.343475 | cathepsin D (lysosomal aspartyl protease | 1.33 | 1.96 | 1.18 |
| 65 | 425923 | NM_005026 | Hs.162808 | phosphoinositide-3-kinase, catalytic, de | 1.33 | 1.70 | 1.60 |
|    | 418803 | U50079    | Hs.88556  | histone deacetylase 1                    | 1.33 | 1.28 | 2.65 |
|    | 427730 | AW250549  | Hs.180577 | granulin                                 | 1.33 | 2.09 | 1.35 |
|    | 441174 | BE312775  | Hs.294005 | Homo sapiens, clone IMAGE:3050476, mRNA, | 1.33 | 2.05 | 1.33 |
|    | 412738 | N34731    | Hs.74562  | siah binding protein 1; FBP interacting  | 1.33 | 1.85 | 1.35 |
| 70 | 424528 | AW073971  | Hs.238954 | ESTs, Weakly similar to KIAA1204 protein | 1.33 | 1.31 | 2.06 |
|    | 422599 | BE387202  | Hs.118638 | non-metastatic cells 1, protein (NM23A)  | 1.33 | 1.77 | 1.43 |
|    | 422997 | BE018212  | Hs.122908 | DNA replication factor                   | 1.33 | 1.91 | 1.39 |
|    | 415323 | BE269352  | Hs.949    | neutrophil cytosolic factor 2 (65kD, chr | 1.33 | 1.16 | 0.60 |
|    | 409119 | AA531133  | Hs.4253   | hypothetical protein MGC2574             | 1.33 | 1.52 | 1.34 |
| 75 | 419652 | AI157485  | Hs.91973  | hypothetical protein                     | 1.32 | 2.07 | 1.29 |
|    | 415697 | AI365603  | Hs.198271 | DKFZP566H1024 protein                    | 1.32 | 2.00 | 1.33 |
|    | 434359 | AF129536  | Hs.284226 | F-box only protein 6                     | 1.32 | 2.07 | 1.39 |
|    | 442932 | AA457211  | Hs.8858   | bromodomain adjacent to zinc finger doma | 1.32 | 1.25 | 1.91 |
|    | 444029 | AW160993  | Hs.326292 | hypothetical gene DKFZp434A1114          | 1.32 | 1.63 | 1.44 |
|    | 456974 | M12529    | Hs.169401 | apolipoprotein E                         | 1.32 | 1.47 | 0.85 |
| 80 | 447733 | AF157482  | Hs.19400  | MAD2 (mitotic arrest deficient, yeast, h | 1.32 | 2.51 | 1.23 |
|    | 448610 | NM_006157 | Hs.21602  | nel (chicken)-like 1                     | 1.31 | 3.12 | 1.31 |
|    | 426490 | NM_001621 | Hs.170087 | aryl hydrocarbon receptor                | 1.31 | 1.21 | 1.65 |
|    | 427584 | BE410293  | Hs.179718 | v-myb avian myeloblastosis viral oncogen | 1.31 | 1.68 | 1.47 |

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|    |        |           |           |   |      |      |      |
|----|--------|-----------|-----------|---|------|------|------|
| 5  | 417059 | AL037672  | Hs.81071  | extracellular matrix protein 1            | 1.31 | 1.30 | 2.14 |
|    | 407777 | AA161071  | Hs.71465  | squalene epoxidase                        | 1.31 | 1.45 | 1.43 |
|    | 408536 | AW381532  | Hs.135188 | ESTs                                      | 1.31 | 1.38 | 0.90 |
|    | 410423 | AW402432  | Hs.63489  | protein tyrosine phosphatase, non-recept  | 1.31 | 1.81 | 1.49 |
|    | 422486 | BE514492  | Hs.117487 | gene near HD on 4p16.3 with homology to   | 1.31 | 1.63 | 1.31 |
| 10 | 409154 | U72882    | Hs.50842  | interferon-induced protein 35             | 1.31 | 1.69 | 1.29 |
|    | 425003 | AF119046  | Hs.154149 | apurinic/aprimidinic endonuclease(APEX    | 1.31 | 1.74 | 1.39 |
|    | 441406 | Z45957    | Hs.7837   | phosphoprotein regulated by mitogenic pa  | 1.31 | 1.43 | 0.94 |
|    | 421975 | AW961017  | Hs.6459   | hypothetical protein FLJ11856             | 1.30 | 2.53 | 1.34 |
|    | 417361 | NM_000275 | Hs.82027  | oculocutaneous albinism II (pink-eye dil  | 1.30 | 1.38 | 1.38 |
| 15 | 425676 | AW410656  | Hs.159161 | Rho GDP dissociation inhibitor (GDI) alp  | 1.30 | 2.11 | 1.36 |
|    | 427289 | AI097346  | Hs.180655 | phosphoserine aminotransferase            | 1.30 | 2.27 | 1.48 |
|    | 427747 | AW411425  | Hs.114416 | serine/threonine kinase 12                | 1.30 | 1.68 | 1.79 |
|    | 422296 | AA360231  | Hs.5199   | Homo sapiens, Similar to transducin (bet  | 1.30 | 1.50 | 1.30 |
|    | 436481 | AA379597  | Hs.5637   | HSPC150 protein similar to ubiquitin-con  | 1.30 | 1.42 | 2.13 |
| 20 | 423062 | NM_003655 | Hs.6657   | ESTs                                      | 1.30 | 1.58 | 1.30 |
|    | 439740 | AL365512  | Hs.321130 | hypothetical protein bK1048E9.5           | 1.30 | 1.77 | 1.35 |
|    | 409340 | BE174629  | Hs.80475  | hypothetical protein MGC2771              | 1.30 | 1.57 | 1.51 |
|    | 416920 | AA176455  | Hs.297939 | polymerase (RNA) II (DNA directed) polyp  | 1.30 | 1.67 | 1.44 |
|    | 430451 | AA836472  | Hs.252549 | cathepsin B                               | 1.30 | 1.49 | 1.16 |
| 25 | 457400 | AF032906  | Hs.153591 | cathepsin Z                               | 1.30 | 1.40 | 1.21 |
|    | 403506 | AI024860  | Hs.25485  | C3001912:gij6677647[ref]NP_033602.1  zin  | 1.29 | 1.88 | 1.26 |
|    | 424867 | AW957974  | Hs.79217  | Not56 (D. melanogaster)-like protein      | 1.29 | 2.64 | 1.31 |
|    | 408815 | BE019494  | Hs.99741  | hypothetical protein FLJ22341             | 1.29 | 1.79 | 1.36 |
|    | 416322 | AA262133  | Hs.1432   | pyrroline-5-carboxylate reductase 1       | 1.29 | 1.59 | 1.80 |
| 30 | 440795 | AA017707  | Hs.1973   | ESTs, Weakly similar to PNL1_HUMAN PEANU  | 1.29 | 2.01 | 1.43 |
|    | 421846 | NM_001761 | Hs.16178  | protein kinase C substrate 80K-H          | 1.29 | 1.70 | 1.34 |
|    | 425966 | AF083208  | Hs.86575  | cyclin F                                  | 1.29 | 1.63 | 1.50 |
|    | 446766 | AA971409  | Hs.156110 | apoptosis antagonizing transcription fac  | 1.29 | 1.71 | 1.40 |
|    | 406827 | AA744529  | Hs.3838   | gb:op92c04.s1 NCI_CGAP_Lu5 Homo sapiens   | 1.29 | 2.04 | 1.35 |
| 35 | 418613 | AA744529  | Hs.84113  | mitogen-activated protein kinase kinase   | 1.29 | 1.41 | 1.94 |
|    | 443086 | AW977125  | Hs.157441 | sine oculis homeobox (Drosophila) homolo  | 1.29 | 1.24 | 1.29 |
|    | 439146 | AW138909  | Hs.61796  | immunoglobulin kappa constant             | 1.29 | 1.99 | 1.36 |
|    | 434398 | AA121098  | Hs.850    | serum-inducible kinase (SNK)              | 1.29 | 1.18 | 1.32 |
|    | 418322 | AA284166  | Hs.293660 | cyclin-dependent kinase inhibitor 3 (CDK  | 1.29 | 1.31 | 2.19 |
| 40 | 400261 | J05272    | Hs.157441 | Eos Control                               | 1.29 | 1.59 | 1.36 |
|    | 413781 | AW936678  | Hs.157441 | IMP (inosine monophosphate) dehydrogenas  | 1.29 | 1.67 | 1.53 |
|    | 412315 | AW960049  | Hs.157441 | gb:PM2-DT0023-080300-004-a04 DT0023 Homo  | 1.28 | 1.26 | 1.07 |
|    | 420372 | X52056    | Hs.157441 | Homo sapiens, clone IMAGE:3535476, mRNA,  | 1.28 | 1.85 | 1.40 |
|    | 425449 | AW805749  | Hs.61796  | spleen focus forming virus (SFFV) provir  | 1.28 | 1.45 | 1.14 |
| 45 | 454478 | U85658    | Hs.289026 | superoxide dismutase 2, mitochondrial     | 1.28 | 2.29 | 1.07 |
|    | 410275 | BE246434  | Hs.166120 | transcription factor AP-2 gamma (activat  | 1.28 | 1.20 | 0.93 |
|    | 406016 | BE292842  | Hs.74573  | Target Exon                               | 1.28 | 1.47 | 1.31 |
|    | 449609 | BE292842  | Hs.166120 | guanine nucleotide binding protein (G pr  | 1.28 | 1.26 | 3.02 |
|    | 426059 | H15785    | Hs.288940 | interferon regulatory factor 7            | 1.28 | 1.76 | 1.23 |
| 50 | 412773 | AI859390  | Hs.44289  | similar to vaccinia virus HindIII K4L OR  | 1.28 | 1.60 | 1.30 |
|    | 452700 | N78098    | Hs.57079  | five-span transmembrane protein M83       | 1.28 | 1.51 | 1.22 |
|    | 408543 | AW500715  | Hs.298184 | ESTs                                      | 1.28 | 2.02 | 1.08 |
|    | 408822 | AA687465  | Hs.288316 | Homo sapiens cDNA FLJ13267 fis, clone OV  | 1.27 | 1.28 | 3.51 |
|    | 425069 | AJ243937  | Hs.333303 | potassium voltage-gated channel, shaker-  | 1.27 | 1.66 | 1.39 |
| 55 | 444681 | NM_000166 | Hs.256290 | chromosome 5 open reading frame 9         | 1.27 | 1.47 | 1.55 |
|    | 430794 | BE160081  | Hs.78281  | gap junction protein, beta 2, 26kD (conn  | 1.27 | 1.81 | 0.89 |
|    | 430637 | AI824113  | Hs.58262  | S100 calcium-binding protein A11 (calgiz  | 1.27 | 1.35 | 1.68 |
|    | 440502 | AI733219  | Hs.58879  | regulator of G-protein signalling 12      | 1.27 | 1.67 | 1.31 |
|    | 441598 | N46466    | Hs.169358 | ESTs                                      | 1.27 | 1.30 | 1.30 |
| 60 | 431921 | AW503672  | Hs.31447  | ESTs                                      | 1.27 | 2.00 | 1.16 |
|    | 459345 | BE077546  | Hs.169358 | gb:U1-HF-BN0-aid-h-11-0-U1.r1 NIH_MGC_50  | 1.26 | 1.44 | 1.33 |
|    | 452436 | BE305081  | Hs.75721  | ESTs, Moderately similar to A46010 X-in   | 1.26 | 1.20 | 1.45 |
|    | 426334 | BE614194  | Hs.79389  | hypothetical protein                      | 1.26 | 1.22 | 1.89 |
|    | 414044 | NM_006159 | Hs.293984 | profilin 1                                | 1.26 | 1.48 | 1.51 |
| 65 | 405268 | BE293492  | Hs.102950 | ENSP00000223174::KIAA0783 PROTEIN.        | 1.26 | 1.19 | 2.25 |
|    | 416602 | AK001724  | Hs.82568  | Protein kinase C-binding protein NELL2    | 1.26 | 1.19 | 4.03 |
|    | 439529 | X59812    | Hs.90280  | hypothetical protein MGC13102             | 1.26 | 1.83 | 1.19 |
|    | 421254 | BE268326  | Hs.89538  | coat protein gamma-cop                    | 1.26 | 1.61 | 1.23 |
|    | 417785 | NM_000078 | Hs.121296 | cytochrome P450, subfamily XXVIIA (stero  | 1.26 | 1.84 | 0.68 |
| 70 | 419395 | AA281219  | Hs.121296 | 5-aminimidazole-4-carboxamide ribonucle   | 1.26 | 1.66 | 1.34 |
|    | 418968 | AU076643  | Hs.313    | cholesteryl ester transfer protein, plas  | 1.26 | 1.42 | 1.19 |
|    | 441553 | AB032947  | Hs.151301 | ESTs                                      | 1.26 | 1.29 | 1.28 |
|    | 446519 | BE293180  | Hs.24379  | secreted phosphoprotein 1 (osteopontin,   | 1.25 | 1.22 | 0.65 |
|    | 424624 | BE293180  | Hs.24379  | Ca2+-dependent activator protein for secr | 1.25 | 1.17 | 2.95 |
| 75 | 450087 | AK001851  | Hs.210778 | MUM2 protein                              | 1.25 | 1.78 | 1.28 |
|    | 429604 | AF023268  | Hs.200600 | hypothetical protein FLJ10989             | 1.25 | 1.18 | 1.25 |
|    | 429380 | AW796016  | Hs.332012 | secretory carrier membrane protein 3      | 1.25 | 2.22 | 1.25 |
|    | 440251 | AK000978  | Hs.79741  | Homo sapiens, clone IMAGE:3687782, mRNA,  | 1.25 | 1.90 | 1.39 |
|    | 416759 | BE619165  | Hs.29203  | hypothetical protein FLJ10116             | 1.24 | 1.32 | 1.53 |
| 80 | 435466 | AW297288  | Hs.55918  | G protein beta subunit-like               | 1.24 | 1.96 | 1.32 |
|    | 450621 | H91923    | Hs.110024 | hypothetical protein FLJ11354             | 1.24 | 1.61 | 1.27 |
|    | 435013 | BE514535  | Hs.77171  | NM_007002:Homo sapiens cell membrane gly  | 1.24 | 1.88 | 1.32 |
|    | 414733 | AA609784  | Hs.77171  | NM_020142:Homo sapiens NADH:tubiquinone o | 1.24 | 1.76 | 1.25 |
|    | 406851 | AA418276  | Hs.7718   | minichromosome maintenance deficient (S.  | 1.24 | 1.82 | 1.42 |
|    | 448498 | W28969    | Hs.7718   | major histocompatibility complex, class   | 1.24 | 1.68 | 1.19 |
|    | 440087 |           |           | ESTs                                      | 1.24 | 1.73 | 1.29 |
|    |        |           |           | hypothetical protein FLJ22678             | 1.24 | 1.70 | 1.38 |

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|    |        |           |           |   |      |      |      |
|----|--------|-----------|-----------|---|------|------|------|
| 5  | 411365 | M76477    | Hs.289082 | GM2 ganglioside activator protein         | 1.24 | 1.61 | 1.16 |
|    | 426502 | Y07759    | Hs.170157 | myosin VA (heavy polypeptide 12, myosin)  | 1.24 | 2.65 | 1.24 |
|    | 452056 | AW955065  | Hs.101150 | Homo sapiens, clone IMAGE:4054156, mRNA,  | 1.24 | 1.49 | 1.50 |
|    | 427390 | A432163   | Hs.268231 | Homo sapiens cDNA: FLJ23111 fis, clone L  | 1.24 | 1.17 | 2.10 |
|    | 429954 | A918130   | Hs.21374  | ESTs                                      | 1.23 | 1.19 | 4.77 |
| 10 | 421178 | BE267994  | Hs.102419 | zinc finger protein                       | 1.23 | 1.62 | 1.28 |
|    | 442609 | AL020996  | Hs.8518   | selenoprotein N                           | 1.23 | 2.30 | 1.24 |
|    | 416188 | BE157260  | Hs.79070  | v-myc avian myelocytomatosis viral oncog  | 1.23 | 1.18 | 0.90 |
|    | 410127 | AA354313  | Hs.58685  | CD5 antigen (p56-62)                      | 1.23 | 1.68 | 1.23 |
|    | 452244 | N33530    | Hs.176674 | ESTs                                      | 1.23 | 2.93 | 1.23 |
| 15 | 406718 | AA505525  | Hs.169476 | glyceraldehyde-3-phosphate dehydrogenase  | 1.23 | 1.56 | 1.29 |
|    | 436939 | AA853680  | Hs.5345   | arginyl aminopeptidase (aminopeptidase B  | 1.23 | 1.68 | 1.23 |
|    | 414457 | AW514320  | Hs.76159  | ATPase, H transporting, lysosomal (vacuo  | 1.23 | 1.58 | 1.20 |
|    | 416929 | N20535    |           | melastatin 1                              | 1.23 | 1.92 | 1.20 |
|    | 401106 |           |           | Target Exon                               | 1.23 | 1.82 | 1.29 |
| 20 | 408981 | AW500797  | Hs.49427  | Gem-interacting protein                   | 1.23 | 1.40 | 1.59 |
|    | 413317 | U53225    | Hs.75283  | sorting nexin 1                           | 1.23 | 1.43 | 1.44 |
|    | 422481 | AL050163  | Hs.117339 | DNAX-activation protein 10                | 1.23 | 1.71 | 1.24 |
|    | 425455 | AL137522  | Hs.157777 | casein kinase 1, gamma 1                  | 1.23 | 1.95 | 1.29 |
|    | 451524 | AK001466  | Hs.26516  | hypothetical protein FLJ10604             | 1.23 | 2.07 | 1.27 |
| 25 | 414389 | L47345    | Hs.155202 | transcription elongation factor B (SII)   | 1.22 | 1.87 | 1.19 |
|    | 422034 | AC006486  | Hs.333069 | Ets2 repressor factor                     | 1.22 | 1.55 | 1.21 |
|    | 434224 | AA380731  | Hs.84     | interleukin 2 receptor, gamma (severe co  | 1.22 | 1.55 | 1.51 |
|    | 429574 | BE268321  | Hs.208912 | hypothetical protein MGC861               | 1.22 | 1.49 | 1.46 |
|    | 411742 | AW247593  | Hs.71819  | eukaryotic translation initiation factor  | 1.22 | 1.64 | 1.40 |
| 30 | 449027 | AJ271216  | Hs.22880  | dipeptidylpeptidase III                   | 1.22 | 1.63 | 1.30 |
|    | 418004 | U37519    | Hs.87539  | aldehyde dehydrogenase 3 family, member   | 1.22 | 1.24 | 0.71 |
|    | 451481 | AA300228  | Hs.295866 | hypothetical protein DKFZp434N1923        | 1.22 | 2.20 | 1.26 |
|    | 422739 | H20106    | Hs.119591 | adaptor-related protein complex 2, sigma  | 1.21 | 1.55 | 1.21 |
|    | 424326 | NM_014479 | Hs.145296 | ADAM-like disintegrin protease, decysin   | 1.21 | 1.13 | 3.29 |
| 35 | 404186 |           |           | NM_019602:Homo sapiens butyrophilin-like  | 1.21 | 1.59 | 1.21 |
|    | 447604 | AW089933  | Hs.301342 | hypothetical protein MGC4342              | 1.21 | 1.25 | 2.00 |
|    | 427979 | BE379776  | Hs.181309 | proteasome (prosome, macropain) subunit,  | 1.21 | 1.14 | 1.25 |
|    | 414509 | AW161311  | Hs.76294  | CD63 antigen (melanoma 1 antigen)         | 1.21 | 1.39 | 1.25 |
|    | 428468 | AA171388  | Hs.184482 | DKFZP586D0624 protein                     | 1.21 | 1.66 | 1.22 |
| 40 | 419700 | AF084935  | Hs.92357  | galactokinase 1                           | 1.21 | 1.63 | 0.74 |
|    | 430948 | A1347578  | Hs.124015 | hypothetical protein MGC2605              | 1.21 | 1.48 | 1.21 |
|    | 448143 | AF039704  | Hs.20478  | ceroid-lipofuscinosis, neuronal 2, late   | 1.20 | 1.75 | 1.23 |
|    | 448499 | BE613280  | Hs.77550  | hypothetical protein MGC1780              | 1.20 | 1.54 | 1.29 |
|    | 442173 | N75101    | Hs.8127   | KIAA0144 gene product                     | 1.20 | 1.54 | 1.31 |
| 45 | 409632 | W74001    | Hs.55279  | serine (or cysteine) proteinase inhibito  | 1.20 | 1.18 | 1.11 |
|    | 448230 | BE395949  | Hs.94814  | hypothetical protein MGC2865              | 1.20 | 1.83 | 1.19 |
|    | 403817 |           |           | NM_015271:Homo sapiens tripartite motif-  | 1.20 | 1.22 | 1.61 |
|    | 411678 | A1907114  | Hs.71465  | squalene epoxidase                        | 1.20 | 1.15 | 2.01 |
|    | 452423 | AA991724  | Hs.180535 | hypothetical protein MGC10966             | 1.20 | 1.79 | 1.20 |
| 50 | 424046 | AF027866  | Hs.138202 | serine (or cysteine) proteinase inhibito  | 1.20 | 2.34 | 1.20 |
|    | 447233 | AW246333  | Hs.17901  | Homo sapiens, clone IMAGE:3937015, mRNA,  | 1.20 | 1.93 | 1.20 |
|    | 422565 | BE259035  | Hs.118400 | singed (Drosophila)-like (sea urchin fas  | 1.20 | 1.32 | 1.52 |
|    | 446159 | NM_013379 | Hs.14089  | dipeptidyl peptidase 7                    | 1.19 | 1.64 | 1.22 |
|    | 434563 | AW083994  | Hs.9469   | pleckstrin homology domain-containing, f  | 1.19 | 1.53 | 1.45 |
| 55 | 421541 | NM_003942 | Hs.105584 | ribosomal protein S6 kinase, 90kD, polyp  | 1.19 | 1.75 | 1.27 |
|    | 450706 | AW167578  | Hs.14691  | ESTs, Moderately similar to I38022 hypot  | 1.19 | 1.71 | 1.22 |
|    | 430381 | NM_006411 | Hs.240534 | 1-acylglycerol-3-phosphate O-acyltransfe  | 1.19 | 1.66 | 1.21 |
|    | 426329 | AL389951  | Hs.271623 | nucleoporin 50kD                          | 1.19 | 1.17 | 1.55 |
|    | 421612 | AF161254  | Hs.106196 | 8D6 antigen                               | 1.19 | 1.73 | 1.30 |
| 60 | 410182 | NM_001983 | Hs.59544  | excision repair cross-complementing rode  | 1.19 | 1.75 | 1.18 |
|    | 434171 | BE247688  | Hs.347349 | KIAA0948 protein                          | 1.18 | 1.73 | 1.09 |
|    | 424837 | BE276113  | Hs.333034 | N-acetyltransferase, homolog of S. cerev  | 1.18 | 2.13 | 1.22 |
|    | 428293 | BE250944  | Hs.183556 | solute carrier family 1 (neutral amino a  | 1.18 | 1.45 | 1.30 |
|    | 453754 | AW972580  | Hs.172753 | ESTs                                      | 1.18 | 1.71 | 1.35 |
| 65 | 439012 | BE383814  | Hs.6455   | RuvB (E coli homolog)-like 2              | 1.18 | 1.60 | 1.23 |
|    | 422256 | M64673    | Hs.1499   | heat shock transcription factor 1         | 1.18 | 1.51 | 1.28 |
|    | 439863 | BE547830  | Hs.9408   | paired immunoglobulin-like receptor beta  | 1.18 | 1.89 | 1.18 |
|    | 430513 | AJ012008  | Hs.241586 | G6C protein                               | 1.18 | 2.07 | 0.81 |
|    | 427283 | AL119796  | Hs.174185 | ectonucleotide pyrophosphatase/phosphodi  | 1.18 | 1.13 | 3.25 |
| 70 | 441648 | H05734    | Hs.30559  | ESTs                                      | 1.18 | 1.56 | 1.23 |
|    | 418219 | AA731836  | Hs.137319 | ESTs                                      | 1.18 | 1.77 | 1.23 |
|    | 406422 |           |           | Target Exon                               | 1.18 | 1.43 | 1.31 |
|    | 414823 | AA156531  | Hs.103902 | ESTs, Weakly similar to A44861 keratin,   | 1.18 | 1.66 | 1.23 |
|    | 425720 | AA362394  | Hs.293984 | hypothetical protein MGC13102             | 1.18 | 1.58 | 1.15 |
| 75 | 419250 | AW770185  |           | U5 snRNP-specific protein, 116 kD         | 1.17 | 1.74 | 1.21 |
|    | 454390 | AB020713  | Hs.55966  | KIAA0906 protein                          | 1.17 | 1.33 | 1.35 |
|    | 428471 | X57348    | Hs.184510 | stratifin                                 | 1.17 | 1.19 | 1.24 |
|    | 430200 | BE613337  | Hs.234896 | geminin                                   | 1.17 | 1.13 | 1.96 |
|    | 412965 | L06419    | Hs.75093  | procollagen-lysine, 2-oxoglutarate 5-dio  | 1.17 | 1.50 | 1.22 |
| 80 | 430122 | NM_013342 | Hs.233765 | TCF3 (E2A) fusion partner (in childhood   | 1.17 | 1.69 | 1.32 |
|    | 430512 | AF182294  | Hs.241578 | U6 snRNA-associated Sm-like protein LSM8  | 1.17 | 1.12 | 2.44 |
|    | 417080 | BE392846  | Hs.1063   | small nuclear ribonucleoprotein polypept  | 1.17 | 1.93 | 1.18 |
|    | 423102 | AW067812  | Hs.303025 | chromosome 11 open reading frame 24       | 1.17 | 1.89 | 1.17 |
|    | 408393 | AW015318  | Hs.23165  | ESTs                                      | 1.16 | 1.10 | 1.91 |
|    | 424292 | AA338432  |           | gb. EST43554 Fetal brain I Homo sapiens c | 1.16 | 1.61 | 1.21 |
|    | 446759 | R61463    | Hs.16165  | expressed in activated T/LAK lymphocytes  | 1.16 | 1.45 | 1.23 |
|    | 427324 | AA159587  | Hs.285932 | hypothetical protein FLJ23322             | 1.16 | 1.50 | 1.23 |

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|    |        |           |           |   |      |      |      |
|----|--------|-----------|-----------|---|------|------|------|
| 5  | 446055 | AI815981  | Hs.12909  | mucolipin 1                               | 1.16 | 1.49 | 1.10 |
|    | 414432 | BE378174  | Hs.26506  | Homo sapiens clone CDABP0005 mRNA sequen  | 1.16 | 1.67 | 1.20 |
|    | 417900 | BE250127  | Hs.82906  | CDC20 (cell division cycle 20, S. cerevi  | 1.16 | 1.66 | 1.32 |
|    | 411305 | BE241596  | Hs.69547  | myelin basic protein                      | 1.16 | 1.15 | 4.29 |
|    | 438930 | AW843633  | Hs.343261 | hypothetical protein AL110115             | 1.16 | 1.37 | 1.34 |
| 10 | 407239 | AA076350  | Hs.67846  | leukocyte immunoglobulin-like receptor,   | 1.15 | 1.82 | 1.17 |
|    | 427458 | BE208364  | Hs.29283  | ESTs, Weakly similar to LKHU proteoglyca  | 1.15 | 1.46 | 1.32 |
|    | 402160 |           |           | Target Exon                               | 1.14 | 1.23 | 1.12 |
|    | 416881 | N32520    | Hs.141358 | ESTs                                      | 1.14 | 2.42 | 1.14 |
|    | 420223 | N27807    |           | ribosomal protein L4                      | 1.14 | 1.23 | 1.14 |
| 15 | 450778 | U81375    | Hs.25450  | solute carrier family 29 (nucleoside tra  | 1.14 | 1.38 | 1.27 |
|    | 429538 | BE182592  | Hs.139322 | small proline-rich protein 2A             | 1.14 | 1.16 | 3.52 |
|    | 428342 | AI739168  |           | Homo sapiens cDNA FLJ13458 fis, clone PL  | 1.13 | 1.13 | 1.13 |
|    | 436696 | AA725678  | Hs.120487 | ESTs                                      | 1.13 | 1.22 | 1.13 |
|    | 448950 | AF288687  | Hs.9275   | CGI-152 protein                           | 1.12 | 1.52 | 1.19 |
| 20 | 437696 | Z83844    | Hs.5790   | hypothetical protein DJ37E16.5            | 1.12 | 1.31 | 1.08 |
|    | 425009 | X58288    | Hs.154151 | protein tyrosine phosphatase, receptor t  | 1.12 | 1.08 | 1.20 |
|    | 412099 | U64198    | Hs.73165  | interleukin 12 receptor, beta 2           | 1.12 | 2.93 | 1.12 |
|    | 407951 | W77762    | Hs.79015  | antigen identified by monoclonal antibod  | 1.12 | 1.11 | 3.43 |
|    | 408116 | AA251393  | Hs.289052 | Homo sapiens, Similar to RIKEN cDNA 5430  | 1.12 | 1.50 | 1.12 |
| 25 | 450296 | AL041949  | Hs.24756  | hepatocyte growth factor-regulated tyros  | 1.11 | 1.48 | 1.12 |
|    | 420697 | AA827705  | Hs.26605  | ESTs                                      | 1.11 | 2.19 | 1.11 |
|    | 438915 | AA280174  | Hs.285681 | Williams-Beuren syndrome chromosome regi  | 1.11 | 2.73 | 1.11 |
|    | 418399 | AF131781  | Hs.84753  | hypothetical protein FLJ12442             | 1.10 | 1.43 | 1.14 |
|    | 450358 | AB010098  | Hs.24907  | coronin, actin-binding protein, 2B        | 1.10 | 1.35 | 1.19 |
| 30 | 444783 | AK001468  | Hs.62180  | anillin (Drosophila Scraps homolog), act  | 1.10 | 1.43 | 1.10 |
|    | 408801 | AI866590  | Hs.63405  | Homo sapiens, clone IMAGE:3609337, mRNA,  | 1.10 | 1.53 | 1.14 |
|    | 402522 |           |           | C1003392*.gi 12314272 emb CAC00591.1  (A  | 1.10 | 1.59 | 1.06 |
|    | 418661 | NM_001949 | Hs.1189   | E2F transcription factor 3                | 1.09 | 1.82 | 1.09 |
|    | 442680 | BE270707  | Hs.8583   | similar to APOBEC1                        | 1.09 | 1.49 | 1.24 |
| 35 | 439702 | AW085525  | Hs.55964  | ESTs                                      | 1.09 | 1.68 | 1.09 |
|    | 423858 | AL137326  | Hs.133483 | Homo sapiens mRNA; cDNA DKFZp434B0650 (f  | 1.09 | 1.10 | 1.73 |
|    | 443759 | BE390832  | Hs.134729 | FXYD domain-containing ion transport reg  | 1.09 | 1.23 | 1.25 |
|    | 414396 | BE548266  | Hs.76057  | galactose-4-epimerase, UDP-               | 1.09 | 1.07 | 1.23 |
|    | 401558 |           |           | ENSP00000220478*:SECRETOTRANIN III.       | 1.08 | 1.54 | 1.08 |
| 40 | 428411 | AW291464  | Hs.10338  | ESTs                                      | 1.08 | 1.07 | 6.19 |
|    | 422051 | AW327546  | Hs.111024 | solute carrier family 25 (mitochondrial   | 1.08 | 1.25 | 0.93 |
|    | 414594 | NM_015362 | Hs.76907  | HSPC002 protein                           | 1.08 | 1.18 | 1.12 |
|    | 453883 | AI638516  | Hs.347524 | cofactor required for Sp1 transcriptiona  | 1.07 | 1.15 | 1.31 |
|    | 420856 | BE513294  | Hs.205736 | HLA class II region expressed gene KE2    | 1.06 | 1.47 | 1.08 |
| 45 | 412265 | AA101325  | Hs.86154  | hypothetical protein FLJ12457             | 1.06 | 1.17 | 1.22 |
|    | 429259 | AA420450  | Hs.292911 | Plakophilin                               | 1.06 | 1.08 | 0.73 |
|    | 417381 | AF164142  | Hs.82042  | solute carrier family 23 (nucleobase tra  | 1.05 | 1.04 | 0.84 |
|    | 415825 | Y18024    | Hs.78877  | inositol 1,4,5-trisphosphate 3-kinase B   | 1.05 | 1.09 | 1.37 |
|    | 444438 | N32755    | Hs.322489 | ESTs                                      | 1.04 | 1.13 | 1.05 |
| 50 | 407394 | AF005081  |           | gb:Homo sapiens skin-specific protein (x  | 1.04 | 1.22 | 0.78 |
|    | 404960 |           |           | eyes absent (Drosophila) homolog 3        | 1.04 | 1.06 | 1.04 |
|    | 408972 | AL050100  | Hs.49378  | DKFZP586D0919 protein                     | 1.04 | 1.09 | 1.13 |
|    | 414477 | U41635    | Hs.76228  | amplified in osteosarcoma                 | 1.03 | 1.11 | 1.03 |
|    | 409327 | L41162    | Hs.53563  | collagen, type IX, alpha 3                | 1.03 | 1.02 | 2.33 |
| 55 | 435056 | AW023337  | Hs.5422   | glycoprotein M6B                          | 1.03 | 1.02 | 3.56 |
|    | 415314 | N88802    | Hs.5422   | glycoprotein M6B                          | 1.02 | 1.02 | 4.02 |
|    | 408591 | AF015224  | Hs.46452  | mammaglobin 1                             | 1.00 | 1.41 | 0.05 |
|    | 401203 |           |           | Target Exon                               | 1.00 | 1.02 | 0.98 |
|    | 400304 | AF005082  | Hs.113261 | Homo sapiens skin-specific protein (xp33  | 1.00 | 1.49 | 0.56 |
| 60 | 407395 | AF005082  |           | gb:Homo sapiens skin-specific protein (x  | 1.00 | 1.69 | 0.91 |
|    | 411388 | X72925    | Hs.69752  | desmocollin 1                             | 1.00 | 3.12 | 1.00 |
|    | 428618 | AA885360  |           | Target CAT                                | 1.00 | 1.77 | 1.00 |
|    | 402860 |           |           | ENSP00000239210:DJ50O24.4 (novel protein  | 1.00 | 1.53 | 1.00 |
|    | 437211 | AA382207  | Hs.5509   | ecotropic viral integration site 2B       | 1.00 | 1.39 | 1.00 |
| 65 | 409269 | AA576953  | Hs.22972  | steroid 5 alpha-reductase 2-like; H5AR g  | 1.00 | 1.46 | 1.00 |
|    | 409190 | AU076536  | Hs.50984  | sarcoma amplified sequence                | 1.00 | 0.80 | 1.00 |
|    | 416143 | AI955650  |           | glutaminy-peptide cyclotransferase (glu   | 1.00 | 1.96 | 1.00 |
|    | 401588 |           |           | C15000180*.gi 544344 sp Q05859 FOR4_MOUSE | 1.00 | 2.04 | 1.00 |
|    | 419519 | AI198719  | Hs.176376 | ESTs                                      | 1.00 | 1.91 | 1.00 |
| 70 | 448816 | AB033052  | Hs.22151  | KIAA1226 protein                          | 1.00 | 1.82 | 1.00 |
|    | 440270 | NM_015986 | Hs.7120   | cytokine receptor-like molecule 9         | 1.00 | 1.15 | 1.00 |
|    | 418618 | U66097    | Hs.86724  | GTP cyclohydrolase 1 (dopa-responsive dy  | 1.00 | 1.66 | 0.74 |
|    | 422836 | AL037365  | Hs.194093 | AKAP-binding sperm protein ropporin       | 1.00 | 2.21 | 1.00 |
|    | 452461 | N78223    | Hs.108106 | transcription factor                      | 1.00 | 1.61 | 1.00 |
| 75 | 428479 | Y00272    | Hs.334562 | cell division cycle 2, G1 to S and G2 to  | 1.00 | 1.42 | 1.00 |
|    | 422420 | U03398    | Hs.1524   | tumor necrosis factor (ligand) superfam   | 1.00 | 1.81 | 1.00 |
|    | 429477 | AI275514  | Hs.6658   | ESTs                                      | 1.00 | 1.67 | 1.00 |
|    | 454027 | R40192    | Hs.21527  | Human DNA sequence from clone GS1-115M3   | 1.00 | 1.05 | 1.00 |
|    | 416209 | AA236776  | Hs.79078  | MAD2 (mitotic arrest deficient, yeast), h | 1.00 | 1.79 | 1.00 |
| 80 | 451993 | AA765776  | Hs.122983 | ESTs                                      | 1.00 | 2.15 | 1.00 |
|    | 416947 | N23282    | Hs.184341 | ESTs, Weakly similar to B34087 hypotheti  | 1.00 | 1.67 | 1.00 |
|    | 441606 | R37263    | Hs.21065  | ESTs, Moderately similar to PC4259 ferri  | 1.00 | 1.87 | 1.00 |
|    | 442590 | AI002686  | Hs.130313 | ESTs                                      | 1.00 | 2.59 | 1.00 |
|    | 404831 |           |           | C1002937*.gi 7499208 pir T20993 hypothe   | 1.00 | 1.44 | 1.00 |
|    | 428454 | U55936    | Hs.184376 | synaptosomal-associated protein, 23kD     | 1.00 | 1.47 | 1.00 |
|    | 419717 | H07970    | Hs.92458  | G protein-coupled receptor 19             | 1.00 | 1.78 | 1.00 |
|    | 408611 | NM_004367 | Hs.46468  | chemokine (C-C motif) receptor 6          | 1.00 | 1.64 | 1.00 |

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|    |        |           |           |  |      |      |      |
|----|--------|-----------|-----------|--|------|------|------|
|    | 421666 | AL035250  | Hs.1408   | endothelin 3                             | 1.00 | 0.63 | 1.00 |
|    | 446155 | AI553695  | Hs.159422 | Homo sapiens cDNA FLJ13997 fis, clone Y7 | 1.00 | 1.60 | 1.00 |
|    | 423899 | NM_001427 | Hs.134989 | engrailed homolog 2                      | 1.00 | 2.91 | 1.00 |
|    | 423130 | AW897586  | Hs.21213  | ESTs                                     | 1.00 | 1.65 | 1.00 |
| 5  | 433843 | AW021423  | Hs.112819 | ESTs                                     | 1.00 | 2.08 | 1.00 |
|    | 458574 | AW384436  | Hs.135265 | Homo sapiens clone FLB8436 PRO2277 mRNA, | 1.00 | 1.00 | 1.00 |
|    | 430205 | AB025904  | Hs.235168 | carbonic anhydrase XIV                   | 1.00 | 1.41 | 1.00 |
|    | 427335 | AA448542  | Hs.251677 | G antigen 7B                             | 1.00 | 1.15 | 1.00 |
|    | 439951 | AI347067  | Hs.124636 | ESTs                                     | 1.00 | 1.80 | 1.00 |
| 10 | 420248 | AI377191  | Hs.44714  | ESTs                                     | 1.00 | 2.15 | 1.00 |
|    | 446259 | AA425204  | Hs.334721 | hypothetical protein FLJ13391            | 1.00 | 2.35 | 1.00 |
|    | 447164 | AF026941  | Hs.17518  | vipin; similar to inflammatory respon    | 1.00 | 1.53 | 1.00 |
|    | 447289 | AW247017  | Hs.36978  | melanoma antigen, family A, 3            | 1.00 | 1.73 | 1.00 |
|    | 408758 | NM_003686 | Hs.47504  | exonuclease 1                            | 1.00 | 1.59 | 1.00 |
| 15 | 453745 | AA952989  | Hs.63908  | hypothetical protein MGC14726            | 1.00 | 1.73 | 1.00 |
|    | 436609 | AI022514  | Hs.131380 | ESTs                                     | 1.00 | 1.96 | 1.00 |
|    | 419308 | N40321    |           | gb:yx80g07.r1 Soares melanocyte 2NbHM Ho | 1.00 | 2.28 | 1.00 |
|    | 421650 | AA781795  | Hs.122587 | ESTs                                     | 1.00 | 1.74 | 1.00 |
|    | 459578 | AW612538  | Hs.304491 | EST                                      | 1.00 | 2.16 | 1.00 |
| 20 | 446152 | AI292036  |           | ESTs                                     | 1.00 | 1.66 | 1.00 |
|    | 449579 | AW207260  | Hs.134014 | ESTs, Weakly similar to T46425 hypothi   | 1.00 | 2.04 | 1.00 |
|    | 418673 | NM_005582 | Hs.87205  | lymphocyte antigen 64 (mouse) homolog (  | 1.00 | 1.75 | 1.00 |
|    | 415004 | AA158925  | Hs.240849 | ESTs, Weakly similar to GBP1_HUMAN INTER | 1.00 | 1.85 | 1.00 |
|    | 426274 | D38122    | Hs.2007   | tumor necrosis factor (ligand) superfami | 1.00 | 1.92 | 1.00 |
| 25 | 453922 | AF053306  | Hs.36708  | budding uninhibited by benzimidazoles 1  | 1.00 | 1.72 | 1.00 |
|    | 417791 | AW965339  | Hs.44269  | ESTs                                     | 1.00 | 1.52 | 1.00 |
|    | 424905 | NM_002497 | Hs.153704 | NIMA (never in mitosis gene a)-related k | 1.00 | 2.02 | 1.00 |
|    | 416445 | AL043004  | Hs.79337  | KIAA0135 protein                         | 1.00 | 1.28 | 1.00 |
| 30 | 408375 | AI224520  | Hs.40930  | ESTs                                     | 1.00 | 1.92 | 1.00 |
|    | 406964 | M21305    |           | FGENES predicted novel secreted protein  | 1.00 | 0.46 | 1.00 |
|    | 408522 | AI541214  | Hs.46320  | Small proline-rich protein SPRK [human,  | 1.00 | 1.00 | 2.48 |
|    | 412828 | AL133396  | Hs.74621  | prion protein (p27-30) (Creutzfeld-Jakob | 0.98 | 0.98 | 3.24 |
|    | 422270 | AF114494  | Hs.114062 | protein tyrosine phosphatase-like (proli | 0.95 | 0.96 | 3.06 |
|    | 446488 | AB037782  | Hs.15119  | KIAA1361 protein                         | 0.94 | 0.96 | 1.61 |
| 35 | 433435 | BE545277  | Hs.340959 | Ts translation elongation factor, mitoch | 0.94 | 0.94 | 0.76 |
|    | 409402 | AF208234  | Hs.695    | cystatin B (stieffin B)                  | 0.93 | 0.91 | 1.55 |
|    | 423942 | AF209704  | Hs.169407 | glycolipid transfer protein              | 0.92 | 0.93 | 2.09 |
|    | 414219 | W20010    | Hs.75823  | ALL1-fused gene from chromosome 1q       | 0.91 | 0.91 | 4.08 |
|    | 429211 | AF052693  | Hs.198249 | gap junction protein, beta 5 (connexin 3 | 0.90 | 0.81 | 0.73 |
| 40 | 417632 | R20855    | Hs.5422   | glycoprotein M6B                         | 0.90 | 0.92 | 3.89 |
|    | 449092 | U91641    |           | alpha2,8-sialyltransferase               | 0.89 | 0.79 | 0.84 |
|    | 426716 | NM_006379 | Hs.171921 | sema domain, immunoglobulin domain (Ig), | 0.89 | 0.92 | 3.70 |
|    | 445033 | AV652402  | Hs.72901  | cyclin-dependent kinase inhibitor 2B (p1 | 0.88 | 0.90 | 2.02 |
|    | 408349 | BE546947  | Hs.44276  | homeo box C10                            | 0.88 | 0.87 | 0.73 |
| 45 | 429345 | R11141    | Hs.199695 | hypothetical protein                     | 0.85 | 0.84 | 0.69 |
|    | 451621 | AI879148  | Hs.26770  | fatty acid binding protein 7, brain      | 0.84 | 0.85 | 1.32 |
|    | 417022 | NM_014737 | Hs.80905  | Ras association (RalGDS/AF-6) domain fam | 0.84 | 0.88 | 3.37 |
|    | 405885 |           |           | Target Exon                              | 0.81 | 0.71 | 1.00 |
| 50 | 407788 | BE514982  | Hs.38991  | S100 calcium-binding protein A2          | 0.78 | 0.78 | 0.90 |
|    | 417515 | L24203    | Hs.82237  | ataxia-telangiectasia group D-associated | 0.77 | 0.73 | 0.71 |
|    | 421100 | AW351839  | Hs.124560 | Homo sapiens cDNA: FLJ21763 fis, clone C | 0.75 | 0.78 | 4.69 |
|    | 440274 | R24595    | Hs.7122   | scrapie responsive protein 1             | 0.74 | 0.78 | 5.42 |
|    | 425071 | NM_013989 | Hs.154424 | deiodinase, iodothyronine, type II       | 0.70 | 0.75 | 4.29 |
| 55 | 412719 | AW016610  | Hs.816    | ESTs                                     | 0.70 | 0.77 | 3.99 |
|    | 432467 | T03667    | Hs.239388 | Human DNA sequence from clone RP1-304B14 | 0.69 | 0.73 | 3.79 |
|    | 437191 | NM_006846 | Hs.331555 | serine protease inhibitor, Kazal type, 5 | 0.65 | 0.64 | 1.11 |
|    | 452487 | AW207659  | Hs.6630   | Homo sapiens cDNA FLJ13329 fis, clone OV | 0.61 | 0.65 | 3.20 |
|    | 448133 | AA723157  | Hs.73769  | folate receptor 1 (adult)                | 0.61 | 0.22 | 0.49 |
| 60 | 439659 | AW970780  | Hs.59483  | Homo sapiens cDNA FLJ14471 fis, clone MA | 0.49 | 0.30 | 0.67 |
|    | 419092 | J05581    | Hs.89603  | mucin 1, transmembrane                   | 0.41 | 0.11 | 0.34 |
|    | 417079 | U65590    | Hs.81134  | interleukin 1 receptor antagonist        | 0.23 | 0.30 | 0.35 |

TABLE 49B:

Pkey: Unique Eos probeset identifier number  
CAT number: Gene cluster number  
Accession: Genbank accession numbers

|    |        |            |  |
|----|--------|------------|--|
|    | Pkey   | CAT Number | Accession  |
| 70 | 430540 | 713_2      | BC017171 BC012195 NM_007126 AF100752 AL137377 Z70768 BM474865 BG754806 AU124376 BG757203 BG764420 BG775028 BG824418 BM045810 AU120387 BG770238 BG686740 BG913323 B1759980 BG395998 BM048875 BE881070 BE313689 BE879144 BM309834 AW245847 AI177017 BF196861 BE856897 AA463876 A1375927 AA648810 AA948193 AA490916 A1459893 A458188 AI240408 AI191843 AI131029 AW768399 A1365196 AW337984 AW026150 BE466591 BE674599 A1818438 AA772197 A1651927 AW151143 B1198825 BG815083 BM458764 BE903567 BE732715 BM043200 BE900263 BE900706 BE731097 BE390023 BG875384 BF996406 BF988930 BM475542 AW246215 BE501897 BE903610 BE561530 BE560537 BE903782 BE732947 BI227204 BG761305 BE262642 BE391848 BE382475 BG008258 BI547991 B1459099 BE391391 BE259420 BE298109 AW245422 AI238477 A1914618 H80534 BE301004 AL531791 A1435581 BF793112 AL577303 AA373265 BE746965 BF743630 BE879296 A1359493 BM018598 A1689260 AW072450 F20201 AW151405 AW517572 AA773468 BG259694 BE391163 BG621529 AI421728 BG767231 BM462953 BG340524 W52648 AA113434 BE785431 BI041981 BG832385 BG253168 BG759470 BF369329 BF981332 BE259418 BE785738 BI091658 N72512 W58732 W85690 BG958989 AI205206 H19721 W17051 W77958 BI262010 AAB44319 W74143 W72214 N85194 BE734033 BG164099 AA931069 F13645 R41394 AK025758 BG180977 BE349455 AA812018 AA740241 AI027722 A1150356 AA886395 AW977627 BE220225 AA884082 AW518114 AI243844 AA809493 AA481029 AA825718 A1347866 AI431670 AAB14436 AI251109 R07704 AA765606 AA724593 A1918399 A1537550 AA491103 AW008188 R07703 AA989120 AA746235 AW028983 AA789102 AU185751 AW971465 AA489681 AW971893 AW612086 BE077936 B1860809 BE002760 BG746251 BE962912 BM454584 AL134894 BF104082 H80591 |
| 80 | 431317 | 997174_1   | AW970501 AW613399 AA503435 AA502682 N91138   |



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453912 32562\_3 BM472224 BI966849 BI966735 AW973032 BI962894 BI963048 AA548765 AI926504 AA041551 AW043754 AI086702 AW008105 AA974849 AW614893  
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H87967  
5 420218 191547\_1 AW958037 R42557 AI337047 AA948360 AI638005 AA459950 AI624915 AI638047 AI467856 AI521826 AA860305 AI932315 AW003092 AW271756  
AW779380 AA609879 AI634791 AI493770 AI565211 Z41145 AI627952 AA303734 BE349457 AW196765 AA256527 BE089727  
458997 11847\_4 BM453041 AA750783 BE218582 AI340046 AW166131 BF515854 AI630296 AA461307 AI090881 AW023059 AA155797 AA115486 AI597396  
AW889004 AW937420 AA137082 AA013374 BG619478 BG401839  
430015 713\_2 BC017171 BC012195 NM\_007126 AF100752 AL137377 Z70768 BM474865 BG754806 AU124376 BG757203 BG764420 BG775028 BG824418  
BM045810 AU120387 BG770238 BG686740 BG913323 BI759980 BG395998 BM048875 BE881070 BE313689 BE879144 BM309834 AW245847  
10 BM045810 AU120387 BG770238 BG686740 BG913323 BI759980 BG395998 BM048875 BE881070 BE313689 BE879144 BM309834 AW245847  
AI770171 BF195861 BE856897 AA463876 AI375927 AA648810 AA948193 AA490916 AI459893 AI458188 AI240408 AI191843 AI131029 AW768399  
AI365196 AW337984 AW026150 BE466591 BE674599 AI818438 AA772197 AI651927 AW151143 BI198825 BG819083 BM458764 BE903567  
BE732715 BM043200 BE900263 BE900706 BE731097 BE390023 BG875384 BF996406 BF988930 BM475542 AW246215 BE501897 BE903610  
BE561530 BE560537 BE903782 BE732947 BI227204 BG761305 BE262642 BE391848 BE382475 BG008258 BI547991 BI455099 BE391391 BE259420  
BE298109 AW245422 AI423847 AI914618 H00534 BE301004 AL531791 AI435581 BF793112 AL577303 AA373265 BE746965 BF743630 BE879296  
15 AI359493 BM018598 AI689260 AW072450 F20201 AW151405 AW517572 AA773468 BG259694 BE391163 BG621529 AI421728 BG767231 BM452953  
BG340524 W52648 AA113434 BE785431 BI041981 BG832385 BG253168 BG759470 BF369329 BF981332 BE259418 BE785738 BI091658 N72512  
W58732 W85690 BG958989 AI205206 H19721 W17051 W77558 BI262010 AA844319 W74143 W72214 N85194 BE734033 BG164099 AB931069  
F13645 R41394 AK025758 BG180977 BE349455 AA812018 AA740241 AI027722 AI150356 AA866395 AW977627 BE220225 AA884082 AW518114  
AI243844 AA809493 AA481029 AA825718 AI347866 AI431670 AA814436 AI251109 R07704 AA765606 AA724593 AW18399 AI537550 AA491103  
20 AW008188 R07703 AA989120 AA746235 AW028983 AA789102 AI185751 AW971465 AA489681 AW971893 AW612086 BE077936 BI860809  
BE002760 BG746251 BE962912 BM454584 AI134894 BF104082 H00591  
AA527161 BG211784 AA527065 AA505489 AW512550  
425231 235504\_1 AK025474 U11293 AF141304 BM424202 AL539879 AL554793 AL543707 AL549509 BI753328 BG756797 BI856494 BE901116 AL556899 AU133347  
417282 2142\_2 BI838505 AW949559 BM012604 BG773980 BG661309 BI260149 BF436764 BG983060 BF822225 BI059728 BF917866 BF917609 BF914374 D31003  
AA234218 AJ420466 BM083921 BE856788 BE669957 BF430992 AW614978 AW205958 BF110763 BF222758 AA195232 AI341353 AI698676  
AI093230 AI123522 AI656594 AI208758 AA975916 AI089224 AI264922 AA256604 AA659637 BE218707 AA195203 AW999239 AW139706 N31717  
AW205941 R95955 N39147 BM015411 AL576975 BF689524 AL563130 BI858155 AA417889 AL513995 AL568815 AU160693 AA836028 H84388  
AL517078 AL564880 AL530507 AL561042 AA024435 W47314 AI680513 AA456116 BF836679 AW975173 H24039 AW105059 BE548113 AW370257  
BM011139 AW675130 BE276045 BF933396 AL517903 AA886367 BI030596 BG477193 BF973867  
30 M31126  
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452194 90339\_1 AI709339  
442643 2736\_1 BC001588 BC007424 AF016369 NM\_004697 BI756186 BE257019 BG500792 BI862776 AL121371 BG574833 AA703250 AA179511 AW052006  
AI280150 AI914000 AI358319 AI081204 AI082594 AA992449 AI470821 AI655744 AW237529 AA678858 AI984430 BF433055 BE467594 BE467573  
35 AA035630 AI289987 AI184802 AI681391 AW552416 AI138377 AI139266 AA961714 AI800163 AA418751 AW451928 AA668676 AI273444 AI494387  
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AW195227 AI189676 BF802049 AL513632 AL554911 AL538845 BE297273 AA315321 BM451920 BE269268 BE292835 BE018128 BG755713  
BM041095 BG677009 AL039691 BF995709 BE735586 BE296453 BG393509 BG824453 AL567522 AI745257 AW388641 AW301265 AI141144  
40 AW029280 AI149362 AU152328 AA418255 AI121009 AI809398 AL528748 H13050 T47086 BI000675 BF334914 BF109661 R44450 H13259 T47087  
AW388646 BF305834 AL577515 BM041600 BE889299 BF239768  
448243 13061\_2 BG166513 AA479726 BE622314 AL134913 BE006305 BE006312 BE006298 AA044582 AW994956 AA234175 AA043906 BE006303 BF327669  
BE006317 BF326759 BF541959  
430441 1438\_6 BG108218 BE560548 AW380115 BE269629 AI911518 AW380113 AA902964 AA455001 AI276529 AI685597 AA970496 D61084 AW380068 AW380080  
45 R00283 C15236 AW327776 D80759  
432810 101919\_1 BG292389 C06094 AI668930 AW104534 AA310513 AA830127 AW134897 AA046953 AW965490 AI810530 BF092924 AA334151 AA334725 D31302  
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AI147163 AA626033 AI539156 AA565542 AI094253 AW512612 BE889628 AA744752 BE646306 AW471324 AA999975 AA863400 H17550 AI991439  
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50 446019 658727\_1 AI362520 D25917 AI670784 AI742347 AW269789 AI270700 AW610541 AW793036 AW793035 AW610540 AW362220 AW362166 AW362214  
AW362225 AW362228 AL119827  
453331 16559\_1 BG571303 AA410586 AA035018 BG572117 BG620022 AA147247 BG005785 BG014448 R31981 H02668 H12498 R36203 BF992089 R73999 T49904  
R75732 BI057974 T53681 AA147933 N50695 R68588 R25671 R31935 R25110 R36105 AK055628 BE157467 AW663674 AA190593 H01642 BF510304  
AA626915 AA746952 AI161014 AA099554 BG572534 AI803329 AI809932 AI808765 AA411449 AI378760 AA976929 AI378620 AA909684 R75632  
AI360919 AI350463 AW069127 AA411621 AA742532 H12451 BE208298 H03612 H12839 N58781 R75957 BF996484 AI240665 BF989591 BI056086  
55 BG001590 BF107035  
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AI308821 AA772275 AW055215 AI589705 AI336532 AA806547 AV682125 H93575 AW071172 AW769904 AI863985 AW261018 AW195655 D79662  
BE042393 N75017 AW014741 C75509 BE748621 H92431 AW079261 AW901780 AA329482 AW960115 BI260621 AI767525 R31663 BI918664  
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60 452203 2630\_1 BC014081 NM\_000593 X57522 L21208 L21207 L21206 L21205 L21204 AL561404 AL546423 AL560492 AL556882 AL541576 AL550654 BI823519  
BI770023 AI554969 BI489906 AI304693 AW295947 BM146642 X57521 BG820143 BE898390 F06770 F12630 BM423610 AL561518 BM009470  
BG742981 AA279685 AA847441 AA313737 BF172639 BF897216 BF914190 BF903647 S70277 AI569694 AW073296 AI361433 AA564644 AA487429  
BE858232 AA838610 AI539114 AI719375 AI829129 BG057675 AI423422 AU158860 BE300655 AW170777 AA586956 AL571889 AL556850 AL576404  
AL582800 BI256544 BF342301 BG875994 AA054458 AA353161 AI940434 BE816522 AL577636 AI479650 AW150377 AU154395 AW951271 AI032220  
65 AI819778 AI346733 AW771150 AW512525 AI249904 AA279809 AI352549 AW512517 BG056280 AA521222 BE721141 AL581932 AL541575 BI819184  
AV660190 AL556475 AI620020 AW089888 AW079179 Z21518 AA687601 F04651 AI783961 T57198 AI433367 T78652 AL554968 AA365648 AL582619  
BE874601 BF804659 AL574458 BM145502 AI266514 AI538823 AI475626 AA948210 AA884054 AA487637 AA031844 AA535221 AW794256  
AW361447 BE788505 AI682892 AA830989 AA862356 AA653084 BM009154 AA135727 H05927 H23433 R42244 W79997 AW366665 AW366601  
AA678742 AL556474 AA135770 BE774050 BF914200 H88457 AA627746 BI560216 BI753586  
70 458098 23945\_1 AI082245 BE467534 AI797130 BE467063 BE467767 BE218421 AI694996 BE327781 BE327407 BE833829 AA989054 AA459718 BE833855 BE550224  
AA832519 AF086393 AV733386 BE465409 N29245 W07677 AA482971 BE503548 H18151 AA461301 W79223 W74510 AI090689 AL600773 AL600781  
N46003 R28075 R34182 BE071550 AW885857 AI276145 AI276969 H97808 N20540 AI468553  
424399 2196\_1 NM\_058173 AF414087 W72837 BF742809 AW070916 BE092421 AI905687 AA340069 BE074512 AI905623 AI905633 BG202312 W72838 AI139455  
75 427239 20459\_2 BG218084 BE926938 BE186013 AW176044 AW291950 BG185269 BG197186 BG192597 BG183176 BG207535 AI127172 BE815819 AI905624  
R75793 BG202313 AI905837 BE815853  
AL532360 BE794750 AA582906 AI015067 AW271034 BG271636 AW075177 AW071374 AI345555 AI307208 BE138953 BE049086 AI334881  
AW075006 AW075181 AA464019 AW302733 AW075100 AW073433 AI802854 AI334909 AI802853 AI345036 AI348921 AI340734 AI307478 AI251289  
AW302327 AW072520 AI312145 AW073656 AW072513 AW071289 AI307559 AA876186 T29587 AI307493 AI255058 AI252868 AI252839 AW074809  
AI252926 AI252160 AI251662 AI251262 AI610913 AI270787 AI270156 AI252075 AW073469 AW072901 AW072496 AW071420 AI305762 AI254764  
AI802837 AI251264 AW073049 AW071311 AI340643 BE138965 BE138502 AW073456 AI334733 AI054335 BE139260 AI054302 AI054060 AI054057  
80 AI053722 AI289711 BE139228 AW470478 AW271039 AW302085 BE048712 AI254494 AI271496 AI252427 BF718773 BF718645 AW074866 BE857822  
NM\_002082 L16862 BG828886 BE795217 BE904064 BE294526 BE297283 BE394617 BE935127 BE935106 F12351 BG823182 H16710  
400222 9287\_3 BF347859 AW499616 AA191322 AW499617 AL601010 AW575742 AA729043 BE463447 AA086179 BE549623 AI335824 AW408712 BM149172  
410600 497855\_1

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|    |        |           |  |
|----|--------|-----------|--|
| 5  | 417324 | 292720_1  | BG775668 BG680336 AW991605 AA455904 AW265432 BF911380 AA456370 BF911379 AA195677 BF914311 BF913866 BG775059<br>BG951874 AI572169   |
| 10 | 453613 | 10943_2   | AI121705 BF514513 BE812196 AW173164 AI911266 AI161253 AA906295 AA724987 AA972070 AW085313 BI062611 BG119864 W02997 H80902<br>T91294 H09335 H09332 Z40007 F10399 F02595 F03100 H38987 AI801190 H80903 AW130044 F10391 T80640 H24461 R46234 R51914   |
| 15 | 411825 | 7891_1    | AK000695 AK000489 BC001688 BG235988 AW006329 AI887644 AI207230 AI148213 AI304333 AI634653 AW662636 AI281247 AA946921 AA424487<br>BE272330 AI830588 AA159183 AA977141 BG231801 AA631793 AA975194 BF817537 AA477798 BI906631 AW083424 AA625199 NM_017767<br>AK000334 BF984048 AW815634 AL573992 AA430612 AA928390 AA464447 AW340827 AA424290 AI927759 BG951502 AW881353 BI765535   |
| 20 | 400270 | 32329_1   | AF067853 NM_000026 X65867 BC018881 S60710 BG686218 BG707897 BI767531 BE742167 BG747544 BG768400 BG323811 AU119991 BG763638<br>BG393097 BG761706 BI766890 BI457560 BG122629 BF972974 BI194649 BE909022 BG488681 AW328441 AW248366 BG718034 BI598504<br>BE264145 AW248440 BE410942 BE256756 AI480227 AI758918 BE251966 AI684330 AW518872 AW264087 AA631137 AI742831 AI990690 AI92994<br>AA417231 AA455931 AA416541 AI652537 AI803674 AA631209 AI923786 AW205704 AI354260 AI198865 BF593386 AW821194 AI693442 AW797594<br>BE893700 BF242879 BE251315 AA534659 AA494551 BI047923 BG949898 BF246869 BI085069 BM007035 AA665981 AI375483 BG221393 AI867580<br>AA128025 AW612345 R12769 W92325 R40084 AA191625 D51044 AA599257 BE878335 AA121664 AI145666 BI026299 AI872956 AA788642<br>AA128068 BF819623 AI277591 AI435105 AI354905 AV747031<br>BC021240 BF430978 BG056212 AW874052 BI856040 AI572156 AI914600 AI002736 BM023413 H91902 AI563177 AL529967 BM023140 BE391587<br>BG761312 BE277571 BI195388 BE389566 H91851 BE391930 BE391441<br>BG003993 AW589921 AW892489 AW903666<br>AK055109 BC019085 AA187684 BG656226 BM023227 AI932311 AW264381 AA398371 BM021483 AI432433 AI375777 AI129580 AW262782<br>AA134107 BM023515 AA977504 AI859222 AI348454 R69725 AA975268 BM021207 AL080074 AA129218 AW207842 N90581 BF471919 AI092259<br>AI028416 AI074114 BG656536 BE501677 AW193419 AA917040 W90430 AI342984 AI378957 AL036486 AW020068 BI491093 BF7476021 R41226<br>R69631 F04125 C02343 AA115589 R56480 AI400988 R54266 R31422<br>BM453041 AA760783 BE218582 AI340046 AW166131 BF515854 AI630296 AA461307 AI090881 AW023059 AA155797 AA115486 AI597396<br>AW889004 AW937420 AA137082 AA013374 BG619478 BG401839<br>BE904404 AA778647 BF431869 AW070999 BG170122 BG191943 BG999184 R42302<br>AK054564 AF086057 AI869310 BG393141 BE220500 AI479459 AI866575 AI361301 AI674602 BF001506 AW004996 AI446292 AI890883 AI608681<br>AW131794 AI356096 AI433040 BG057018 AI696166 AW081428 AI392809 AA985226 AW190187 BE896007 BG171443 AW516382 AA731186 N50847<br>AA417728 F27148 AI003145 AL520675 AL577680 AL578955 AA316669 BF804796 AA768324 AI285396 BG745142 BG325246 BG475289 AL580501<br>AA832445 AA832168 BF063242 AW251083 BF345614 BE871009 BG698638 BG978245 BG978247<br>BC007350 BG766159 BG769338 BG761999 BG744385 BG770572 AW370610 AW370581 AA978353 AW327973 AW402425 AI889380 AA868504<br>AW612968 AA630644 AI751211 N26980 AI394506 AA747849 BF154926 BF477185 AA649647 R39135 AI750216 T35363 W36278 AW079375<br>AW612240 AA505495 AA515380 BG760793 AW370651 BG766029 AW370595 BF229885 BG762422 BG764907 T50662 AA025671 AW815715<br>AV703420 H65047 AA485582 R56186 H90385 R55913 BI261497 BI018403 BF376945 T75578 BF933325 BF932853 BG502266 AW686934 AV683504<br>BI018121 N41953 BF933343 BF932871 H08334 R14012 BE897622 T50816 BG689803 BF340083 Z20199<br>AA971409<br>BE896316 BG819393 AA187888 AW753122<br>BC006097 X03066 NM_002120 M26040 AW469119 AW469127 AI299772 AW518149 AI144456 AW628070 AI629032 AI358810 AI880433 AI440472<br>AI357070 AI855365 AW014799 AI767973 AW518041 AA909398 AW768606<br>AW936678 AW936821 AW936683 AW936822 AW936781 AW936817 AW936811 AW936653 AW936823 AW936685 AW936815 AW936637 AW936812<br>AW936730 AW936762 AW936682 AW936732<br>AW796921 AW798102 AW805749 AW805872 BF985060 AW794380 BF380449 AW794466 AW794538<br>AW853325 AW503672<br>AI659839 BE897640 BE907077 BC003059 BC017245 BC010733 BM423383 AI537826 AL580324 BG749884 BE910412 BI085225 BG830374<br>BG765711 BE513420 BE513706 AW249005 BE378229 BE250756 BG389441 BF998736 H61321 BF869238 BG979991 H49658 H49658 AA353290 D64154<br>BM468130 AL549088 BI765497 AL556922 BI833272 BM009270 BI546248 BG750170 BG480128 AL561553 BI559389 BG762029 BG741197 BI561200<br>BI259044 AL523216 BG333073 BI838073 BE790691 AV762878 BF972560 BI260209 BI333058 BI090606 BG468883 BI598273 BI826098 BE622086<br>BI758061 BG751116 BE905428 BG764482 AL522174 BG761428 BI836634 BG749048 BG774512 BE280653 BG480630 BG716728 BI765635<br>BG573991 BG389305 BF971754 BG680599 BE795075 BG324709 AA984290 BE304564 BG283813 BE252914 BF872431 BE407696 BE264894<br>AL552517 BF872428 BF724779 BE279635 BF804329 BE764960 BF811388 D31335 AW951318 BF992435 BF811453 NM_007002 AL518634<br>AL574934 AL523534 AL520445 AL521785 AL547001 AL558522 BI829145 BI862487 BI753281 BE258642 AL039594 BG015181 BE925165 BF872433<br>AI904540 AI904495 AA776741 AA317533 BG476628 R13328 BG489456 BF102495 BF693420 AL526597 BG104181 BG740214 BE393189 AI986312<br>H61596 AW051180 BI668762 AW938619 BI086232 AA053472 BE264345<br>AA609784 R97304<br>BG167206 AA677283 AA677217 AI703389 AI051577 AI912137 H39571 AA650047 AI399798 H24807 AA341614 BG945259 AI074162 AW960920<br>AA628934 AA659498 AA699617 H14450 H21758 H39576 AA095608 AI049973 BG054505 BG319545 AI742408 AA421324 AI580138 AI375883<br>AI374848 AI367657 AI374762 AI304678 AA007357 BF477168 AI373751 AA779885 AI801494 BE349021 AI220937 AW338397 AA253409 AA418327<br>AA872682 AI572030 AI521517 AI572944 AI418670 AI266089 W72413 W76492 AI809207 AI915747 H22230 H21951 H08513 H25154<br>BC017849 BC005892 N42983 BF691239 AI42991 N29240 N40292 N33322 N33330 N20535<br>BG755078 BI226909 N41827 AW404060 BI058921 H11253 AA616274 R05714 H00515 BI086965 AI032786 BI089613 BM171783 AI127382 AI660953<br>AW296271 AI582209 AA460965 AI376115 AI016900 BG055846 AI023644 AA767046 AA815039 AW403510 AI868663 AA815462 AA325654 AW292253<br>AW959582 AV725205 AW959578 AA300091 W24933 R05715 AW770185 H00465 N93714 H11254 T49555<br>AW966308 AA339512 AA338432<br>N27807 AA256634 BE276324<br>AK056315 AI015524 AA724079 BI713619 AI377728 AW293682 AI928140 AI092404 AI085630 AA731340 BM469629 AW968804 AA425658 AA769094<br>BF446026 AW118719 AI332765 AW500888 AW576556 AI859571 AW499664 AW614573 AW629495 AW505314 W74704 AI356361 AI923640<br>AW070509 AI521500 AL042095 AA609309 AA761319 AI381489 H45700 AA761333 AW255424 AA909524 AA635311 AA649040 AI392620 Z40708<br>AI985564 AW263513 AA913892 AI693486 AW263502 AI806164 AW291137 BI061872 BI059498 AA134476 AW084888 AA036967 AW370823 T55263<br>BI002756 AA489664 BF827261 W74741 BF963166<br>AF005081 BG193848<br>BI017998 BI826643 BG715794 BG722697 BI460787 BG773459 H52859 AI652853 AI990773 AW665193 AW340601 AA913806 AI337099 BE045942<br>AW572790 AW515652 H15004 AA909115 BI465310 BI462024 BI561578 BI463075 BG722527 R86003 BG652386 H15003 BI562131 BG435272<br>BG218868 AV705271 N34158 AL538368 BG186620 BG188697 BG181900 AI200440 BG033721 BF968528 BF792647 AW204668 AA922311 F02735<br>AW342041 BG217293 BE619664 BE465887 AA745605 AI278924 AI278546 AI280994 AA809678 AA282134 T08599 AA732436 T05478 F04402<br>AA262267 AI969523 N25559 AI760218 BG217318 BF893160<br>N40321 AA236322 AA236215<br>AI292036 AI858546 AI277390<br>AK056270 AV706896 AI692935 AI681140 AW162481 AW087114 AW157019 AI689795 AW251085 AW206911 BF438207 AW134945 BE041668<br>BF111425 U91641 NM_013305 BF968902 U59966 AU130750 BE174853 AI929731 AW161524 R43753 BE779688 |
| 75 | 419308 | 249928_1  |  |
| 80 | 446152 | 2857941_1 |  |
|    | 449092 | 4406_1    |  |

TABLE 49C:

Pkey:

Unique number corresponding to an Eos probeset

Ref:

Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) [Nature](#) 402:489-495.

Strand:

Indicates DNA strand from which exons were predicted.

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Nt\_position: Indicates nucleotide positions of predicted exons.

| Pkey   | Ref     | Strand | Nt_position                              |
|--------|---------|--------|--|
| 402075 | 8117407 | Plus   | 121907-122035,122804-122921,124019-12416 |
| 405451 | 7622517 | Minus  | 145949-146227                            |
| 401747 | 9789672 | Minus  | 118596-118816,119119-119244,119609-11976 |
| 401454 | 9186923 | Minus  | 114659-114832                            |
| 405545 | 1054740 | Plus   | 118677-118807,119091-119296,121626-12182 |
| 401780 | 7249190 | Minus  | 28397-28617,28920-29045,29135-29296,2941 |
| 403328 | 8469086 | Minus  | 120428-120703                            |
| 405547 | 1054740 | Plus   | 124361-124520,124914-125050              |
| 403532 | 8076842 | Minus  | 81750-81901                              |
| 400750 | 8119067 | Plus   | 198991-199168,199316-199548              |
| 405506 | 6466489 | Plus   | 80014-80401,80593-81125                  |
| 400533 | 6981826 | Minus  | 277132-277595                            |
| 405779 | 7280331 | Minus  | 33048-33856                              |
| 402994 | 2996643 | Minus  | 4727-4969                                |
| 401781 | 7249190 | Minus  | 83215-83435,83531-83656,83740-83901,8423 |
| 401994 | 4153858 | Minus  | 42904-43124,43211-43336,44607-44763,4519 |
| 403969 | 8569909 | Plus   | 31237-31375,32405-32506                  |
| 401760 | 9929699 | Plus   | 83126-83250,85320-85540,94719-95287      |
| 401797 | 6730720 | Plus   | 6973-7118                                |
| 401151 | 9438288 | Plus   | 30848-31228                              |
| 404872 | 9650523 | Minus  | 18540-18718                              |
| 402876 | 9864669 | Plus   | 5679-6027,7485-7584                      |
| 405204 | 7230116 | Plus   | 126569-126754                            |
| 402294 | 2282012 | Minus  | 2575-3000                                |
| 400991 | 8096825 | Plus   | 159197-159320                            |
| 401284 | 9800819 | Minus  | 101307-101421                            |
| 402474 | 7547175 | Minus  | 53526-53628,55755-55920,57530-57757      |
| 403022 | 3132351 | Plus   | 92097-92864                              |
| 402542 | 9801558 | Minus  | 67076-67594                              |
| 403409 | 9438598 | Plus   | 6860-7054,12573-12771                    |
| 403506 | 7596863 | Plus   | 105008-105650                            |
| 406016 | 8272661 | Plus   | 41341-41940                              |
| 405268 | 4156151 | Minus  | 24404-24521                              |
| 401106 | 8568931 | Plus   | 122694-122893                            |
| 404186 | 4481839 | Plus   | 829-1110                                 |
| 403817 | 8962065 | Plus   | 110297-111052                            |
| 406422 | 9256411 | Plus   | 163003-163311                            |
| 402160 | 8516165 | Plus   | 166063-166354                            |
| 402622 | 9930984 | Minus  | 129861-130099                            |
| 401558 | 7139678 | Plus   | 103510-104090                            |
| 404960 | 7408010 | Minus  | 146186-146377,147747-147943              |
| 401203 | 9743387 | Minus  | 172961-173056,173868-173928              |
| 402860 | 9588237 | Minus  | 76423-76560                              |
| 401588 | 7230871 | Plus   | 46412-46561                              |
| 404831 | 6624702 | Minus  | 16833-17020,20007-20120,21605-21799,2333 |
| 405885 | 7677703 | Minus  | 42574-42998                              |

TABLE 50A: ABOUT 398 GENES UPREGULATED IN PRIMARY MELANOMAS OR MELANOMA METASTASES RELATIVE TO BENIGN NEVI

Table 50A lists about 398 genes upregulated in primary melanoma or melanoma metastases relative to benign nevi. Genes were selected from 59680 probesets on the Eos/Affymetrix Hu03 Genechip array. Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

Pkey: Unique Eos probeset identifier number

ExAccn: Exemplar Accession number, Genbank accession number

UnigeneID: Unigene number

Unigene Title: Unigene gene title

R1: 70th percentile of primary melanoma and melanoma metastasis AIs divided by the maximum AI of benign nevi.

R2: 70th percentile of primary melanoma and melanoma metastasis AIs divided by the maximum AI of benign nevi, where the 15th percentile of normal tissue AIs was subtracted from both the numerator and denominator

| Pkey   | ExAccn    | UnigeneID | Unigene Title                            | R1    | R2    |
|--------|-----------|-----------|--|-------|-------|
| 422424 | AI186431  | Hs.296638 | prostate differentiation factor          | 13.73 | 16.82 |
| 446619 | AU076643  | Hs.313    | secreted phosphoprotein 1 (osteopontin)  | 11.67 | 11.84 |
| 407846 | AA426202  | Hs.40403  | Cbp/p300-interacting transactivator, wit | 9.35  | 7.59  |
| 444381 | BE387335  | Hs.283713 | ESTs, Weakly similar to S64054 hypotheti | 8.63  | 7.90  |
| 417880 | BE241595  | Hs.82848  | selectin L (lymphocyte adhesion molecule | 8.21  | 4.09  |
| 424321 | W74048    | Hs.1765   | lymphocyte-specific protein tyrosine kin | 7.13  | 6.10  |
| 447210 | AF035269  | Hs.17752  | phosphatidylserine-specific phospholipas | 6.79  | 6.26  |
| 417693 | AW959741  | Hs.40368  | adaptor-related protein complex 1, sigma | 6.55  | 6.36  |
| 429500 | X78565    | Hs.289114 | hexabrachion (tenascin C, cytostatin)    | 6.43  | 7.11  |
| 414812 | X72755    | Hs.77367  | monokine induced by gamma interferon     | 6.43  | 7.51  |
| 451736 | AW080356  | Hs.23889  | ESTs, Weakly similar to ALU7_HUMAN ALU S | 6.31  | 4.28  |
| 418870 | AF147204  | Hs.89414  | chemokine (C-X-C motif), receptor 4 (fus | 6.20  | 4.32  |
| 428291 | AA534009  | Hs.183487 | interferon stimulated gene (20kD)        | 6.03  | 4.52  |
| 417308 | H60720    | Hs.81892  | KIAA0101 gene product                    | 6.01  | 6.78  |
| 448569 | BE382657  | Hs.21486  | signal transducer and activator of trans | 5.99  | 7.51  |
| 439310 | AF086120  | Hs.102793 | ESTs                                     | 5.95  | 4.79  |
| 452838 | U65011    | Hs.30743  | preferentially expressed antigen in mela | 5.95  | 5.55  |
| 422241 | Y00062    | Hs.170121 | protein tyrosine phosphatase, receptor t | 5.76  | 4.82  |
| 442379 | NM_004613 | Hs.8265   | transglutaminase 2 (C polypeptide, prote | 5.76  | 2.19  |

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|    |        |           |           |  |      |       |
|----|--------|-----------|-----------|--|------|-------|
| 5  | 409274 | NM_003930 | Hs.52644  | SKAP55 homologue                         | 5.65 | 4.63  |
|    | 442739 | NM_007274 | Hs.8679   | cytosolic acyl coenzyme A thioester hydr | 5.58 | 3.41  |
|    | 442711 | AF151073  | Hs.8645   | hypothetical protein                     | 5.45 | 5.79  |
|    | 425118 | AU076611  | Hs.154672 | methylene tetrahydrofolate dehydrogenase | 5.42 | 5.56  |
|    | 412918 | BE563957  |           | activated RNA polymerase II transcriptio | 5.35 | 4.31  |
| 10 | 428125 | AA393071  | Hs.182579 | leucine aminopeptidase                   | 5.33 | 4.83  |
|    | 446921 | AB012113  | Hs.16530  | small inducible cytokine subfamily A (Cy | 5.33 | 5.13  |
|    | 431183 | NM_006855 | Hs.250696 | KDEL (Lys-Asp-Glu-Leu) endoplasmic retic | 5.30 | 6.27  |
|    | 414219 | W20010    | Hs.75823  | ALL1-fused gene from chromosome 1q       | 5.16 | 5.13  |
|    | 426600 | NM_003378 | Hs.171014 | VEGF nerve growth factor inducible       | 5.05 | 13.72 |
| 15 | 415444 | BE247295  | Hs.78452  | solute carrier family 20 (phosphate tran | 5.03 | 4.93  |
|    | 436701 | AW959032  |           | ESTs, Moderately similar to I78885 serin | 5.03 | 3.42  |
|    | 406648 | AA563730  | Hs.277477 | major histocompatibility complex, class  | 4.99 | 3.36  |
|    | 410850 | AW362867  | Hs.302738 | Homo sapiens cDNA: FLJ21425 fis, clone C | 4.98 | 5.30  |
|    | 418299 | AA279530  | Hs.83968  | integrin, beta 2 (antigen CD18 (p95), ly | 4.98 | 4.85  |
| 20 | 432469 | AL080084  |           | CGI-100 protein                          | 4.97 | 4.46  |
|    | 404854 |           |           | Target Exon                              | 4.85 | 3.49  |
|    | 415701 | NM_003878 | Hs.78619  | gamma-glutamyl hydrolase (conjugase, fol | 4.82 | 4.90  |
|    | 425397 | J04088    | Hs.155346 | topoisomerase (DNA) II alpha (170kD)     | 4.81 | 5.26  |
|    | 408958 | T99607    | Hs.49346  | signal recognition particle 54kD         | 4.78 | 2.34  |
| 25 | 453949 | AU077146  | Hs.36927  | heat shock 105kD                         | 4.78 | 5.18  |
|    | 458079 | AI796870  | Hs.54277  | DNA segment on chromosome X (unique) 992 | 4.77 | 4.13  |
|    | 440245 | AK001913  | Hs.7100   | hypothetical protein                     | 4.74 | 3.32  |
|    | 412228 | AW503785  | Hs.73792  | complement component (3d/Epstein Barr vi | 4.74 | 1.55  |
|    | 417834 | BE172058  | Hs.82589  | tumor rejection antigen (gp96) 1         | 4.73 | 4.25  |
| 30 | 451003 | AF058696  | Hs.25812  | Nijmegen breakage syndrome 1 (nibrin)    | 4.67 | 4.69  |
|    | 424571 | BE379766  |           | polymerase (RNA) II (DNA directed) polyp | 4.62 | 3.02  |
|    | 434203 | BE262677  | Hs.283558 | hypothetical protein PRO1855             | 4.61 | 5.45  |
|    | 452268 | NM_003512 | Hs.28777  | H2A histone family, member L             | 4.60 | 2.88  |
|    | 421311 | N71848    | Hs.283609 | hypothetical protein PRO2032             | 4.60 | 3.24  |
| 35 | 410491 | AA465131  | Hs.64001  | Homo sapiens clone 25218 mRNA sequence   | 4.60 | 4.34  |
|    | 425706 | AW406678  | Hs.122559 | hypothetical protein FLJ22570            | 4.59 | 3.58  |
|    | 450293 | N36754    | Hs.171118 | hypothetical protein FLJ00026            | 4.57 | 3.82  |
|    | 406836 | AW514501  | Hs.156110 | immunoglobulin kappa constant            | 4.57 | 9.27  |
|    | 413441 | AI929374  | Hs.75367  | Src-like-adaptor                         | 4.53 | 3.60  |
| 40 | 431129 | AL137751  | Hs.263671 | Homo sapiens mRNA; cDNA DKFZp434I0812 (f | 4.48 | 4.89  |
|    | 418506 | AA084248  | Hs.85339  | G protein-coupled receptor 39            | 4.47 | 3.72  |
|    | 411060 | NM_006074 | Hs.318501 | Homo sapiens mRNA full length insert cDN | 4.47 | 3.96  |
|    | 417501 | AL041219  | Hs.82222  | sema domain, immunoglobulin domain (Ig), | 4.45 | 2.40  |
|    | 437763 | AA469389  | Hs.5831   | tissue inhibitor of metalloproteinase 1  | 4.43 | 4.27  |
| 45 | 448883 | BE614989  | Hs.7503   | hypothetical protein FLJ14153            | 4.42 | 3.91  |
|    | 417274 | N92036    | Hs.81848  | RAD21 (S. pombe) homolog                 | 4.41 | 3.80  |
|    | 419285 | D31887    | Hs.89868  | KIAA0062 protein                         | 4.40 | 3.20  |
|    | 418321 | D63477    | Hs.84087  | KIAA0143 protein                         | 4.38 | 2.79  |
|    | 430154 | AW583058  | Hs.234726 | serine (or cysteine) proteinase inhibito | 4.37 | 3.86  |
| 50 | 428450 | NM_014791 | Hs.184339 | KIAA0175 gene product                    | 4.36 | 4.65  |
|    | 428297 | AA236291  | Hs.183583 | serine (or cysteine) proteinase inhibito | 4.36 | 3.42  |
|    | 447232 | AW499834  | Hs.327    | interleukin 10 receptor, alpha           | 4.36 | 3.31  |
|    | 409598 | NM_014018 | Hs.55097  | mitochondrial ribosomal protein S28      | 4.35 | 3.10  |
|    | 442432 | BE093589  | Hs.38178  | hypothetical protein FLJ23468            | 4.34 | 5.61  |
| 55 | 407047 | X65965    |           | gb.H.sapiens SOD-2 gene for manganese su | 4.33 | 3.31  |
|    | 443991 | NM_002250 | Hs.10082  | potassium intermediate/small conductance | 4.33 | 3.57  |
|    | 452322 | BE566343  | Hs.28988  | glutaredoxin (thioltransferase)          | 4.32 | 2.20  |
|    | 420991 | AW504814  | Hs.287379 | Homo sapiens mRNA for FLJ00111 protein,  | 4.32 | 3.60  |
|    | 449722 | BE280074  | Hs.23960  | cyclin B1                                | 4.31 | 5.79  |
| 60 | 408380 | AF123050  | Hs.44532  | diubiquitin                              | 4.30 | 3.62  |
|    | 427127 | AW802282  | Hs.22265  | pyruvate dehydrogenase phosphatase       | 4.28 | 4.18  |
|    | 417933 | X02308    | Hs.82962  | thymidylate synthetase                   | 4.28 | 5.06  |
|    | 432828 | AB042326  | Hs.287402 | chondroitin 4-sulfotransferase           | 4.25 | 4.15  |
|    | 450306 | AL080080  | Hs.24766  | thioredoxin domain-containing            | 4.24 | 3.15  |
| 65 | 440266 | AA088809  | Hs.19525  | hypothetical protein FLJ22794            | 4.23 | 3.65  |
|    | 407951 | W77762    | Hs.79015  | antigen identified by monoclonal antibod | 4.22 | 4.21  |
|    | 427337 | Z46223    | Hs.176663 | Fc fragment of IgG, low affinity IIb, r  | 4.20 | 4.11  |
|    | 408989 | AW361666  | Hs.49500  | KIAA0746 protein                         | 4.20 | 4.26  |
|    | 449626 | AA774247  | Hs.301637 | zinc finger protein 258                  | 4.19 | 2.65  |
| 70 | 422846 | BE513934  | Hs.1583   | neutrophil cytosolic factor 1 (47kD, chr | 4.18 | 6.80  |
|    | 415726 | T89844    | Hs.78712  | aminolevulinatase, delta-, synthase 1    | 4.16 | 4.28  |
|    | 444207 | AI565004  |           | cathepsin D (lysosomal aspartyl protease | 4.16 | 1.89  |
|    | 416980 | AA381133  | Hs.80684  | high-mobility group (nonhistone chromoso | 4.14 | 3.32  |
|    | 438718 | AL040058  | Hs.6375   | uncharacterized hypothalamus protein HT0 | 4.14 | 3.02  |
| 75 | 437802 | AI475995  | Hs.122910 | ESTs                                     | 4.12 | 4.18  |
|    | 446392 | AF142419  | Hs.15020  | homolog of mouse quaking QKI (KH domain  | 4.12 | 3.87  |
|    | 409461 | AA382169  | Hs.54483  | N-myc (and STAT1) interactor             | 4.11 | 3.80  |
|    | 427247 | AW504221  | Hs.174103 | integrin, alpha L (antigen CD11A (p180), | 4.11 | 5.71  |
|    | 414359 | M62194    | Hs.75929  | cadherin 11, type 2, OB-cadherin (osteob | 4.10 | 4.25  |
| 80 | 450071 | AA018283  | Hs.24359  | Homo sapiens cDNA FLJ11174 fis, clone PL | 4.10 | 2.91  |
|    | 452882 | AW972990  | Hs.196270 | folate transporter/carrier               | 4.10 | 4.25  |
|    | 414522 | AW518944  | Hs.76325  | Immunoglobulin J chain                   | 4.09 | 3.99  |
|    | 407756 | AA116021  | Hs.38260  | ubiquitin specific protease 18           | 4.09 | 4.60  |
|    | 405506 |           |           | Target Exon                              | 4.08 | 3.64  |
|    | 444677 | AL110212  | Hs.301005 | purine-rich element binding protein B    | 4.07 | 2.43  |
|    | 417497 | AW402482  | Hs.82212  | CD53 antigen                             | 4.07 | 6.55  |
|    | 413715 | AW851121  | Hs.75497  | Homo sapiens cDNA: FLJ22139 fis, clone H | 4.06 | 3.27  |

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|    |        |           |           |   |      |      |
|----|--------|-----------|-----------|---|------|------|
|    | 421508 | NM_004833 | Hs.105115 | absent in melanoma 2                      | 4.05 | 4.39 |
|    | 408688 | AI634522  | Hs.152925 | KIAA1268 protein                          | 4.05 | 3.32 |
|    | 439453 | BE264974  | Hs.6566   | thyroid hormone receptor interactor 13    | 4.04 | 3.53 |
| 5  | 445701 | AF055581  | Hs.13131  | lymphocyte adaptor protein                | 4.02 | 4.20 |
|    | 451131 | AI267586  | Hs.268012 | fatty-acid-Coenzyme A ligase, long-chain  | 4.01 | 3.96 |
|    | 449291 | BE176893  | Hs.23440  | KIAA1105 protein                          | 4.01 | 2.34 |
|    | 443071 | AL080021  | Hs.8986   | complement component 1, q subcomponent,   | 4.00 | 6.97 |
|    | 417615 | BE548641  | Hs.82314  | hypoxanthine phosphoribosyltransferase 1  | 3.99 | 4.27 |
| 10 | 408246 | N55669    | Hs.333823 | mitochondrial ribosomal protein L13       | 3.98 | 3.66 |
|    | 408819 | AW163483  | Hs.48320  | double ring-finger protein, Dofin         | 3.98 | 3.76 |
|    | 424058 | AL121516  | Hs.138617 | thyroid hormone receptor interactor 12    | 3.97 | 2.38 |
|    | 418942 | AI566004  | Hs.141269 | Homo sapiens cDNA: FLJ21550 fis, clone C  | 3.97 | 3.40 |
|    | 424756 | AW504657  | Hs.152931 | lamin B receptor                          | 3.93 | 2.67 |
| 15 | 421958 | AA357185  | Hs.109918 | ras homolog gene family, member H         | 3.89 | 2.39 |
|    | 440692 | AL031591  | Hs.7370   | phosphotidylinositol transfer protein, b  | 3.88 | 3.23 |
|    | 433001 | AF217513  | Hs.279905 | clone HQ0310 PRO0310p1                    | 3.88 | 4.24 |
|    | 418255 | AW135405  | Hs.37251  | ESTs                                      | 3.87 | 2.53 |
|    | 444371 | BE540274  | Hs.239    | forkhead box M1                           | 3.86 | 4.29 |
| 20 | 450515 | AW304226  |           | biphenyl hydrolase-like (serine hydrolas  | 3.85 | 3.73 |
|    | 416114 | AI695549  | Hs.183868 | glucuronidase, beta                       | 3.85 | 3.74 |
|    | 440596 | H13032    | Hs.103378 | hypothetical protein MGC11034             | 3.84 | 1.90 |
|    | 417020 | T78413    |           | heterogeneous nuclear ribonucleoprotein   | 3.82 | 2.04 |
|    | 448503 | BE243146  | Hs.21332  | BTB (POZ) domain containing 1             | 3.81 | 3.07 |
| 25 | 446506 | AI123118  | Hs.15159  | chemokine-like factor, alternatively spl  | 3.81 | 3.69 |
|    | 417059 | AL037672  | Hs.81071  | extracellular matrix protein 1            | 3.80 | 6.01 |
|    | 410668 | BE379794  | Hs.159651 | hypothetical protein                      | 3.80 | 5.22 |
|    | 420107 | AL043980  | Hs.7886   | pellino (Drosophila) homolog 1            | 3.79 | 3.93 |
|    | 446071 | N51527    | Hs.13659  | hypothetical protein DKFZp586F2423        | 3.79 | 2.74 |
| 30 | 419731 | S47242    | Hs.92909  | SON DNA binding protein                   | 3.77 | 1.85 |
|    | 443710 | AI928136  | Hs.9691   | Homo sapiens cDNA: FLJ23249 fis, clone C  | 3.77 | 4.98 |
|    | 406837 | R70292    | Hs.156110 | immunoglobulin kappa constant             | 3.77 | 7.42 |
|    | 436481 | AA379597  | Hs.5199   | HSPC150 protein similar to ubiquitin-con  | 3.76 | 3.55 |
|    | 419381 | AB023420  | Hs.90093  | heat shock 70kD protein 4                 | 3.76 | 3.81 |
| 35 | 423979 | AF229181  | Hs.136644 | CS box-containing WD protein              | 3.76 | 3.97 |
|    | 402474 |           |           | NM_004079: Homo sapiens cathepsin S (CTSS | 3.76 | 4.01 |
|    | 412828 | AL133396  | Hs.74621  | prion protein (p27-30) (Creutzfeldt-Jakob | 3.75 | 3.77 |
|    | 454080 | AI199711  | Hs.576    | fucosidase, alpha-L- 1, tissue            | 3.74 | 6.15 |
|    | 408085 | N25929    | Hs.342849 | ADP-ribosylation factor-like 5            | 3.74 | 2.92 |
| 40 | 426096 | D87436    | Hs.166318 | lipin 2                                   | 3.72 | 2.98 |
|    | 417105 | X60992    | Hs.81225  | CD6 antigen                               | 3.72 | 2.78 |
|    | 418322 | AA284166  | Hs.84113  | cyclin-dependent kinase inhibitor 3 (CDK  | 3.72 | 3.37 |
|    | 447735 | AA775268  | Hs.6127   | Homo sapiens cDNA: FLJ23020 fis, clone L  | 3.70 | 4.09 |
|    | 409264 | NM_014937 | Hs.52463  | KIAA0966 protein                          | 3.69 | 4.79 |
| 45 | 429170 | NM_001394 | Hs.2359   | dual specificity phosphatase 4            | 3.69 | 2.94 |
|    | 428398 | AI249368  | Hs.98558  | ESTs                                      | 3.68 | 3.82 |
|    | 423494 | AW504365  | Hs.24143  | Wiskott-Aldrich syndrome protein interac  | 3.67 | 3.52 |
|    | 413235 | BE243445  | Hs.75248  | topoisomerase (DNA) II beta (180kD)       | 3.67 | 2.79 |
|    | 423712 | W46802    | Hs.81988  | disabled (Drosophila) homolog 2 (mitogen  | 3.66 | 3.42 |
| 50 | 409703 | NM_006187 | Hs.56009  | 2'-5'-oligoadenylate synthetase 3 (100 k  | 3.66 | 6.44 |
|    | 447225 | R62676    | Hs.17820  | Rho-associated, coiled-coil containing p  | 3.65 | 2.93 |
|    | 414829 | AA321568  | Hs.77436  | pleckstrin                                | 3.65 | 2.30 |
|    | 400219 |           |           | Eos Control                               | 3.64 | 2.76 |
|    | 437239 | AW503395  | Hs.5541   | ATPase, Ca transporting, ubiquitous       | 3.63 | 2.73 |
| 55 | 422445 | M23114    | Hs.1526   | ATPase, Ca transporting, cardiac muscle,  | 3.62 | 3.60 |
|    | 449971 | AA807346  | Hs.288581 | Homo sapiens cDNA FLJ14296 fis, clone PL  | 3.62 | 3.62 |
|    | 424460 | BE275979  | Hs.296014 | polymerase (RNA) II (DNA directed) polyp  | 3.62 | 3.06 |
|    | 427609 | AK000436  | Hs.179791 | hypothetical protein FLJ20429             | 3.62 | 2.31 |
|    | 400750 |           |           | Target Exon                               | 3.61 | 2.74 |
| 60 | 424541 | AW392551  | Hs.180559 | ESTs, Weakly similar to A56194 thromboxa  | 3.61 | 2.25 |
|    | 427051 | BE178110  | Hs.173374 | Homo sapiens cDNA FLJ10500 fis, clone NT  | 3.60 | 4.20 |
|    | 433867 | AK000596  | Hs.3618   | hippocalcin-like 1                        | 3.59 | 4.19 |
|    | 421986 | AL137438  | Hs.110454 | SEC15 (S. cerevisiae)-like                | 3.59 | 1.58 |
|    | 414841 | H55601    | Hs.77490  | glutathione S-transferase theta 1         | 3.58 | 1.00 |
| 65 | 429693 | BE254962  | Hs.211612 | SEC24 (S. cerevisiae) related gene famil  | 3.57 | 3.00 |
|    | 425204 | NM_002436 | Hs.1861   | membrane protein, palmitoylated 1 (55kD)  | 3.56 | 3.09 |
|    | 441669 | R78195    | Hs.29692  | Homo sapiens cDNA FLJ11436 fis, clone HE  | 3.56 | 3.26 |
|    | 442043 | BE567620  | Hs.99210  | ESTs                                      | 3.55 | 3.56 |
|    | 406636 | L12064    |           | gb:Homo sapiens (clone WR4.12VL) anti-th  | 3.55 | 3.83 |
| 70 | 446341 | AL040763  | Hs.310735 | ESTs, Moderately similar to ALU7_HUMAN A  | 3.54 | 3.52 |
|    | 432485 | N90866    | Hs.276770 | CDW52 antigen (CAMPATH-1 antigen)         | 3.54 | 4.66 |
|    | 422765 | AW409701  | Hs.1578   | baculoviral IAP repeat-containing 5 (sur  | 3.54 | 3.25 |
|    | 412630 | AA738437  | Hs.26226  | Homo sapiens cDNA: FLJ21286 fis, clone C  | 3.54 | 1.87 |
|    | 432841 | M93425    | Hs.62     | protein tyrosine phosphatase, non-recept  | 3.53 | 3.96 |
| 75 | 425177 | AF127577  | Hs.155017 | nuclear receptor interacting protein 1    | 3.53 | 3.40 |
|    | 426643 | AA857131  | Hs.171595 | HIV TAT specific factor 1                 | 3.51 | 2.21 |
|    | 420137 | AA306478  | Hs.95327  | CD3D antigen, delta polypeptide (TIT3 co  | 3.51 | 2.51 |
|    | 429248 | U96759    | Hs.198307 | von Hippel-Lindau binding protein 1       | 3.51 | 2.85 |
|    | 452852 | AK001972  | Hs.30822  | hypothetical protein FLJ11110             | 3.51 | 2.71 |
| 80 | 451791 | Z78407    | Hs.27023  | vesicle transport-related protein         | 3.49 | 2.91 |
|    | 418310 | AA814100  | Hs.86693  | ESTs                                      | 3.49 | 1.45 |
|    | 406868 | AA505445  | Hs.300697 | immunoglobulin heavy constant gamma 3 (G  | 3.48 | 6.81 |
|    | 400200 |           |           | NM_002788: Homo sapiens proteasome (pros  | 3.48 | 2.51 |
|    | 438746 | AI885815  | Hs.184727 | Human melanoma-associated antigen p97 (m  | 3.47 | 6.94 |

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|    |        |           |           |  |      |       |
|----|--------|-----------|-----------|--|------|-------|
| 5  | 441646 | AB023169  | Hs.7935   | KIAA0952 protein                         | 3.47 | 3.38  |
|    | 427968 | AI857607  | Hs.181301 | cathepsin S                              | 3.45 | 2.71  |
|    | 440201 | AL359588  | Hs.7041   | hypothetical protein DKFZp762B226        | 3.45 | 3.45  |
|    | 434608 | AA805443  | Hs.179909 | hypothetical protein FLJ22995            | 3.44 | 3.68  |
|    | 427527 | AI809057  | Hs.153261 | immunoglobulin heavy constant mu         | 3.44 | 6.70  |
| 10 | 413385 | M34455    | Hs.840    | indoleamine-pyrrole 2,3 dioxygenase      | 3.44 | 2.72  |
|    | 435550 | AI224456  | Hs.324507 | H.sapiens polyA site DNA                 | 3.43 | 2.76  |
|    | 453857 | AL080235  | Hs.35861  | DKFZP586E1621 protein                    | 3.43 | 3.64  |
|    | 423392 | AA195037  | Hs.169341 | HTPAP protein                            | 3.43 | 2.29  |
|    | 418460 | M26315    | Hs.85258  | CD8 antigen, alpha polypeptide (p32)     | 3.43 | 2.78  |
| 15 | 453915 | AA588721  | Hs.286218 | ribosomal protein L44                    | 3.41 | 3.06  |
|    | 442485 | BE092285  | Hs.29724  | hypothetical protein FLJ13187            | 3.41 | 4.23  |
|    | 432606 | NM_002104 | Hs.3066   | granzyme K (serine protease, granzyme 3; | 3.40 | 3.93  |
|    | 417410 | AF063020  | Hs.82110  | PC4 and SFRS1 interacting protein 1      | 3.40 | 2.12  |
|    | 436810 | AA353044  | Hs.5321   | ARP3 (actin-related protein 3, yeast) ho | 3.40 | 4.70  |
| 20 | 422545 | X02761    | Hs.287820 | fibronectin 1                            | 3.39 | 7.58  |
|    | 409142 | AL136877  | Hs.50758  | SMC4 (structural maintenance of chromoso | 3.36 | 4.12  |
|    | 434826 | AF155661  | Hs.22265  | pyruvate dehydrogenase phosphatase       | 3.34 | 5.05  |
|    | 448410 | AK000227  | Hs.21126  | hypothetical protein FLJ20220            | 3.33 | 4.31  |
|    | 416065 | BE267931  | Hs.78996  | proliferating cell nuclear antigen       | 3.33 | 4.60  |
| 25 | 432642 | BE297635  | Hs.3069   | heat shock 70kD protein 98 (mortalin-2)  | 3.32 | 4.49  |
|    | 425234 | AW152225  | Hs.165909 | ESTs, Weakly similar to I38022 hypotheri | 3.24 | 4.22  |
|    | 443623 | AA345519  | Hs.9641   | complement component 1, q subcomponent,  | 3.23 | 12.31 |
|    | 426490 | NM_001621 | Hs.170087 | aryl hydrocarbon receptor                | 3.23 | 5.07  |
|    | 443958 | BE241880  | Hs.10029  | cathepsin C                              | 3.16 | 4.97  |
| 30 | 412577 | Z22968    | Hs.74076  | CD163 antigen                            | 3.14 | 4.75  |
|    | 414050 | NM_004766 | Hs.75724  | coatmer protein complex, subunit beta 2  | 3.13 | 4.00  |
|    | 421633 | AF121860  | Hs.106260 | sorting nexin 10                         | 3.12 | 4.45  |
|    | 413936 | AF113676  | Hs.297681 | serine (or cysteine) proteinase inhibito | 3.11 | 4.00  |
|    | 428797 | AA496205  | Hs.193700 | Homo sapiens mRNA; cDNA DKFZp586i0324 (f | 3.10 | 4.03  |
| 35 | 430314 | AA369601  | Hs.239138 | pre-B-cell colony-enhancing factor       | 3.06 | 4.49  |
|    | 430413 | AW842182  | Hs.241392 | small inducible cytokine A5 (RANTES)     | 3.04 | 4.98  |
|    | 418526 | BE019020  | Hs.85838  | solute carrier family 16 (monocarboxylic | 3.03 | 4.49  |
|    | 452139 | AA099969  | Hs.16331  | Homo sapiens cDNA: FLJ21482 fis, clone C | 3.01 | 4.75  |
|    | 439237 | AW408158  | Hs.318893 | ESTs, Weakly similar to A47582 B-cell gr | 2.95 | 5.55  |
| 40 | 422684 | BE561617  | Hs.119192 | H2A histone family, member Z             | 2.94 | 4.64  |
|    | 406782 | AA430373  |           | gb:zw2011.s1 Soares ovary tumor NbHOT H  | 2.93 | 10.28 |
|    | 438549 | BE386801  | Hs.21858  | trinucleotide repeat containing 3        | 2.91 | 5.40  |
|    | 450455 | AL117424  | Hs.25035  | chloride intracellular channel 4         | 2.90 | 4.86  |
|    | 427528 | AU077143  | Hs.179565 | minichromosome maintenance deficient (S. | 2.89 | 4.04  |
| 45 | 422530 | AW972300  | Hs.118110 | bone marrow stromal cell antigen 2       | 2.87 | 9.61  |
|    | 423605 | AF047826  | Hs.129887 | cadherin 19, type 2                      | 2.83 | 4.86  |
|    | 410231 | AA314163  | Hs.61153  | proteasome (prosome, macropain) 26S subu | 2.82 | 5.02  |
|    | 419956 | AL137939  | Hs.40096  | cadherin 19, type 2                      | 2.80 | 4.30  |
|    | 416511 | NM_006762 | Hs.79356  | Lysosomal-associated multispanning membr | 2.79 | 5.80  |
| 50 | 429732 | U20158    | Hs.2488   | lymphocyte cytosolic protein 2 (SH2 doma | 2.78 | 4.21  |
|    | 448517 | AA082750  | Hs.42194  | hypothetical protein FLJ22649 similar to | 2.78 | 4.23  |
|    | 416784 | AA334592  | Hs.79914  | lumican                                  | 2.78 | 4.40  |
|    | 427792 | M63928    | Hs.180841 | tumor necrosis factor receptor superfam  | 2.77 | 4.23  |
|    | 412140 | AA219691  | Hs.73625  | RAB6 interacting, kinesin-like (rabkines | 2.77 | 4.17  |
| 55 | 427080 | AW068287  | Hs.301175 | ras-related C3 botulinum toxin substrate | 2.76 | 4.43  |
|    | 446272 | BE268912  | Hs.14601  | hematopoietic cell-specific Lyn substrat | 2.75 | 4.20  |
|    | 437179 | AA393508  |           | serologically defined colon cancer antig | 2.74 | 4.07  |
|    | 429402 | AF116571  | Hs.201671 | SRY (sex determining region Y)-box 13    | 2.72 | 4.63  |
|    | 421360 | AA297012  | Hs.103839 | erythrocyte membrane protein band 4.1-li | 2.71 | 4.93  |
| 60 | 409202 | AA236881  | Hs.51043  | hexosaminidase B (beta polypeptide)      | 2.68 | 4.15  |
|    | 426124 | AI268389  | Hs.250697 | phosphatidylinositol glycan, class F     | 2.68 | 4.00  |
|    | 422672 | X12784    | Hs.119129 | collagen, type IV, alpha 1               | 2.67 | 4.72  |
|    | 417389 | BE260964  | Hs.82045  | midkine (neurite growth-promoting factor | 2.65 | 7.77  |
|    | 409415 | AA579258  | Hs.6083   | Homo sapiens cDNA: FLJ21028 fis, clone C | 2.65 | 4.47  |
| 65 | 410341 | AW499985  | Hs.42915  | ARP2 (actin-related protein 2, yeast) ho | 2.64 | 5.61  |
|    | 433027 | AF191018  | Hs.279923 | putative nucleotide binding protein, est | 2.63 | 4.34  |
|    | 424687 | J05070    | Hs.151738 | matrix metalloproteinase 9 (gelatinase B | 2.62 | 4.95  |
|    | 409430 | R21945    | Hs.346735 | splicing factor, arginine/serine-rich 5  | 2.60 | 6.00  |
|    | 424779 | AL046851  | Hs.153053 | CD37 antigen                             | 2.60 | 4.27  |
| 70 | 409354 | N68188    | Hs.159472 | Homo sapiens cDNA: FLJ22224 fis, clone H | 2.60 | 4.64  |
|    | 427550 | BE242818  | Hs.311609 | nuclear RNA helicase, DECD variant of DE | 2.57 | 4.27  |
|    | 426143 | BE379836  |           | proteasome (prosome, macropain) subunit, | 2.56 | 4.20  |
|    | 421553 | NM_006433 | Hs.105806 | granulysin                               | 2.56 | 4.13  |
|    | 425593 | AA278921  | Hs.1908   | proteoglycan 1, secretory granule        | 2.55 | 5.46  |
| 75 | 428169 | AI928984  | Hs.182793 | golgi phosphoprotein 2                   | 2.54 | 5.78  |
|    | 429800 | AA333375  | Hs.223014 | antizyme inhibitor                       | 2.50 | 5.15  |
|    | 407241 | M34516    |           | gb:Human omega light chain protein 14.1  | 2.50 | 4.98  |
|    | 421739 | AB004550  | Hs.107526 | UDP-Gal:betaGlcNAc beta 1,4- galactosylt | 2.45 | 5.58  |
|    | 412819 | T25829    | Hs.24048  | FK506 binding protein precursor          | 2.45 | 7.20  |
| 80 | 412025 | AI827451  | Hs.24143  | Wiskott-Aldrich syndrome protein interac | 2.44 | 4.11  |
|    | 435523 | T62849    | Hs.11090  | membrane-spanning 4-domains, subfamily A | 2.44 | 4.67  |
|    | 445350 | AF052112  | Hs.12540  | lysophospholipase I                      | 2.44 | 5.44  |
|    | 449296 | AL137257  | Hs.23458  | Homo sapiens cDNA: FLJ23015 fis, clone L | 2.41 | 4.31  |
|    | 440065 | W03476    | Hs.266331 | hypothetical protein MGC4595             | 2.41 | 4.25  |
|    | 400223 |           |           | Eos Control                              | 2.39 | 5.68  |
|    | 422658 | AF231981  | Hs.250175 | homolog of yeast long chain polyunsatura | 2.39 | 6.62  |
|    | 431629 | AU077025  | Hs.265827 | interferon, alpha-inducible protein (clo | 2.38 | 7.22  |

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|    |        |           |           |   |      |       |
|----|--------|-----------|-----------|---|------|-------|
| 5  | 414622 | AI752666  | Hs.76669  | nicotinamide N-methyltransferase                            | 2.38 | 5.21  |
|    | 415149 | X12451    | Hs.78056  | cathepsin L   | 2.37 | 7.71  |
|    | 435099 | AC004770  | Hs.4756   | flap structure-specific endonuclease 1                      | 2.37 | 5.68  |
|    | 427407 | BE268649  | Hs.177766 | ADP-ribosyltransferase (NAD; poly (ADP-ribose) polymerase 2 | 2.31 | 4.89  |
|    | 426432 | AF001601  | Hs.169857 | paraoxonase 2   | 2.29 | 4.83  |
| 10 | 430555 | AI815486  | Hs.243901 | Homo sapiens cDNA FLJ20738 fis, clone HE                    | 2.27 | 5.03  |
|    | 413869 | NM_000878 | Hs.75596  | interleukin 2 receptor, beta                                | 2.25 | 4.14  |
|    | 412517 | AK001364  | Hs.808    | heterogeneous nuclear ribonucleoprotein                     | 2.21 | 4.31  |
|    | 447547 | NM_007229 | Hs.18842  | protein kinase C and casein kinase subst                    | 2.19 | 4.62  |
|    | 416232 | AW502678  | Hs.79090  | exportin 1 (CRM1, yeast, homolog)                           | 2.18 | 4.84  |
| 15 | 420842 | AI083668  | Hs.50601  | hypothetical protein MGC10986                               | 2.14 | 4.22  |
|    | 411358 | R47479    | Hs.94761  | KIAA1691 protein  | 2.13 | 4.65  |
|    | 428227 | AA321649  | Hs.2248   | small inducible cytokine subfamily B (Cy                    | 2.13 | 4.03  |
|    | 406687 | M31126    |           | matrix metalloproteinase 11 (stromelysin                    | 2.11 | 4.16  |
|    | 417331 | AW411297  | Hs.81972  | SHC (Src homology 2 domain-containing) t                    | 2.11 | 4.25  |
| 20 | 450344 | AW994032  | Hs.8768   | hypothetical protein FLJ10849                               | 2.11 | 4.09  |
|    | 429642 | X68264    | Hs.211579 | melanoma cell adhesion molecule (MCAM) (                    | 2.11 | 5.42  |
|    | 416448 | L13210    | Hs.79339  | lectin, galactoside-binding, soluble, 3                     | 2.10 | 6.42  |
|    | 418613 | AA744529  | Hs.86575  | mitogen-activated protein kinase kinase                     | 2.10 | 4.00  |
|    | 453352 | T10446    |           | ESTs  | 2.09 | 4.48  |
| 25 | 409220 | BE243323  | Hs.51233  | tumor necrosis factor receptor superfam                     | 2.09 | 4.98  |
|    | 414045 | NM_002951 | Hs.75722  | ribophorin II   | 2.07 | 4.59  |
|    | 422451 | AA310753  | Hs.42491  | ESTs, Weakly similar to S65657 alpha-1C-                    | 2.07 | 4.09  |
|    | 414085 | AA114016  | Hs.75746  | aldehyde dehydrogenase 1 family, member                     | 2.06 | 5.06  |
|    | 452363 | AI582743  | Hs.94953  | Homo sapiens, Similar to complement comp                    | 2.04 | 11.17 |
| 30 | 438393 | AA351815  | Hs.50740  | Homo sapiens cDNA: FLJ22272 fis, clone H                    | 2.03 | 4.36  |
|    | 413313 | NM_002047 | Hs.283108 | glycyl-tRNA synthetase                                      | 2.02 | 4.79  |
|    | 412994 | D32257    | Hs.75113  | general transcription factor IIA                            | 2.00 | 4.67  |
|    | 424415 | NM_001975 | Hs.146580 | enolase 2, (gamma, neuronal)                                | 1.98 | 4.79  |
|    | 421897 | AW583693  | Hs.109253 | N-terminal acetyltransferase complex ard                    | 1.98 | 4.17  |
| 35 | 442159 | AW163390  | Hs.278554 | heterochromatin-like protein 1                              | 1.95 | 7.53  |
|    | 429451 | BE409861  | Hs.202833 | heme oxygenase (decycling) 1                                | 1.95 | 4.63  |
|    | 416967 | BE616731  | Hs.80645  | interferon regulatory factor 1                              | 1.95 | 4.31  |
|    | 400203 |           |           | Eos Control   | 1.94 | 5.03  |
|    | 437317 | AA748613  | Hs.311977 | ESTs, Highly similar to SWI/SNF related,                    | 1.94 | 4.03  |
| 40 | 414945 | BE076358  | Hs.77667  | lymphocyte antigen 6 complex, locus E                       | 1.93 | 4.68  |
|    | 416224 | NM_002902 | Hs.79088  | reticulocalbin 2, EF-hand calcium bindin                    | 1.92 | 4.12  |
|    | 445411 | AL137255  | Hs.12646  | hypothetical protein FLJ22693                               | 1.91 | 4.23  |
|    | 413945 | NM_000591 | Hs.75627  | CD14 antigen  | 1.90 | 5.00  |
|    | 413317 | U53225    | Hs.75283  | sorting nexin 1   | 1.89 | 4.20  |
| 45 | 448719 | AA033627  | Hs.21858  | trinucleotide repeat containing 3                           | 1.89 | 4.26  |
|    | 430838 | N46664    | Hs.169395 | hypothetical protein FLJ12015                               | 1.88 | 4.15  |
|    | 427239 | BE270447  |           | ubiquitin carrier protein                                   | 1.87 | 5.72  |
|    | 450440 | AB024334  | Hs.25001  | tyrosine 3-monooxygenase/tryptophan 5-mo                    | 1.87 | 5.81  |
|    | 433671 | AW138797  | Hs.132906 | 19A24 protein   | 1.85 | 4.27  |
| 50 | 413190 | AA151802  | Hs.40368  | adaptor-related protein complex 1, sigma                    | 1.85 | 5.19  |
|    | 414915 | NM_002462 | Hs.76391  | myxovirus (influenza) resistance 1, homo                    | 1.85 | 4.31  |
|    | 430040 | AW503115  | Hs.227823 | pM5 protein   | 1.83 | 5.57  |
|    | 417929 | R27219    | Hs.74647  | Human T-cell receptor active alpha-chain                    | 1.82 | 4.29  |
|    | 414570 | Y00285    | Hs.76473  | insulin-like growth factor 2 receptor                       | 1.81 | 4.39  |
| 55 | 414416 | AW409985  | Hs.76084  | hypothetical protein MGC2721                                | 1.80 | 4.20  |
|    | 428977 | AK001404  | Hs.194698 | cyclin B2   | 1.79 | 4.17  |
|    | 418707 | U97502    | Hs.87497  | butyrophilin, subfamily 3, member A2                        | 1.78 | 4.30  |
|    | 425367 | BE271188  | Hs.155975 | protein tyrosine phosphatase, receptor t                    | 1.78 | 5.44  |
|    | 425811 | AL039104  | Hs.159557 | karyopherin alpha 2 (RAG cohort 1, impor                    | 1.77 | 5.11  |
| 60 | 422009 | AI742845  | Hs.110713 | DEK oncogene (DNA binding)                                  | 1.77 | 4.37  |
|    | 424909 | S78187    | Hs.153752 | cell division cycle 25B                                     | 1.74 | 5.00  |
|    | 409154 | U72882    | Hs.50842  | interferon-induced protein 35                               | 1.74 | 4.86  |
|    | 413892 | AI878921  | Hs.75607  | myristoylated alanine-rich protein kinas                    | 1.73 | 4.37  |
|    | 444954 | AW247076  | Hs.12163  | eukaryotic translation initiation factor                    | 1.71 | 5.02  |
| 65 | 424263 | M77640    | Hs.1757   | L1 cell adhesion molecule (hydrocephalus                    | 1.70 | 4.68  |
|    | 424825 | AF207069  | Hs.153357 | procollagen-lysine, 2-oxoglutarate 5-dio                    | 1.70 | 4.59  |
|    | 427378 | BE515037  | Hs.177556 | melanoma antigen, family D, 1                               | 1.67 | 5.59  |
|    | 413322 | AA380158  | Hs.75290  | ADP-ribosylation factor 4                                   | 1.67 | 4.39  |
|    | 442414 | BE408758  | Hs.8297   | ribonuclease 6 precursor                                    | 1.65 | 4.03  |
| 70 | 410129 | BE244074  | Hs.58831  | regulator of Fas-induced apoptosis                          | 1.64 | 4.24  |
|    | 422976 | AU076657  | Hs.1600   | chaperonin containing TCP1, subunit 5 (e                    | 1.64 | 4.91  |
|    | 443051 | AA333660  | Hs.71331  | hypothetical protein MGC5350                                | 1.64 | 4.08  |
|    | 452472 | AW957300  | Hs.294142 | ESTs, Weakly similar to C55663 oligodend                    | 1.63 | 4.41  |
|    | 446143 | BE245342  | Hs.306079 | sec61 homolog   | 1.62 | 4.70  |
| 75 | 431142 | AA852596  | Hs.250641 | tropomyosin 4   | 1.62 | 4.86  |
|    | 407752 | AA573581  | Hs.13328  | ESTs  | 1.62 | 4.19  |
|    | 416322 | BE019494  | Hs.79217  | pyrroline-5-carboxylate reductase 1                         | 1.61 | 4.51  |
|    | 414572 | AU077174  | Hs.288181 | cathepsin H   | 1.60 | 5.25  |
|    | 415017 | F06434    | Hs.77805  | ATPase, H transporting, lysosomal (vacuo                    | 1.60 | 4.56  |
| 80 | 452056 | AW955065  | Hs.101150 | Homo sapiens, clone IMAGE:4054156, mRNA,                    | 1.58 | 5.46  |
|    | 413976 | BE295452  | Hs.75655  | procollagen-proline, 2-oxoglutarate 4-di                    | 1.58 | 4.05  |
|    | 414420 | AA043424  | Hs.76095  | immediate early response 3                                  | 1.58 | 4.00  |
|    | 419638 | N46504    | Hs.91747  | profilin 2  | 1.57 | 5.57  |
|    | 422624 | BE616678  | Hs.76152  | KDEL (Lys-Asp-Glu-Leu) endoplasmic retic                    | 1.57 | 4.44  |
|    | 415819 | AU077330  |           | transcription elongation factor A (SII),                    | 1.55 | 4.89  |
|    | 439627 | BE621702  | Hs.29076  | hypothetical protein FLJ21841                               | 1.55 | 6.66  |
|    | 425243 | N89487    | Hs.155291 | KIAA0005 gene product                                       | 1.54 | 4.38  |

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|    |        |           |           |  |      |      |
|----|--------|-----------|-----------|--|------|------|
| 5  | 424799 | BE550723  | Hs.153179 | fatty acid binding protein 5 (psoriasis- | 1.53 | 4.22 |
|    | 416971 | R34557    | Hs.80658  | uncoupling protein 2 (mitochondrial, pro | 1.53 | 7.41 |
|    | 426059 | BE292842  | Hs.166120 | interferon regulatory factor 7           | 1.51 | 4.12 |
|    | 418879 | AW162087  | Hs.5437   | Tax1 (human T-cell leukemia virus type I | 1.50 | 4.02 |
|    | 432999 | BE294029  | Hs.279903 | Ras homolog enriched in brain 2          | 1.50 | 4.18 |
|    | 415661 | AF057307  | Hs.78575  | prosaposin (variant Gaucher disease and  | 1.49 | 4.19 |
|    | 428098 | AU077258  | Hs.182429 | protein disulfide isomerase-related prot | 1.49 | 5.74 |
|    | 452264 | AU077013  | Hs.28757  | transmembrane 9 superfamily member 2     | 1.48 | 4.53 |
| 10 | 415198 | AW009480  | Hs.943    | natural killer cell transcript 4         | 1.47 | 4.95 |
|    | 411794 | AL118577  | Hs.75658  | phosphorylase, glycogen; brain           | 1.45 | 4.61 |
|    | 433271 | BE621697  | Hs.14317  | nucleolar protein family A, member 3 (H/ | 1.45 | 4.15 |
|    | 421416 | BE302950  | Hs.104125 | adenylyl cyclase-associated protein      | 1.42 | 4.67 |
|    | 415089 | N25117    | Hs.299465 | ribosomal protein S26                    | 1.41 | 5.19 |
| 15 | 421975 | AW961017  | Hs.6459   | hypothetical protein FLJ11856            | 1.41 | 4.03 |
|    | 400202 |           |           | NM_002795*.Homo sapiens proteasome (pros | 1.41 | 4.44 |
|    | 413278 | BE563085  | Hs.833    | interferon-stimulated protein, 15 kDa    | 1.41 | 4.57 |
|    | 412968 | AW500508  | Hs.75102  | alanyl-tRNA synthetase                   | 1.40 | 4.25 |
|    | 440704 | M69241    | Hs.162    | insulin-like growth factor binding prote | 1.39 | 4.11 |
| 20 | 447099 | AB030656  | Hs.17377  | coronin, actin-binding protein, 1C       | 1.39 | 4.51 |
|    | 428511 | AA019912  | Hs.184693 | transcription elongation factor B (SIII) | 1.38 | 4.90 |
|    | 413825 | BE299181  | Hs.75564  | CD151 antigen                            | 1.37 | 4.44 |
|    | 441737 | X79449    | Hs.7957   | adenosine deaminase, RNA-specific        | 1.36 | 4.29 |
|    | 440087 | W28969    | Hs.7718   | hypothetical protein FLJ22678            | 1.36 | 4.10 |
| 25 | 413566 | AW604451  | Hs.285814 | sprouty (Drosophila) homolog 4           | 1.35 | 4.50 |
|    | 413019 | BE281604  | Hs.75140  | low density lipoprotein-related protein- | 1.35 | 5.14 |
|    | 433026 | AW160616  | Hs.279921 | HSPC035 protein                          | 1.35 | 4.14 |
|    | 427380 | NM_005534 | Hs.177559 | interferon gamma receptor 2 (interferon  | 1.34 | 4.35 |
|    | 428289 | M26301    | Hs.2253   | complement component 2                   | 1.33 | 4.23 |
| 30 | 419715 | AF070523  | Hs.92384  | vitamin A responsive; cytoskeleton relat | 1.32 | 4.61 |
|    | 425299 | AW505214  | Hs.155550 | calnexin                                 | 1.31 | 4.76 |
|    | 422242 | AJ251760  | Hs.273385 | guanine nucleotide binding protein (G pr | 1.30 | 5.30 |
|    | 448483 | AA356392  | Hs.21321  | Homo sapiens clone FLB9213 PRO2474 mRNA, | 1.29 | 6.09 |
|    | 407143 | C14076    | Hs.332329 | EST                                      | 1.29 | 4.56 |
| 35 | 413125 | BE244589  | Hs.75207  | glyoxalase I                             | 1.26 | 5.56 |
|    | 439053 | BE244588  | Hs.6456   | chaperonin containing TCP1, subunit 2 (b | 1.26 | 4.98 |
|    | 413929 | BE501689  | Hs.75617  | collagen, type IV, alpha 2               | 1.25 | 4.76 |
|    | 419663 | AA394208  | Hs.92198  | calcium-regulated heat-stable protein (2 | 1.24 | 4.56 |
|    | 422166 | W72424    | Hs.112405 | S100 calcium-binding protein A9 (calgran | 1.21 | 8.96 |
| 40 | 416636 | N32536    | Hs.42645  | solute carrier family 16 (monocarboxylic | 1.21 | 4.02 |
|    | 425335 | BE394327  | Hs.296267 | folliculin-like 1                        | 1.18 | 4.29 |
|    | 446211 | AI021993  | Hs.14331  | S100 calcium-binding protein A13         | 1.17 | 4.32 |
|    | 429542 | NM_014899 | Hs.10432  | KIAA0878 protein                         | 1.13 | 4.17 |
|    | 454117 | BE410100  | Hs.40368  | adaptor-related protein complex 1, sigma | 1.10 | 4.00 |
| 45 | 428216 | M18468    | Hs.183037 | protein kinase, cAMP-dependent, regulato | 1.09 | 4.40 |
|    | 431211 | M86849    | Hs.323733 | gap junction protein, beta 2, 26kD (conn | 1.00 | 4.70 |
|    | 422158 | L10343    | Hs.112341 | protease inhibitor 3, skin-derived (SKAL | 0.98 | 4.40 |
|    | 408522 | AI541214  | Hs.46320  | Small proline-rich protein SPRK (human,  | 0.90 | 4.78 |

|    |             |                                       |
|----|-------------|---------------------------------------|
| 50 | TABLE 50B:  |                                       |
|    | Pkey:       | Unique Eos probeset identifier number |
|    | CAT number: | Gene cluster number                   |
|    | Accession:  | Genbank accession numbers             |

|    |        |            |  |
|----|--------|------------|--|
| 55 | Pkey   | CAT Number | Accession  |
|    | 412918 | 2764_3     | BE784583 AL519009 AV755430 AV756363 AV711927 BI523434 AI521453 AA846815 AW024829 AW949702 BG218926 AA626658 AI445621 AI452815 AA946555 AA723580 AA612925 BG105326 BG532618 AW513994 AW602165 AI373448 AA907901 AW135104 BG186662 W69205 BG219754 BE774875 BG190378 AA483698 BE066066 BE066067 BE066062 AW304207 BE939361 AW795569 BG210592 AW795644 BE939358 AW102886 BE065977 BG182971 H97042 D58090 BI046351 H81248 AI750112 AW372079 C05492 D58287 D57835 AA935095 BF700910 BG215802 BG195459 AW368467 BG495535 BG533177 BI087962 BE541579 BF130753   |
| 60 | 436701 | 28142_1    | Z69892 AA210833 BM353155 AI473754 AI147901 AI803109 AA843296 AA418925 AI478552 AI400067 AI360304 AA418828 AW301673 BE218952 AI632804 BF433234 AA394157 BF378047 BE467036 AA319724 AW290940 AI222671 AI347724 AW001711 AI028652 AA398130 AI470582 AI915936 AA908929 C75102 N36920 H50440 AI919034 AI004399 AI383862 AI123606 AA648518 AA516258 AI865321 N22865 AA848101 AI589792 AA758196 AA214630 AI373911 AW194733 AA213447 AI290291 BF437165 AA757592 BF086904 AW959032 AW992466 BF446888 AI936337 BE938849 AW149064 AI701629 N90021   |
| 65 | 432469 | 58644_1    | BC016556 BC016365 NM_016040 AF151858 BI561037 AW966873 AW967497 BE219482 BE018650 AW770511 AW459095 AW470133 BM150181 BM193977 AI824135 AI632346 AI129838 BM147664 AI292112 BE244667 AA251084 AW503659 BM193866 BM194481 BF446862 AL597435 BF000262 AI824386 AI990100 AW087624 AA668793 AL080084 BI335866 BI820940 BG779242 BM069854 AA282620 AA256771 AW964511 AA451623 H00335 AW370399 AW954201 BM145846 BG111760 AI750065 BG655794 AA564086 BG494071 BM069606 AI675331 BE302224 AI476466 AI625980 BM144854 AI184602 AI343932 AW136586 AW029464 AI708651 AA824243 BM145917 AA662210 AA825708 AI335858 AI273704 AA662171 N48971 AA976614 AI344537 AA609603 AI873901 AI859995 AA833589 AA765811 AI150322 AI926816 BM148634 N98862 AA019347 AA897062 AA831100 N69889 BE243185 AA282179 AA831098 AA112676 AI702407 BG621752 BE006492 AA353202 BG674256 N46921 BI048774 AW300233 BF739890 AW968679 AA393405 BF115146 AA910851 AA013099 N28878 AA287713 BE348728 BG616446 AL599953 AL599952 BF381073 AW505056 AA094735 H03613 AA287714 H27168 R54718 BF792697 AV63603 AV685883 BG619956 BF541504 BF216789 AA319751 BM452652 BF335838 AA280397 BG171509 BF571997 AA490239 AW388161 BE842126 BG165309 N71903 AI955397 AI536898 BE242040 F09718 AA772421 AA450218 M78543 BE241414 AA013098 H00297 AW576477 AW150918 AW591371 AI382711 N71926 H72497 AI285602 AA745055 AI281647 BF377670 T65207 BG532880 BG721680 AA285143 H27167 AW500235 BG494497 BF668895 |
| 70 |        |            | BE379766 AW152643 AI803450 AI564343 AI092711 AI140525 AW152156 AI620740 AI554689 AI161209 AI290242 AI339745 AI374611 AI347388 AI858296 AI140529 AI366124 AA493912 AA406235 AA493889 AI057160 AW022264 AI097277 AI141126 AI080051 AA983529 AA860507 N53469 AA843767 N81163 N70628 AA424577 AA983537 BF003004 AA626688 AA235977 AI057152 AI095366 AI095356 AA458646 AW194479 AA150439 AI375272 AW571777 AI359198 AA993793 BE614394 BE738239 AA127883 AI034344 T59504 D81608 AA908704 AW051665 AA382785 AA307208 N24639 AI370715 BE244980 AA548596 AW449675 AI91008 BF223749 N70752 N22266 AI191012 AA028001 AI419106 BF215661 BF591548 BG942356 AI474968 BE858217 BF793358 BF756758 BC483603 AI093724 BF693395 BG545345 AI744294 T59549 AA811773 BG499757  |
| 75 | 424571 | 9758_1     |  |
| 80 |        |            |  |



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444207 9172\_3 BE739425 AA514221 AA865491 AI828293 AA470456 AI276739 AA169357 BE932464 AA514889 AW819039 AW819083 BE843048 AI432496 AI4070335  
AI247243 BG533994 AA513783 AI887309 AA528036 AW972006 AW873028 AI924914 AI818810 AW152378 AW084946 AI521413 AI669583 BE932521  
AI581370 BE180238 AW089750 AW771461 AW089714 AI590949 AI819148 AA731056 BF815234 BF911506 AA235803 AA485373 AI735658  
AW393133 AW073080 AI070637 BF353320 BE843111 AW819036 AW393135 BG697291 AV648670 AV654332 AV687530 BG566964 AI007430  
AI676072 AA837010 AI452482 AI625817 AW241750 BE048616 AI290928 AI680714 AA485530 BE175687 AV648513 AW130312 AI000556 AA632893  
BE674169 BF001208 AA948166 BE175650 AA524664 AA490345 AI244948 AA602956 AA483492 AA918178 AW802049 BG675859 AV656877  
BG678060 AI565004 AW819026 BE843092 AV686437 AV723049 BG616948 AI911647 AI743490 AI091096 BE857251 AI962074 AA040027 AW769317  
AA343477 AA640112 BF876213 R82948 H26425 H82876 BE843095 BE843140 BG536641 BG617830 AA235802 BE774985 BE006682 BF342375  
AA903144 BF338083 BF984258 AV657996 AI749532 BE768614 BE857252 BE932516 BE768573 AV657993 AV657777 AV752631 BE774974 T55847  
BF095761 BF911511 BE710793 BE180119 BG617338 H45942 T55897 AV657718 BG563497  
10 450515 13638\_2 BE299605 AI589870 AA847598 AI470122 BF939896 AI304356 BE223045 BF435800 AI394207 AI708171 AW025415 AI079409 AW008420 AW304226  
N34543 AW603578 AA526961 AA983631 N99134 AA626645 R45023 AA902417 AW672925 AA449885 AA953982 AW754711 AA010062 N80194  
H14620 H28475 H26247 BF333581 AW842369 H06848 H05608 H81745 H15016 R51905 AA860423 AI860904 AA876023  
15 417020 74857\_1 AK024824 BI089104 AL596792 AI880004 BF969921 BE349489 AA843097 AI475644 AW576123 AW731676 AI339951 AI128503 AW243903 BG231992  
BG057353 AA987811 AA575927 AI889162 N68847 AA464693 AA962541 AA843323 AI969578 AI830997 AW731626 H77926 AI338984 AI24078  
AI128953 T88696 AA808038 AA694545 H02091 BF439007 AI189805 AI279912 AA730423 R26552 AA455012 AI264219 AI46015 R19187 D51331  
T24484 AI522034 AV721528 BI056340 BG009879 AW371368 Z36733 BE707682 BG501334 BG180238 BE177547 H48381 BF055495 AI948528  
AW994255 BF109394 AI817046 V58758 H48807 H01994 T78413 BG750345 R24132 N92060 R25367  
20 400219 8366\_1 BC003552 L10284 NM\_001746 AJ271880 BI834281 BI597016 AU133331 BI668332 BI463073 BG720694 AL046729 BI460138 BI461052 AV547588  
BG823268 AW889757 BE001258 AA312565 AA476446 AU098976 AA312196 BF749977 M94859 AF070646 BG564196 BG623597 AU117332  
BG680963 BI667083 AU134542 AU138830 AI761759 BG679882 AA209406 AW512644 AW514813 AI570535 BE547592 BG655418 AI459204  
BF725673 BE870032 BF001968 AL047245 BF724470 BF058818 H18415 BE076849 BE076857 BE076848 BE076827 BE076856 AV708587 AA380923  
BE076851 F08118 L18887 BF795701 AU128383 BE908363 AW673350 AW500108 BE079837 BE929419 BF868758 AW503373 AW580528 BE005524  
25 BI917505 BI457781 BE883812 BI668159 AA213643 AA374821 BF969974 BM480200 AU136152 BE395635 AV685066 AV693755 AL040984 AA676820  
BG895408 BE082272 BE082312 C05287 BE082264 AA379850 AW672902 AI625955 BF033526 AW296657 AU728815 AV677058 AW081700  
AA911707 AA362640 BE707179 BG913228 BG116191 BG752367 AA074678 AL036937 BG113760 H03524 BG681802 AI564688 AU149556 BE178600  
AI813488 AI452433 AI208989 AA599392 AA580385 AA486274 AA629899 AA565929 AA114046 AA094252 BM450328 BG529968 R68320 BE076792  
BE090073 BE076855 BE076859 BE076829 AA361719 AA379164 AI202712 BG223315 BE122741 BG534531 AA933494 H24970 BF032674 BF085150  
30 BE739158 AA352904 C21593 BG697597 AA134969 AA374612 BE566182 BE871838 BE076911 AW579175 BF966390 BI548594 BG386452 BG913195  
BM456787 N40286 T80096 N39642 H42119 BG483861 AW381621 R69347 AW128895 AI367416 AI095285 AA099344 BE568161 AA180109 BF246488  
BI561938 AW579170 BG567212  
35 406636 0\_0 L12064 L12083 L12065 L12075 L12066 L12085 L12072 L12082 L12081 L12062 L12080  
400200 3806\_1 BC005265 BG176720 AW006027 BM352064 AW026316 AI635822 AI880584 AI693769 AI092211 BI492387 AI400449 AW166297 BF939910 AA232282  
AW021432 AI333893 AA494308 AA854899 AI436795 AW069256 AA682373 AI092748 AA993184 AI126077 AI081758 AI240686 AI261863 AI378423  
AA465237 AI376096 AA035579 AI087306 AA448162 AA129977 AI090903 AI080686 AI288939 N33004 AI801240 AW021546 AI370773 AI086064  
AA669528 AI250053 AI870113 AA853181 AA858014 BG055562 BG939559 AW080765 AA032283 AW467587 H40506 D00762 NM\_002788 AA641134  
AI582295 AI417525 AI563975 AI093566 AI077743 AI290741 AW073417 BE875418 BM264076 BG876884 AI680535 AW854219 BE774635 AW854212  
BG952443 AW854221 AW854208 BE156348 BE843056 AW858991 BE937569 BG878291 BG876450 AW819099 AI908570 AA449871 AU135228  
BM478404 BF126296 AA375499 AA248473  
40 406782 0\_0 AA430373 AA968771  
437179 12239\_1 AK055109 BC019085 AA187684 BG656226 BM023227 AI932311 AW264381 AA398371 BM021483 AI432433 AI375777 AI129580 AW262782  
AA134107 BM023515 AA977504 AI859222 AI348454 R69725 AA975268 BM021207 AL080074 AA129218 AW207842 N90581 AA771919 AI092259  
AI028416 AI074114 BG656536 BE501677 AW193419 AA917040 W90430 AI342984 AI378957 AI036486 AW020068 BI491093 BF476021 R41226  
R69631 F04125 C02343 AA115589 R56480 AI400988 R54266 R31422  
45 426143 3806\_1 BC005265 BG176720 AW006027 BM352064 AW026316 AI635822 AI880584 AI693769 AI092211 BI492387 AI400449 AW166297 BF939910 AA232282  
AW021432 AI333893 AA494308 AA854899 AI436795 AW069256 AA682373 AI092748 AA993184 AI126077 AI081758 AI240686 AI261863 AI378423  
AA465237 AI376096 AA035579 AI087306 AA448162 AA129977 AI090903 AI080686 AI288939 N33004 AI801240 AW021546 AI370773 AI086064  
AA669528 AI250053 AI870113 AA853181 AA858014 BG055562 BG939559 AW080765 AA032283 AW467587 H40506 D00762 NM\_002788 AA641134  
AI582295 AI417525 AI563975 AI093566 AI077743 AI290741 AW073417 BE875418 BM264076 BG876884 AI680535 AW854219 BE774635 AW854212  
50 BG952443 AW854221 AW854208 BE156348 BE843056 AW858991 BE937569 BG878291 BG876450 AW819099 AI908570 AA449871 AU135228  
BM478404 BF126296 AA375499 AA248473  
55 400223 2368\_1 NM\_005648 BC013809 L34587 BF103775 BG702618 BG716553 BI667090 BG505863 BF983483 BG718195 BI857891 BG501016 BM043599  
ALS21812 BG705730 BI495545 BI495546 BF112248 BM023182 BM023123 AI075173 AW051799 BF058224 BI248855 BF436008 AA398446 BG822375  
BM019558 BM023382 BG614174 N56909 BI467064 BM023464 AI207475 BM311415 BG758430 BF0758807 AI934826 N90351 GC422026 BE103312  
AI027778 AI081950 AI360890 BM009115 AI191829 BG759697 AI138728 AA399403 AI355589 AI336427 AA868702 AA393660 AA025127 BG027630  
AA962721 AA631224 BG940967 BE791087 AA573315 W81685 AA393525 BG944103 AI339125 AI149864 AA977555 N90314 BE612839 BG491847  
AI129091 AA461234 AA781198 AA759256 AA888954 AA975844 AI184099 AI018025 AA398363 AI003331 AI193380 AA626020 AI244476 BI601114  
AW135664 AI206607 AW263599 AA813219 AI684453 AA878626 AA772222 AI085496 AI630226 BG940966 AI022010 AA770649 AA887624 AA491739  
AA974295 BG530040 AA037091 AA019912 BI160457 H64512 BG503896  
60 406687 0\_0 M31126  
453352 12299\_2 BG619646 AA367158 BI850421 AW998556 BF107010 BF969630 BF185964 AA361080 AW960025 AA147486 AI807023 AW770262 BI492178  
BM145577 AA829932 AW021238 AW629477 AI337862 AI457141 BI712705 BM194542 BI712465 AI380070 N27407 AI609764 AI274152 AI206228  
AI076874 AI261827 AI610982 AI469158 AM20690 AI168768 AA491675 C16249 C16232 C16209 C16275 C16274 C16243 R23287 BF246254 R66736  
R23212 C14593  
65 400203 11774\_1 NM\_002794 D26599 BM469989 BF305151 BG821966 BI089030 AW007738 BI222910 BM049422 BG028749 AI189162 AI831230 AW131497  
BM272215 BE791105 AW778828 AA479594 AA480133 AA131997 AA284572 AA453009 BF928258 AA152127 AA393918 BF765307 BE247542  
BF934697 BF341798 BE253409 AA470520 AI826932 AW379902 AV762678 AV741784 AV760892 AI025755 AA878562 AA630630 AA761708  
AA862518 AA865831 AA862947 N53065 AA131821 AA293499 N23342 N26856 AI147346 AW951549 AA772963 BE245986 BG208493 AI831666  
BG474873 BI023168 AU149647 BG197089 BG191102 BF304178 BE536135 AA706900 AA443583 AI002710 AW276192 AU149842 BG214797  
70 BG198193 AW197923 AW627799 T98663 BG194788 BG214656 BF345258 BG716363 AI066528 BI546220 AA339815 AA132004 AA353826 H97858  
BG187823 BF841463 AI351714 AV735966 BG196439 BG216840 BG198438 BG400762  
427239 20459\_2 ALS32360 BE794750 AA582906 AI015067 AW271034 BG271636 AW075177 AW071374 AI345565 AI307208 BE138953 BE049086 AI334881  
AW570006 AW075181 AA464019 AW302733 AW075100 AW073433 AI802854 AI334909 AI802853 AI345036 AI2340734 AI307478 AI251289  
AW302327 AW072520 AI312145 AW073656 AW072513 AW071289 AI307559 AA876186 T29587 AI307493 AI255068 AI252868 AI252839 AW074809  
AI252926 AI252160 AI251652 AI251262 AI610913 AI270787 AI270156 AI252075 AW073469 AW072901 AW072496 AW071420 AI305762 AI254764  
AI802837 AI251264 AW073049 AW071311 AI340643 BE138965 BE138502 AW073456 AI334733 AI054335 BE139200 AI054302 AI054060 AI054057  
AI053722 AI289711 BE139228 AW470478 AW271039 AW302085 BE041872 AI254494 AI271496 AI252427 BF718773 BF718645 AW074866 BE857822  
75 415819 40015\_1 BE739429 BM460292 AL549095 BF752457 BE783002 BG035869 AW061528 AI880413 BF593762 AA974415 AW305318 AA716501 AI936239  
AI809486 AI744171 AW804992 BF108747 AW804693 BE219333 AI807707 AA306963 BG012140 BF741621 BF741618 BF741619 AW062543  
AA155832 AU151381 AU158043 AU150410 AU145605 AU150252 AA188205 AU153035 AI147293 AA084507 AA868165 AI887120 AI468336  
AW023112 H44035 F01513 AA747672 AW779630 AA757298 R77738 AU150931 R38473 AA189022 H96984 AL550490 AW949737 AU150194  
AU149258 AI749453 AW172950 AW276160 AI753604 AI421762 AW575512 AI275633 AW516120 AI340167 AI567728 AI797326 AI471532 AI074080  
AI633122 AW674646 AW316571 AA258187 AA102780 AA258186 AI363307 AA862862 AI206836 AA629555 AA486287 AI185097 AI872389 BE465687

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AI246746 AI351453 AI189679 AA594582 AI038639 AA862764 AA644332 AA912423 AA601552 AW014502 AA694605 AW068949 BF941650  
 AW297886 BF941649 AI077854 AI027442 AA705602 AW020757 BI491734 AA977135 AA653973 BI522334 AA398723 AI280083 AI419671 AW009199  
 AA496011 AU144081 AI538440 BF741690 BF741680 H41990 AV724108 AW955578 BE698790 T29312 BG954488 R33179 BI832621 BF742040  
 BE091493 H92122 BG614879 AW993709 AI216562 H44107 AA393530 BE173154 BG285054 BF751883 AA489308 BF741676 R64496 BE183198  
 H97097 AW062534 BF036430 AW192614 BF431707 N30258 AA629072 BG954496 AI401616 BG960957  
 BE873890 BF745945 AA156007 AA573157 AW874610 AA916387 N75963 BM083306 AW044671 BC013008 NM\_002795 D26598 BG118716 BI910891  
 BF972860 BG119842 BI094093 AL538757 BE271653 BI856538 BE909573 BG109826 BE784430 BE899255 BI833973 BM010809 BE621321 BG684956  
 BE904726 BI871370 AV708990 BF971483 BE298241 BI197007 BE272092 BG120374 AW963509 BE540572 AV744947 BG943041 AW327463  
 BG472870 BE393697 N28533 AA316042 N42043 AW404246 AW892094 AA379896 AW801110 AW406977 AA379791 BG941889 BE076254 AA360459  
 AA379385 AA320056 BG942618 D31230 AA308300 AA360371 AA371733 AA732937 AA494241 W32225 BF745937 AI383690 BG202360

TABLE 50C:

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Pkey: Unique number corresponding to an Eos probeset  
 Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA  
 sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.  
 Strand: Indicates DNA strand from which exons were predicted.  
 NL\_position: Indicates nucleotide positions of predicted exons.

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| Pkey   | Ref     | Strand | NL_position                         |
|--------|---------|--------|-------------------------------------|
| 404854 | 7143420 | Plus   | 14260-14537                         |
| 405506 | 6466489 | Plus   | 80014-80401,80593-81125             |
| 402474 | 7547175 | Minus  | 53526-53628,55755-55920,57530-57757 |
| 400750 | 8119067 | Plus   | 198991-199168,199316-199548         |

TABLE 51A: ABOUT 453 GENES UPREGULATED IN PRIMARY MELANOMAS RELATIVE TO NORMAL SKIN

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Table 51A lists about 453 genes upregulated in primary melanomas relative to normal skin. Genes were selected from 59680 probesets on the Eos/Affymetrix Hu03 Genechip array.  
 Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

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Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 R1: 90th percentile of primary melanoma AIs divided by 90th percentile of normal skin AIs  
 R2: 90th percentile of primary melanoma AIs divided by 90th percentile of normal skin AIs, where the 15th percentile of normal tissue AIs was subtracted from both  
 the numerator and denominator

| Pkey   | ExAccn    | UnigenelD | Unigene Title                            | R1    | R2    |
|--------|-----------|-----------|--|-------|-------|
| 452838 | U65011    | Hs.30743  | preferentially expressed antigen in mela | 14.06 | 15.56 |
| 430377 | NM_001922 | Hs.301865 | dopachrome tautomerase (dopachrome delta | 13.64 | 11.62 |
| 426555 | NM_000372 | Hs.2053   | tyrosinase (oculocutaneous albinism IA)  | 13.50 | 7.98  |
| 438549 | BE386801  | Hs.21858  | trinucleotide repeat containing 3        | 12.78 | 13.80 |
| 422424 | AI186431  | Hs.296638 | prostate differentiation factor          | 11.88 | 15.56 |
| 426600 | NM_003378 | Hs.171014 | VGF nerve growth factor inducible        | 10.14 | 22.46 |
| 430822 | AJ005371  | Hs.248017 | glyceraldehyde-3-phosphate dehydrogenase | 9.33  | 7.25  |
| 457211 | AW972565  | Hs.32399  | ESTs, Weakly similar to S51797 vasodilat | 8.66  | 9.62  |
| 438380 | T06430    | Hs.6194   | chondroitin sulfate proteoglycan BEHAB/b | 7.87  | 9.58  |
| 417355 | D13168    | Hs.82002  | endothelin receptor type B               | 7.66  | 4.63  |
| 447210 | AF035269  | Hs.17752  | phosphatidylserine-specific phospholipas | 7.38  | 9.04  |
| 413554 | AA319146  | Hs.75426  | secretogranin II (chromogranin C)        | 6.64  | 7.32  |
| 415752 | BE314524  | Hs.78776  | putative transmembrane protein           | 6.46  | 4.65  |
| 421508 | NM_004833 | Hs.105115 | absent in melanoma 2                     | 6.44  | 7.00  |
| 449644 | AW960707  | Hs.148324 | ESTs                                     | 6.43  | 5.92  |
| 426312 | AF026939  | Hs.181874 | interferon-induced protein with letratri | 6.27  | 6.47  |
| 446921 | AB012113  | Hs.16530  | small inducible cytokine subfamily A (Cy | 6.17  | 3.70  |
| 429500 | X78565    | Hs.289114 | hexabrachion (tenascin C, cytotoxic)     | 6.09  | 3.92  |
| 414812 | X72755    | Hs.77367  | monokine induced by gamma interferon     | 6.04  | 7.73  |
| 452973 | H88409    | Hs.40527  | ESTs                                     | 6.04  | 5.89  |
| 402075 |           |           | ENSP00000251056*:Plasma membrane calcium | 5.96  | 2.50  |
| 436856 | AI469355  | Hs.127310 | ESTs                                     | 5.72  | 5.29  |
| 425088 | AA663372  | Hs.169395 | hypothetical protein FLJ12015            | 5.68  | 5.88  |
| 439310 | AF086120  | Hs.102793 | ESTs                                     | 5.62  | 6.30  |
| 429170 | NM_001394 | Hs.2359   | dual specificity phosphatase 4           | 5.62  | 3.30  |
| 413670 | AB000115  | Hs.75470  | hypothetical protein, expressed in osteo | 5.50  | 4.28  |
| 409512 | AW979187  | Hs.293591 | melanoma differentiation associated prot | 5.36  | 4.14  |
| 430540 | AW245422  |           | Homo sapiens cDNA: FLJ22105 fis, clone H | 5.36  | 4.64  |
| 436315 | BE390513  | Hs.27935  | hypothetical protein MGC4837             | 5.35  | 4.31  |
| 442426 | AI373062  | Hs.332938 | hypothetical protein MGC5370             | 5.28  | 4.03  |
| 435056 | AW023337  | Hs.5422   | glycoprotein M6B                         | 5.23  | 3.25  |
| 432828 | AB042326  | Hs.287402 | chondroitin 4-sulfotransferase           | 5.20  | 5.52  |
| 430294 | AI538226  | Hs.32976  | guanine nucleotide binding protein 4     | 5.14  | 4.82  |
| 431639 | AK000680  | Hs.266175 | phosphoprotein associated with GEMs      | 5.09  | 4.35  |
| 430838 | N46664    | Hs.169395 | hypothetical protein FLJ12015            | 5.06  | 3.68  |
| 414004 | AA737033  | Hs.7155   | ESTs, Moderately similar to 2115357A TYK | 5.04  | 4.23  |
| 407366 | AF026942  | Hs.17518  | gb:Homo sapiens cig33 mRNA, partial sequ | 4.94  | 6.29  |
| 422192 | AA305159  | Hs.113019 | fls485                                   | 4.88  | 5.62  |
| 420208 | BE276055  | Hs.95972  | silver (mouse homolog) like              | 4.88  | 6.00  |
| 445006 | NM_004403 | Hs.13530  | deafness, autosomal dominant 5           | 4.77  | 4.33  |
| 440055 | W03476    | Hs.266331 | hypothetical protein MGC4595             | 4.74  | 9.85  |
| 421574 | AJ000152  | Hs.105924 | defensin, beta 2                         | 4.74  | 5.75  |
| 440274 | R24595    | Hs.7122   | scrapie responsive protein 1             | 4.72  | 2.78  |
| 417166 | AA431323  | Hs.42146  | ESTs                                     | 4.68  | 4.29  |
| 415314 | N88802    | Hs.5422   | glycoprotein M6B                         | 4.65  | 3.73  |
| 443983 | H04482    | Hs.163724 | ESTs                                     | 4.64  | 3.06  |

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|    |        |           |           |  |      |       |
|----|--------|-----------|-----------|--|------|-------|
|    | 432642 | BE297635  | Hs.3069   | heat shock 70kD protein 9B (mortalin-2)  | 4.62 | 2.87  |
|    | 437179 | AA393508  |           | serologically defined colon cancer antlg | 4.62 | 5.08  |
|    | 417933 | X02308    | Hs.82962  | thymidylate synthetase                   | 4.58 | 3.02  |
| 5  | 431620 | AA126109  | Hs.264981 | 2'-5'-oligoadenylate synthetase 2 (69-71 | 4.50 | 4.37  |
|    | 431629 | AU077025  | Hs.265827 | interferon, alpha-inducible protein (clo | 4.49 | 16.82 |
|    | 447937 | AL109716  | Hs.20034  | Homo sapiens mRNA full length insert cDN | 4.44 | 5.95  |
|    | 409264 | NM_014937 | Hs.52463  | KIAA0966 protein                         | 4.42 | 2.94  |
|    | 434203 | BE262677  | Hs.283558 | hypothetical protein PRO1855             | 4.42 | 3.54  |
| 10 | 422309 | U79745    | Hs.114924 | solute carrier family 16 (monocarboxylic | 4.38 | 3.30  |
|    | 449722 | BE280074  | Hs.23960  | cyclin B1                                | 4.32 | 4.07  |
|    | 446619 | AU076643  | Hs.313    | secreted phosphoprotein 1 (osteopontin,  | 4.30 | 3.82  |
|    | 450065 | AL050107  | Hs.24341  | transcriptional co-activator with PDZ-bl | 4.28 | 4.36  |
|    | 424247 | X14008    | Hs.234734 | lysozyme (renal amyloidosis)             | 4.27 | 3.05  |
| 15 | 413916 | N49813    | Hs.75615  | apolipoprotein C-II                      | 4.25 | 4.68  |
|    | 420267 | N37030    | Hs.173337 | ESTs                                     | 4.24 | 4.24  |
|    | 442739 | NM_007274 | Hs.8679   | cytosolic acyl coenzyme A thioester hydr | 4.21 | 3.00  |
|    | 433576 | BE080715  | Hs.161091 | ESTs                                     | 4.20 | 6.31  |
|    | 412652 | AI801777  |           | ESTs                                     | 4.20 | 2.73  |
| 20 | 438209 | AL120659  | Hs.6111   | aryl-hydrocarbon receptor nuclear transl | 4.20 | 5.18  |
|    | 441553 | AA281219  | Hs.121296 | ESTs                                     | 4.14 | 4.94  |
|    | 407856 | AA045281  | Hs.266175 | phosphoprotein associated with GEMs      | 4.14 | 3.14  |
|    | 439926 | AW014875  | Hs.137007 | ESTs                                     | 4.12 | 4.76  |
|    | 429903 | AL134197  | Hs.93597  | cyclin-dependent kinase 5, regulatory su | 4.12 | 4.85  |
| 25 | 400860 |           |           | Target Exon                              | 4.10 | 5.20  |
|    | 409415 | AA579258  | Hs.6083   | Homo sapiens cDNA: FLJ21028 fis, clone C | 4.08 | 6.02  |
|    | 416636 | N32536    | Hs.42645  | solute carrier family 16 (monocarboxylic | 4.08 | 2.42  |
|    | 452826 | BE245286  | Hs.301635 | peroxisomal biogenesis factor 6          | 4.06 | 2.96  |
|    | 407748 | AL079409  | Hs.38176  | KIAA0606 protein; SCN Circadian Oscillat | 4.06 | 2.28  |
| 30 | 417632 | R20855    | Hs.5422   | glycoprotein M6B                         | 4.01 | 2.96  |
|    | 418064 | BE387287  | Hs.83384  | S100 calcium-binding protein, beta (neur | 4.00 | 4.62  |
|    | 448111 | AA053486  | Hs.20315  | interferon-induced protein with tetrairi | 4.00 | 2.82  |
|    | 420674 | NM_000055 | Hs.1327   | butyrylcholinesterase                    | 4.00 | 2.90  |
|    | 451668 | Z43948    | Hs.326444 | cartilage acidic protein 1               | 3.99 | 5.17  |
| 35 | 430015 | AW768399  |           | ESTs                                     | 3.96 | 3.89  |
|    | 407756 | AA116021  | Hs.38260  | ubiquitin specific protease 18           | 3.94 | 2.91  |
|    | 430223 | NM_002514 | Hs.235935 | nephroblastoma overexpressed gene        | 3.93 | 3.89  |
|    | 433364 | AI075407  | Hs.296083 | ESTs, Moderately similar to I54374 gene  | 3.93 | 4.70  |
|    | 448719 | AA033627  | Hs.21858  | trinucleotide repeat containing 3        | 3.92 | 7.78  |
| 40 | 419381 | AB023420  | Hs.90093  | heat shock 70kD protein 4                | 3.87 | 3.34  |
|    | 402609 |           |           | KIAA1209 protein                         | 3.87 | 3.69  |
|    | 408083 | BE383668  | Hs.42484  | hypothetical protein FLJ10618            | 3.86 | 4.04  |
|    | 409703 | NM_006187 | Hs.56009  | 2'-5'-oligoadenylate synthetase 3 (100 k | 3.85 | 3.64  |
|    | 420218 | AW958037  |           | ribosomal protein L4                     | 3.84 | 3.20  |
| 45 | 434826 | AF155661  | Hs.22265  | pyruvate dehydrogenase phosphatase       | 3.84 | 5.19  |
|    | 410600 | AW575742  |           | ESTs, Moderately similar to S65657 alpha | 3.82 | 5.74  |
|    | 442117 | AW664964  | Hs.128899 | ESTs; hypothetical protein for IMAGE:447 | 3.82 | 2.96  |
|    | 428513 | BE220806  | Hs.184697 | Homo sapiens clone 23785 mRNA sequence   | 3.82 | 4.03  |
|    | 417381 | AF164142  | Hs.82042  | solute carrier family 23 (nucleobase tra | 3.80 | 3.56  |
| 50 | 432094 | AI658580  | Hs.61426  | Homo sapiens mesenchymal stem cell prote | 3.79 | 3.23  |
|    | 443105 | X96753    | Hs.9004   | chondroitin sulfate proteoglycan 4 (mela | 3.77 | 3.66  |
|    | 423605 | AF047826  | Hs.129887 | cadherin 19, type 2                      | 3.72 | 2.28  |
|    | 407846 | AA426202  | Hs.40403  | Cbp/p300-interacting transactivator, wit | 3.72 | 5.34  |
|    | 442578 | AK001643  | Hs.8395   | hypothetical protein FLJ10781            | 3.71 | 3.42  |
|    | 448966 | AW372914  | Hs.86149  | phosphoinositol 3-phosphate-binding prot | 3.68 | 3.31  |
| 55 | 428227 | AA321649  | Hs.2248   | small inducible cytokine subfamily B (Cy | 3.68 | 4.24  |
|    | 400750 |           |           | Target Exon                              | 3.68 | 2.74  |
|    | 447217 | BE465754  | Hs.17778  | neuropilin 2                             | 3.66 | 3.60  |
|    | 459373 | BE408266  | Hs.301406 | hypothetical protein PP3501              | 3.66 | 3.48  |
| 60 | 419628 | H67546    | Hs.49768  | ESTs                                     | 3.62 | 4.13  |
|    | 406868 | AA505445  | Hs.300697 | immunoglobulin heavy constant gamma 3 (G | 3.61 | 4.40  |
|    | 421866 | M24470    | Hs.1435   | guanosine monophosphate reductase        | 3.59 | 3.53  |
|    | 421709 | AA159394  | Hs.107056 | CED-5 protein                            | 3.57 | 2.63  |
|    | 438501 | Z44110    | Hs.86149  | phosphoinositol 3-phosphate-binding prot | 3.56 | 3.54  |
| 65 | 408962 | BE386436  | Hs.44317  | SRY (sex determining region Y)-box 10    | 3.55 | 2.70  |
|    | 425139 | AW630488  | Hs.25338  | protease, serine, 23                     | 3.50 | 2.80  |
|    | 428411 | AW291464  | Hs.10338  | ESTs                                     | 3.49 | 2.58  |
|    | 452744 | AI267652  | Hs.246107 | Homo sapiens mRNA; cDNA DKFZp434E082 (fr | 3.48 | 4.61  |
|    | 411305 | BE241596  | Hs.69547  | myelin basic protein                     | 3.48 | 3.37  |
| 70 | 447343 | AA256641  | Hs.236894 | ESTs, Highly similar to S02392 alpha-2-m | 3.47 | 2.68  |
|    | 429954 | AI918130  | Hs.21374  | ESTs                                     | 3.47 | 2.63  |
|    | 417621 | AV654694  | Hs.82316  | interferon-induced, hepatitis C-associat | 3.46 | 2.34  |
|    | 435256 | AF193766  | Hs.13872  | cytokine-like protein C17                | 3.46 | 2.47  |
|    | 450534 | AI570189  | Hs.25132  | KIAA0470 gene product                    | 3.42 | 3.65  |
| 75 | 421100 | AW351839  | Hs.124660 | Homo sapiens cDNA: FLJ21763 fis, clone C | 3.41 | 2.63  |
|    | 418506 | AA084248  | Hs.85339  | G protein-coupled receptor 39            | 3.40 | 4.02  |
|    | 442711 | AF151073  | Hs.8645   | hypothetical protein                     | 3.39 | 2.95  |
|    | 453344 | BE349075  | Hs.44571  | ESTs                                     | 3.38 | 2.38  |
|    | 436700 | AI693690  | Hs.301406 | hypothetical protein PP3501              | 3.36 | 4.60  |
| 80 | 418007 | M13509    | Hs.83169  | matrix metalloproteinase 1 (interstitial | 3.36 | 2.61  |
|    | 433857 | AK000596  | Hs.3618   | hippocalcin-like 1                       | 3.36 | 4.26  |
|    | 408393 | AW015318  | Hs.23165  | ESTs                                     | 3.36 | 2.10  |
|    | 447484 | AA464839  | Hs.292566 | hypothetical protein FLJ14697            | 3.36 | 2.49  |
|    | 412828 | AL133396  | Hs.74621  | prion protein (p27-30) (Creutzfeld-Jakob | 3.35 | 2.27  |

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|    |        |           |           |  |      |      |
|----|--------|-----------|-----------|--|------|------|
| 5  | 426158 | NM_001982 | Hs.199067 | v-erb-b2 avian erythroblastic leukemia v | 3.35 | 2.58 |
|    | 440325 | NM_003812 | Hs.7164   | a disintegrin and metalloproteinase doma | 3.34 | 2.55 |
|    | 420602 | AF060877  | Hs.99236  | regulator of G-protein signalling 20     | 3.34 | 5.96 |
|    | 439963 | AW247529  | Hs.6793   | platelet-activating factor acetylhydrola | 3.34 | 2.73 |
|    | 406663 | U24683    |           | immunoglobulin heavy constant mu         | 3.31 | 5.21 |
| 10 | 427540 | R12014    | Hs.20976  | ESTs                                     | 3.30 | 3.40 |
|    | 412141 | AI183838  | Hs.48938  | hypothetical protein FLJ21802            | 3.29 | 2.80 |
|    | 400282 |           |           | NM_005313:Homo sapiens glucose regulated | 3.29 | 3.46 |
|    | 419870 | AW403911  | Hs.266175 | phosphoprotein associated with GEMs      | 3.28 | 5.20 |
|    | 416539 | Y07909    | Hs.79368  | epithelial membrane protein 1            | 3.28 | 2.79 |
| 15 | 431518 | AA743462  | Hs.165337 | ESTs                                     | 3.27 | 2.51 |
|    | 402994 |           |           | NM_002463*:Homo sapiens myxovirus (influ | 3.26 | 6.38 |
|    | 419956 | AL137939  | Hs.40096  | cadherin 19, type 2                      | 3.26 | 4.48 |
|    | 421379 | Y15221    | Hs.103982 | small inducible cytokine subfamily B (Cy | 3.26 | 3.71 |
|    | 444371 | BE540274  | Hs.239    | forkhead box M1                          | 3.25 | 3.72 |
| 20 | 432874 | W94322    | Hs.279651 | melanoma inhibitory activity             | 3.25 | 5.33 |
|    | 417282 | AA195203  |           | RAB5C, member RAS oncogene family        | 3.24 | 3.20 |
|    | 439569 | AW602166  | Hs.222399 | CEGP1 protein                            | 3.24 | 2.32 |
|    | 422530 | AW972300  | Hs.118110 | bone marrow stromal cell antigen 2       | 3.24 | 6.20 |
|    | 403817 |           |           | NM_015271:Homo sapiens tripartite motif- | 3.23 | 3.70 |
| 25 | 407857 | AI928445  | Hs.92254  | synaptotagmin-like 2                     | 3.22 | 2.49 |
|    | 426334 | BE305081  | Hs.169358 | hypothetical protein                     | 3.21 | 2.46 |
|    | 453837 | AL138387  | Hs.256126 | baculoviral IAP repeat-containing 7 (liv | 3.19 | 5.50 |
|    | 427283 | AL119796  | Hs.174185 | ectonucleotide pyrophosphatase/phosphodi | 3.18 | 2.04 |
|    | 437379 | AL359575  | Hs.23765  | Homo sapiens mRNA; cDNA DKFZp547M123 (fr | 3.18 | 3.73 |
| 30 | 424090 | X99699    | Hs.139262 | XIAP associated factor-1                 | 3.18 | 4.44 |
|    | 410491 | AA465131  | Hs.64001  | Homo sapiens clone 25218 mRNA sequence   | 3.18 | 3.26 |
|    | 408418 | AW963897  | Hs.44743  | KIAA1435 protein                         | 3.16 | 2.21 |
|    | 412326 | R07566    | Hs.73817  | small inducible cytokine A3 (homologous  | 3.16 | 4.04 |
|    | 402829 |           |           | C1002500:gi6754254ref NP_034610.1  hea   | 3.15 | 4.57 |
| 35 | 437862 | AW978107  | Hs.5884   | Homo sapiens mRNA; cDNA DKFZp586C0224 (f | 3.15 | 3.07 |
|    | 425935 | Z98200    | Hs.163724 | HSPC019 protein                          | 3.14 | 3.08 |
|    | 417124 | BE122762  | Hs.25338  | ESTs                                     | 3.14 | 2.73 |
|    | 425071 | NM_013989 | Hs.154424 | deiodinase, iodothyronine, type II       | 3.11 | 2.16 |
|    | 412490 | AW803564  | Hs.288850 | Homo sapiens cDNA: FLJ22528 fis, clone H | 3.10 | 2.43 |
| 40 | 442271 | AF000652  | Hs.8180   | syndecan binding protein (syntenin)      | 3.10 | 2.83 |
|    | 415817 | U88967    | Hs.78867  | protein tyrosine phosphatase, receptor-t | 3.10 | 1.78 |
|    | 429083 | Y09397    | Hs.227817 | BCL2-related protein A1                  | 3.10 | 3.17 |
|    | 437673 | AW665665  | Hs.153034 | ESTs                                     | 3.10 | 3.32 |
|    | 407813 | AL120247  | Hs.40109  | KIAA0872 protein                         | 3.10 | 3.90 |
| 45 | 445745 | AB007924  | Hs.13245  | KIAA0455 gene product                    | 3.10 | 3.35 |
|    | 451537 | R56631    | Hs.26550  | retinoid X receptor, gamma               | 3.09 | 4.45 |
|    | 408654 | BE018882  | Hs.46721  | UCC1 protein                             | 3.08 | 3.65 |
|    | 444484 | AK002126  | Hs.11260  | hypothetical protein FLJ11264            | 3.08 | 2.12 |
|    | 446019 | AI362520  |           | histone deacetylase 3                    | 3.08 | 2.26 |
| 50 | 434276 | AF123659  | Hs.93605  | leucine zipper, putative tumor suppresso | 3.08 | 5.29 |
|    | 427871 | AW992405  | Hs.59522  | Homo sapiens, clone IMAGE:3507281, mRNA, | 3.06 | 3.36 |
|    | 403532 |           |           | NM_024638:Homo sapiens hypothetical prot | 3.06 | 3.37 |
|    | 433160 | AW207002  | Hs.134342 | TASP for testis-specific adriamycin sens | 3.04 | 3.17 |
|    | 446341 | AL040763  | Hs.310735 | ESTs, Moderately similar to ALU7_HUMAN A | 3.03 | 2.98 |
| 55 | 426501 | AW043782  | Hs.293616 | ESTs                                     | 3.03 | 2.01 |
|    | 450325 | AI935962  | Hs.91973  | ESTs                                     | 3.02 | 2.19 |
|    | 418941 | AA452970  | Hs.239527 | E1B-55kDa-associated protein 5           | 3.02 | 3.29 |
|    | 431797 | BE169641  | Hs.270134 | hypothetical protein FLJ20280            | 3.02 | 2.54 |
|    | 442064 | AI422867  | Hs.88594  | ESTs                                     | 3.00 | 1.96 |
| 60 | 405451 |           |           | dihydropyrimidinase-like 3               | 3.00 | 2.98 |
|    | 414915 | NM_002462 | Hs.76391  | myxovirus (influenza) resistance 1, homo | 2.99 | 6.41 |
|    | 454117 | BE410100  | Hs.40368  | adaptor-related protein complex 1, sigma | 2.98 | 3.25 |
|    | 452958 | AA883929  | Hs.40527  | ESTs                                     | 2.98 | 4.14 |
|    | 427647 | W19744    | Hs.180059 | Homo sapiens cDNA FLJ20653 fis, clone KA | 2.96 | 3.30 |
| 65 | 409190 | AU076536  | Hs.50984  | sarcoma amplified sequence               | 2.96 | 2.47 |
|    | 428819 | AL135623  | Hs.193914 | KIAA0575 gene product                    | 2.96 | 4.16 |
|    | 428450 | NM_014791 | Hs.184339 | KIAA0175 gene product                    | 2.96 | 2.41 |
|    | 414219 | W20010    | Hs.75823  | ALL1-fused gene from chromosome 1q       | 2.95 | 2.79 |
|    | 411358 | R47479    | Hs.94761  | KIAA1691 protein                         | 2.95 | 4.70 |
| 70 | 432467 | T03667    | Hs.239388 | Human DNA sequence from clone RP1-304B14 | 2.94 | 2.65 |
|    | 400222 |           |           | NM_002082*:Homo sapiens G protein-couple | 2.94 | 2.69 |
|    | 405785 |           |           | NM_025184*:Homo sapiens hypothetical pro | 2.94 | 2.55 |
|    | 409760 | AA302840  |           | gb:EST10534 Adipose tissue, white I Homo | 2.94 | 2.57 |
|    | 418113 | AI272141  | Hs.83484  | SRY (sex determining region Y)-box 4     | 2.93 | 2.52 |
| 75 | 409038 | T97490    | Hs.50002  | small inducible cytokine subfamily A (Cy | 2.93 | 2.43 |
|    | 456760 | AW961251  | Hs.127828 | guanine nucleotide binding protein (G pr | 2.92 | 3.20 |
|    | 459710 | AI701596  | Hs.121592 | ESTs                                     | 2.91 | 4.45 |
|    | 411395 | AA889673  | Hs.7542   | KIAA1802 protein                         | 2.90 | 2.72 |
|    | 427528 | AU077143  | Hs.179565 | minichromosome maintenance deficient (S  | 2.90 | 2.27 |
| 80 | 406964 | M21305    |           | FGENES predicted novel secreted protein  | 2.90 | 2.03 |
|    | 428834 | AW899713  | Hs.339315 | ESTs                                     | 2.89 | 3.55 |
|    | 413190 | AA151802  | Hs.40368  | adaptor-related protein complex 1, sigma | 2.89 | 3.87 |
|    | 438619 | AB032773  |           | TU12B1-TY protein                        | 2.88 | 2.37 |
|    | 442432 | BE093589  | Hs.38178  | hypothetical protein FLJ23468            | 2.87 | 2.00 |
|    | 428782 | X12830    | Hs.193400 | interleukin 6 receptor                   | 2.86 | 2.51 |
|    | 454027 | R40192    | Hs.21527  | Human DNA sequence from clone GS1-115M3  | 2.86 | 3.07 |
|    | 453107 | NM_016113 | Hs.279746 | vanilloid receptor-like protein 1        | 2.86 | 5.58 |

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|----|--------|-----------|-----------|--|------|-------|
|    | 414737 | AI160386  | Hs.125087 | ESTs                                     | 2.84 | 2.79  |
|    | 412140 | AA219691  | Hs.73625  | RAB6 interacting, kinesin-like (rabkines | 2.84 | 3.80  |
|    | 447735 | AA775268  | Hs.6127   | Homo sapiens cDNA: FLJ23020 fis, clone L | 2.83 | 2.11  |
|    | 416091 | AF295370  | Hs.283082 | defensin, beta 3                         | 2.83 | 3.32  |
| 5  | 442445 | AA082665  | Hs.209561 | KIAA1715 protein                         | 2.81 | 2.17  |
|    | 408208 | BE018717  |           | ESTs                                     | 2.81 | 2.43  |
|    | 430066 | AI929659  | Hs.237825 | signal recognition particle 72kD         | 2.80 | 2.25  |
|    | 424755 | AB033094  | Hs.152925 | KIAA1268 protein                         | 2.80 | 2.74  |
|    | 422616 | BE300330  | Hs.118725 | selenophosphate synthetase 2             | 2.79 | 2.01  |
| 10 | 405506 |           |           | Target Exon                              | 2.78 | 2.65  |
|    | 411619 | AI418609  | Hs.71040  | hypothetical protein FLJ20425            | 2.78 | 3.10  |
|    | 400236 |           |           | Eos Control                              | 2.78 | 2.21  |
|    | 452698 | NM_001295 | Hs.301921 | chemokine (C-C motif) receptor 1         | 2.78 | 3.15  |
|    | 446488 | AB037782  | Hs.15119  | KIAA1361 protein                         | 2.78 | 2.80  |
| 15 | 439778 | AL109729  | Hs.99364  | putative transmembrane protein           | 2.78 | 3.78  |
|    | 420005 | AW271106  | Hs.133294 | ESTs                                     | 2.78 | 2.86  |
|    | 428642 | NM_014899 | Hs.10432  | KIAA0878 protein                         | 2.77 | 3.07  |
|    | 453779 | N35187    | Hs.43388  | 28kD interferon responsive protein       | 2.76 | 4.56  |
|    | 425289 | AW139342  | Hs.155530 | interferon, gamma-inducible protein 16   | 2.76 | 1.83  |
| 20 | 437723 | AI672731  | Hs.13256  | ESTs                                     | 2.76 | 4.23  |
|    | 416730 | T99937    |           | gb:ye72d04.r1 Soares fetal liver spleen  | 2.76 | 2.98  |
|    | 426153 | AF057169  | Hs.182771 | vitelliform macular dystrophy (Best dise | 2.76 | 3.21  |
|    | 444670 | H58373    | Hs.332938 | hypothetical protein MGC5370             | 2.76 | 3.97  |
| 25 | 421351 | AU076667  | Hs.103755 | receptor-interacting serine-threonine ki | 2.74 | 3.50  |
|    | 406673 | M34996    | Hs.198253 | major histocompatibility complex, class  | 2.74 | 3.24  |
|    | 427268 | X78520    | Hs.174139 | chloride channel 3                       | 2.74 | 2.82  |
|    | 428403 | AI393048  | Hs.326159 | leucine rich repeat (in FLII) interactin | 2.74 | 1.95  |
|    | 409417 | AA156247  | Hs.104879 | serine (or cysteine) proteinase inhibito | 2.74 | 2.99  |
|    | 419705 | AW368634  | Hs.154331 | ESTs                                     | 2.74 | 2.28  |
| 30 | 440457 | BE387593  | Hs.21321  | Homo sapiens clone FLB9213 PRO2474 mRNA, | 2.72 | 3.60  |
|    | 413599 | AJ006239  | Hs.75438  | quinoid dihydropteridine reductase       | 2.72 | 2.43  |
|    | 447164 | AF026941  | Hs.17518  | vipirin; similar to inflammatory respon  | 2.72 | 4.77  |
|    | 430594 | AK000790  | Hs.246885 | hypothetical protein FLJ20783            | 2.72 | 3.67  |
| 35 | 413278 | BE563085  | Hs.833    | interferon-stimulated protein, 15 kDa    | 2.71 | 12.06 |
|    | 424572 | M19650    | Hs.179600 | 2',3'-cyclic nucleotide 3' phosphodieste | 2.70 | 2.40  |
|    | 409142 | AL136877  | Hs.50758  | SMC4 (structural maintenance of chromoso | 2.70 | 3.81  |
|    | 425996 | W67330    |           | hypothetical protein AL110115            | 2.69 | 3.85  |
|    | 430441 | BE398091  |           | desmoplakin (DPI, DPII)                  | 2.68 | 2.55  |
| 40 | 442355 | AA456539  | Hs.8262   | lysosomal-associated membrane protein 2  | 2.68 | 1.67  |
|    | 421362 | AK000050  | Hs.103853 | hypothetical protein FLJ20043            | 2.68 | 2.94  |
|    | 437158 | AW090198  |           | KIAA1150 protein                         | 2.68 | 1.89  |
|    | 412315 | AW936678  |           | gb:PM2-DT0023-080300-004-a04 DT0023 Homo | 2.68 | 2.80  |
|    | 432878 | BE386490  | Hs.279663 | Pirin                                    | 2.68 | 2.58  |
|    | 408822 | AW500715  | Hs.57079  | Homo sapiens cDNA FLJ13267 fis, clone OV | 2.68 | 2.74  |
| 45 | 426759 | AI590401  | Hs.21213  | ESTs                                     | 2.68 | 2.35  |
|    | 405486 |           |           | Target Exon                              | 2.67 | 2.70  |
|    | 410326 | AI368909  | Hs.47650  | ESTs                                     | 2.67 | 3.33  |
|    | 434040 | AW444613  | Hs.288809 | hypothetical protein FLJ20159            | 2.66 | 2.54  |
| 50 | 437396 | BE140396  | Hs.21621  | hypothetical protein DKFZp762O076        | 2.66 | 1.91  |
|    | 412719 | AW016610  | Hs.816    | ESTs                                     | 2.66 | 4.21  |
|    | 451708 | AI306536  | Hs.60975  | ESTs                                     | 2.66 | 5.69  |
|    | 418299 | AA279530  | Hs.83968  | integrin, beta 2 (antigen CD18 (p95), ly | 2.66 | 2.31  |
|    | 425017 | AL119305  | Hs.26409  | ESTs                                     | 2.66 | 2.73  |
| 55 | 400235 |           |           | NM_005336:Homo sapiens high density lipo | 2.66 | 2.29  |
|    | 444809 | BE207568  | Hs.208219 | oculospanin                              | 2.64 | 2.86  |
|    | 436291 | BE568452  | Hs.344037 | protein regulator of cytokinesis 1       | 2.64 | 2.33  |
|    | 406382 |           |           | C16001275:glj12698037[dbj]BAB21837.1  (  | 2.64 | 2.48  |
|    | 432241 | AI937050  | Hs.6298   | KIAA1151 protein                         | 2.63 | 3.16  |
|    | 417308 | H60720    | Hs.81892  | KIAA0101 gene product                    | 2.63 | 2.10  |
| 60 | 429294 | AA095971  | Hs.198793 | Homo sapiens cDNA: FLJ22463 fis, clone H | 2.62 | 2.43  |
|    | 453935 | AI633770  | Hs.42572  | ESTs                                     | 2.62 | 1.99  |
|    | 401454 |           |           | NM_014226*:Homo sapiens renal tumor anti | 2.62 | 3.01  |
|    | 436456 | AW292677  | Hs.248122 | G protein-coupled receptor 24            | 2.62 | 5.94  |
| 65 | 418478 | U38945    | Hs.1174   | cyclin-dependent kinase inhibitor 2A (me | 2.61 | 3.02  |
|    | 453256 | AI565587  | Hs.32556  | KIAA0379 protein                         | 2.60 | 2.68  |
|    | 451622 | AW139587  | Hs.30579  | Homo sapiens cDNA: FLJ23070 fis, clone L | 2.60 | 2.51  |
|    | 424006 | AF054815  | Hs.137548 | CD84 antigen (leukocyte antigen)         | 2.60 | 2.56  |
|    | 409354 | N68188    | Hs.159472 | Homo sapiens cDNA: FLJ22224 fis, clone H | 2.59 | 3.00  |
|    | 425392 | N39725    | Hs.15220  | zinc finger protein 106                  | 2.58 | 3.52  |
| 70 | 427286 | AW732802  | Hs.2132   | epidermal growth factor receptor pathway | 2.58 | 1.86  |
|    | 418166 | AI754416  |           | Cdc42 effector protein 3                 | 2.58 | 2.15  |
|    | 413794 | AF234532  | Hs.61638  | myosin X                                 | 2.58 | 2.54  |
|    | 445707 | AI248720  | Hs.114390 | ESTs                                     | 2.58 | 1.95  |
|    | 416640 | BE262478  | Hs.79404  | neuron-specific protein                  | 2.57 | 2.46  |
| 75 | 427982 | NM_016156 | Hs.181326 | KIAA1073 protein                         | 2.56 | 1.74  |
|    | 439453 | BE264974  | Hs.6566   | thyroid hormone receptor interactor 13   | 2.56 | 2.22  |
|    | 455839 | BE145814  |           | gb:MRQ-HT0208-101299-202-a04 HT0208 Homo | 2.55 | 2.34  |
|    | 447737 | AK000643  | Hs.19404  | DKFZP564L0862 protein                    | 2.55 | 2.31  |
|    | 423799 | AW026300  | Hs.132906 | 19A24 protein                            | 2.54 | 2.11  |
| 80 | 442762 | AF035119  | Hs.8700   | deleted in liver cancer 1                | 2.54 | 2.47  |
|    | 432886 | BE159028  | Hs.279704 | chromatin accessibility complex 1        | 2.54 | 3.99  |
|    | 440676 | NM_004987 | Hs.112378 | LIM and senescent cell antigen-like doma | 2.54 | 2.96  |
|    | 424481 | R19453    | Hs.1787   | proteolipid protein 1 (Pelizaeus-Merzbac | 2.53 | 6.98  |

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|    | 422340 | AW296219  | Hs.115325 | RAB7, member RAS oncogene family-like 1    | 2.53 | 3.06 |
|    | 428844 | AW972635  | Hs.301904 | hypothetical protein FLJ12671              | 2.53 | 3.13 |
|    | 458997 | AW937420  |           | ESTs                                       | 2.53 | 1.63 |
| 5  | 419591 | AF090900  | Hs.91393  | Homo sapiens cDNA: FLJ21887 fis, clone H   | 2.52 | 2.30 |
|    | 414807 | AI738616  | Hs.77348  | hydroxyprostaglandin dehydrogenase 15-(N   | 2.52 | 1.80 |
|    | 429238 | NM_002849 | Hs.198288 | protein tyrosine phosphatase, receptor t   | 2.52 | 3.02 |
|    | 432882 | NM_013257 | Hs.279696 | serum/glucocorticoid regulated kinase-li   | 2.52 | 3.05 |
|    | 407260 | L09095    |           | gb:Homo sapiens mRNA fragment              | 2.50 | 5.00 |
|    | 431186 | NM_012249 | Hs.250697 | ras-like protein                           | 2.49 | 6.16 |
| 10 | 417542 | J04129    | Hs.82269  | progesteragen-associated endometrial prote | 2.49 | 4.71 |
|    | 419556 | U29615    | Hs.91093  | chitinase 1 (chitotriosidase)              | 2.48 | 5.77 |
|    | 408209 | NM_004454 | Hs.43697  | ets variant gene 5 (ets-related molecule   | 2.48 | 3.77 |
|    | 405885 |           |           | Target Exon                                | 2.46 | 3.11 |
|    | 406837 | R70292    | Hs.156110 | immunoglobulin kappa constant              | 2.44 | 3.10 |
| 15 | 412609 | Z48804    | Hs.74124  | ocular albinism 1 (Nettleship-Falls)       | 2.44 | 4.90 |
|    | 421633 | AF121860  | Hs.106260 | sorting nexin 10                           | 2.44 | 4.31 |
|    | 415929 | AA724373  | Hs.49344  | hypothetical protein FLJ11006              | 2.42 | 3.19 |
|    | 413171 | AA318325  | Hs.75219  | tyrosinase-related protein 1               | 2.37 | 3.57 |
|    | 406621 | X57809    | Hs.8997   | immunoglobulin lambda locus                | 2.36 | 5.87 |
| 20 | 414142 | AW368397  | Hs.334485 | hemocytin (fibulin 6)                      | 2.36 | 3.04 |
|    | 410700 | AA352335  | Hs.65641  | hypothetical protein FLJ20073              | 2.36 | 3.66 |
|    | 414283 | AW960011  | Hs.154993 | ESTs                                       | 2.34 | 4.95 |
|    | 453931 | AL121278  | Hs.25144  | ESTs                                       | 2.34 | 4.18 |
|    | 422515 | AW500470  | Hs.117950 | multifunctional polypeptide similar to S   | 2.32 | 3.45 |
| 25 | 435292 | N20514    | Hs.172965 | ESTs                                       | 2.32 | 4.94 |
|    | 412926 | AI879076  | Hs.75061  | macrophage myristoylated alanine-rich C    | 2.31 | 3.78 |
|    | 440197 | AW340708  | Hs.317714 | pallid (mouse) homolog, pallidin           | 2.30 | 3.95 |
|    | 425262 | D87119    | Hs.155418 | GS3955 protein                             | 2.29 | 5.08 |
|    | 439979 | AW600291  | Hs.6823   | hypothetical protein FLJ10430              | 2.28 | 4.05 |
| 30 | 403969 |           |           | ENSP00000034663:Zinc finger protein 131    | 2.28 | 3.64 |
|    | 421686 | AB011156  | Hs.106794 | KIAA0584 protein                           | 2.26 | 3.31 |
|    | 432800 | BE391046  | Hs.278962 | AIM-1 protein                              | 2.24 | 4.08 |
|    | 406782 | AA430373  |           | gb:zw20f11.s1 Soares ovary tumor NbHOT H   | 2.24 | 3.47 |
| 35 | 415539 | AI733881  | Hs.72472  | BMP-R1B                                    | 2.22 | 3.66 |
|    | 447523 | BE613328  | Hs.21938  | hypothetical protein FLJ12492              | 2.20 | 3.43 |
|    | 433180 | AB038651  | Hs.31854  | K562 cell-derived leucine-zipper-like pr   | 2.20 | 3.52 |
|    | 415825 | Y18024    | Hs.78877  | inositol 1,4,5-trisphosphate 3-kinase B    | 2.19 | 3.76 |
|    | 407241 | M34516    |           | gb:Human omega light chain protein 14.1    | 2.18 | 3.17 |
| 40 | 422243 | AW803733  | Hs.23585  | hypothetical protein MGC12250              | 2.18 | 3.28 |
|    | 417324 | AW265494  |           | ESTs                                       | 2.16 | 5.85 |
|    | 412819 | T25829    | Hs.24048  | FK506 binding protein precursor            | 2.14 | 3.49 |
|    | 432342 | AL036128  | Hs.274404 | plasminogen activator, tissue              | 2.13 | 4.39 |
|    | 427923 | AW274357  | Hs.301406 | hypothetical protein PP3501                | 2.13 | 5.48 |
|    | 417437 | U52682    | Hs.82132  | interferon regulatory factor 4             | 2.13 | 3.08 |
| 45 | 425535 | AB007937  | Hs.158287 | KIAA0468 gene product                      | 2.13 | 8.66 |
|    | 429638 | AI916662  | Hs.211577 | kinectin 1 (kinesin receptor)              | 2.12 | 3.01 |
|    | 409154 | U72882    | Hs.50842  | interferon-induced protein 35              | 2.12 | 4.66 |
|    | 429951 | AL040521  | Hs.15220  | zinc finger protein 106                    | 2.12 | 3.71 |
| 50 | 418918 | X07871    | Hs.89476  | CD2 antigen (p50), sheep red blood cell    | 2.11 | 4.27 |
|    | 419200 | AW966405  |           | EST  | 2.11 | 3.58 |
|    | 416448 | L13210    | Hs.79339  | lectin, galactoside-binding, soluble, 3    | 2.10 | 5.34 |
|    | 425069 | AA687465  | Hs.298184 | potassium voltage-gated channel, shaker-   | 2.07 | 7.86 |
|    | 445133 | AW157646  | Hs.198689 | ESTs                                       | 2.06 | 3.68 |
| 55 | 411492 | T46848    | Hs.70337  | immunoglobulin superfamily, member 4       | 2.04 | 3.36 |
|    | 408015 | AW136771  | Hs.244349 | epidermal differentiation complex protei   | 2.03 | 3.41 |
|    | 424412 | H15512    | Hs.10043  | hypothetical protein FLJ13074              | 2.03 | 3.82 |
|    | 431657 | AI345227  | Hs.105448 | ESTs, Weakly similar to B34087 hypotheti   | 2.02 | 3.03 |
|    | 427536 | BE277141  | Hs.115803 | gb:601178666F1 NIH_MGC_20 Homo sapiens c   | 2.02 | 3.09 |
| 60 | 400533 |           |           | ENSP00000209376*:PREDO5 protein (Fragmen   | 2.00 | 3.29 |
|    | 432680 | T47364    | Hs.278613 | interferon, alpha-inducible protein 27     | 1.99 | 3.07 |
|    | 410129 | BE244074  | Hs.58831  | regulator of Fas-induced apoptosis         | 1.97 | 4.52 |
|    | 417312 | AW888411  | Hs.250811 | leukemia-associated phosphoprotein p18 (   | 1.97 | 3.26 |
|    | 423952 | AW877787  | Hs.136102 | KIAA0853 protein                           | 1.94 | 3.79 |
|    | 455705 | AW161061  |           | ESTs, Weakly similar to zinc finger prot   | 1.93 | 3.16 |
| 65 | 419723 | AL120193  | Hs.339810 | longevity assurance (LAG1, S. cerevisiae   | 1.93 | 3.11 |
|    | 438866 | U44385    | Hs.325495 | tissue inhibitor of metalloproteinase 2    | 1.93 | 3.47 |
|    | 448410 | AK000227  | Hs.21126  | hypothetical protein FLJ20220              | 1.92 | 3.00 |
|    | 400292 | AA250737  | Hs.72472  | BMP-R1B                                    | 1.92 | 4.07 |
| 70 | 436797 | AA731491  | Hs.334477 | hypothetical protein MGC14879              | 1.90 | 3.04 |
|    | 406851 | AA609784  |           | major histocompatibility complex, class    | 1.90 | 6.53 |
|    | 428437 | AV656017  | Hs.184325 | CGI-76 protein                             | 1.89 | 3.39 |
|    | 431836 | AF178532  | Hs.271411 | beta-site APP-cleaving enzyme 2            | 1.89 | 4.04 |
|    | 424687 | J05070    | Hs.151738 | matrix metalloproteinase 9 (gelatinase B   | 1.87 | 3.64 |
|    | 426322 | J05068    | Hs.2012   | transcobalamin I (vitamin B12 binding pr   | 1.85 | 4.21 |
| 75 | 425221 | AV649864  | Hs.155188 | TATA box binding protein (TBP)-associate   | 1.85 | 3.13 |
|    | 420162 | BE378432  | Hs.95577  | cyclin-dependent kinase 4                  | 1.85 | 3.04 |
|    | 443530 | BE563088  | Hs.9552   | binder of Arl Two                          | 1.85 | 3.20 |
|    | 433671 | AW138797  | Hs.132906 | 19A24 protein                              | 1.84 | 3.39 |
| 80 | 424415 | NM_001975 | Hs.146580 | enolase 2, (gamma, neuronal)               | 1.82 | 3.22 |
|    | 400991 |           |           | Target Exon                                | 1.82 | 4.11 |
|    | 418677 | S83308    | Hs.87224  | SRY (sex determining region Y)-box 5       | 1.82 | 3.43 |
|    | 424441 | X14850    | Hs.147097 | H2A histone family, member X               | 1.81 | 3.12 |
|    | 424825 | AF207069  | Hs.153357 | procollagen-lysine, 2-oxoglutarate 5-dio   | 1.79 | 5.31 |

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|    |        |           |           |  |      |      |
|----|--------|-----------|-----------|--|------|------|
| 5  | 425818 | AB021225  | Hs.159581 | matrix metalloproteinase 17 (membrane-in | 1.79 | 3.40 |
|    | 416426 | AA180256  | Hs.210473 | Homo sapiens cDNA FLJ14872 fis, clone PL | 1.78 | 3.38 |
|    | 414945 | BE076358  | Hs.77667  | lymphocyte antigen 6 complex, locus E    | 1.77 | 3.69 |
|    | 440842 | AW246547  | Hs.17901  | Homo sapiens, clone IMAGE:3937015, mRNA, | 1.77 | 3.12 |
|    | 401591 |           |           | Target Exon                              | 1.75 | 4.30 |
|    | 425923 | NM_005026 | Hs.162808 | phosphoinositide-3-kinase, catalytic, de | 1.75 | 3.68 |
|    | 412844 | A1828045  | Hs.18016  | Homo sapiens mRNA; cDNA DKFZp586H0324 (f | 1.74 | 3.53 |
|    | 417237 | H86385    | Hs.81737  | palmitoyl-protein thioesterase 2         | 1.73 | 3.06 |
| 10 | 419849 | BE041436  | Hs.93379  | eukaryotic translation initiation factor | 1.72 | 4.38 |
|    | 454429 | BE273437  | Hs.301406 | hypothetical protein PP3501              | 1.72 | 4.38 |
|    | 440672 | AF083811  | Hs.7345   | MAD1 (mitotic arrest deficient, yeast, h | 1.72 | 3.61 |
|    | 408204 | AA454501  | Hs.43666  | protein tyrosine phosphatase type IVA, m | 1.72 | 3.06 |
|    | 430148 | BE387620  | Hs.234489 | lactate dehydrogenase B                  | 1.71 | 4.38 |
| 15 | 426502 | Y07759    | Hs.170157 | myosin VA (heavy polypeptide 12, myosin) | 1.70 | 3.13 |
|    | 413317 | U53225    | Hs.75283  | sorting nexin 1                          | 1.70 | 3.08 |
|    | 417333 | AL157545  | Hs.173179 | bromodomain and PHD finger containing, 3 | 1.68 | 3.15 |
|    | 407223 | H96850    |           | gb:Yw03b12.s1 Soares melanocyte 2NblM Ho | 1.68 | 4.19 |
|    | 413566 | AW604451  | Hs.285814 | sprouty (Drosophila) homolog 4           | 1.67 | 5.74 |
|    | 404067 |           |           | Target Exon                              | 1.67 | 4.73 |
| 20 | 447630 | A1660149  | Hs.44865  | lymphoid enhancer-binding factor 1       | 1.66 | 3.22 |
|    | 443337 | Y07604    | Hs.9235   | non-metastatic cells 4, protein expresse | 1.65 | 3.17 |
|    | 427747 | AW411425  | Hs.180655 | serine/threonine kinase 12               | 1.64 | 3.35 |
|    | 437912 | BE278594  | Hs.5912   | F-box only protein 7                     | 1.64 | 3.24 |
|    | 404140 |           |           | NM_006510:Homo sapiens ret finger protei | 1.64 | 3.10 |
| 25 | 414214 | D49958    | Hs.75819  | glycoprotein M6A                         | 1.64 | 3.45 |
|    | 427239 | BE270447  |           | ubiquitin carrier protein                | 1.62 | 3.58 |
|    | 427289 | A1097346  |           | phosphoserine aminotransferase           | 1.62 | 5.89 |
|    | 452923 | BE275018  | Hs.288940 | five-span transmembrane protein M83      | 1.62 | 3.23 |
| 30 | 426020 | AL110195  | Hs.166017 | microphthalmia-associated transcription  | 1.62 | 4.00 |
|    | 439627 | BE621702  | Hs.29076  | hypothetical protein FLJ21841            | 1.61 | 5.00 |
|    | 451489 | NM_005503 | Hs.26468  | amyloid beta (A4) precursor protein-bind | 1.60 | 3.06 |
|    | 414699 | A1815523  | Hs.76930  | synuclein, alpha (non A4 component of am | 1.58 | 3.34 |
|    | 411825 | AK000334  |           | hypothetical protein FLJ20327            | 1.56 | 3.18 |
| 35 | 438552 | AJ245820  | Hs.6314   | type I transmembrane receptor (seizure-r | 1.56 | 3.23 |
|    | 428081 | AA421048  | Hs.95011  | syntrophin, beta 1 (dystrophin-associate | 1.55 | 3.10 |
|    | 401914 |           |           | Target Exon                              | 1.54 | 3.33 |
|    | 424902 | NM_003866 | Hs.153687 | inositol polyphosphate-4-phosphatase, ty | 1.54 | 3.15 |
|    | 441648 | H05734    | Hs.30559  | ESTs                                     | 1.52 | 3.36 |
| 40 | 439769 | AA448828  | Hs.30596  | Homo sapiens mRNA full length insert cDN | 1.52 | 3.17 |
|    | 437696 | ZB3844    | Hs.5790   | hypothetical protein dJ37E16.5           | 1.52 | 4.93 |
|    | 413019 | BE281604  | Hs.75140  | low density lipoprotein-related protein- | 1.52 | 3.01 |
|    | 419741 | NM_007019 | Hs.93002  | ubiquitin carrier protein E2-C           | 1.52 | 3.83 |
|    | 422596 | AF063611  | Hs.118633 | 2'-5'-oligoadenylate synthetase-like     | 1.50 | 3.04 |
| 45 | 421851 | R18686    | Hs.108896 | lambda-crystallin                        | 1.47 | 3.10 |
|    | 448499 | BE613280  | Hs.77550  | hypothetical protein MGC1780             | 1.44 | 3.07 |
|    | 427378 | BE515037  | Hs.177556 | melanoma antigen, family D, 1            | 1.44 | 3.00 |
|    | 412641 | M16660    | Hs.74335  | heat shock 90kD protein 1, beta          | 1.42 | 3.66 |
|    | 448143 | AF039704  | Hs.20478  | ceroid-lipofuscinosis, neuronal 2, late  | 1.42 | 4.16 |
| 50 | 413291 | NM_006278 | Hs.75268  | sialyltransferase 4C (beta-galactosidase | 1.41 | 3.30 |
|    | 435968 | AW161481  | Hs.111577 | integral membrane protein 3              | 1.41 | 3.30 |
|    | 422486 | BE514492  | Hs.117487 | gene near HD on 4p16.3 with homology to  | 1.40 | 3.01 |
|    | 443759 | BE390832  | Hs.134729 | FXRD domain-containing ion transport reg | 1.39 | 3.82 |
|    | 444441 | AW613841  | Hs.301394 | hypothetical protein MGC3101             | 1.39 | 3.43 |
| 55 | 430205 | AB025904  | Hs.235168 | carbonic anhydrase XIV                   | 1.36 | 3.32 |
|    | 406827 | AA971409  |           | gb:op92c04.s1 NCL CGAP_Lu5 Homo sapiens  | 1.35 | 3.03 |
|    | 406906 | Z25424    |           | gb:H.sapiens protein-serine/threonine ki | 1.34 | 6.25 |
|    | 426890 | AA393167  | Hs.41294  | ESTs                                     | 1.34 | 3.66 |
|    | 433320 | D60647    | Hs.250879 | ESTs, Highly similar to CTXN RAT CORTEXI | 1.34 | 3.18 |
| 60 | 450358 | AB010098  | Hs.24907  | coronin, actin-binding protein, 2B       | 1.33 | 3.19 |
|    | 421612 | AF161254  | Hs.106196 | 8D6 antigen                              | 1.33 | 3.03 |
|    | 438915 | AA280174  | Hs.285681 | Williams-Beuren syndrome chromosome regi | 1.32 | 3.68 |
|    | 428342 | A1739168  |           | Homo sapiens cDNA FLJ13458 fis, clone PL | 1.32 | 3.10 |
|    | 449444 | AW818436  |           | solute carrier family 16 (monocarboxylic | 1.30 | 3.30 |
| 65 | 404700 |           |           | Target Exon                              | 1.30 | 3.14 |
|    | 403043 |           |           | Target Exon                              | 1.30 | 4.22 |
|    | 409858 | NM_006586 | Hs.56828  | trinucleotide repeat containing 5        | 1.29 | 3.09 |
|    | 424579 | AL117477  | Hs.119960 | DKFZP727G051 protein                     | 1.27 | 3.13 |
|    | 406908 | Z25437    |           | gb:H.sapiens protein-tyrosine kinase gen | 1.27 | 3.66 |
| 70 | 432665 | AW603880  |           | ATPase, H transporting, lysosomal (vacuo | 1.26 | 3.09 |
|    | 423130 | AW897586  | Hs.21213  | ESTs                                     | 1.24 | 3.34 |
|    | 453220 | AB033089  | Hs.32452  | Homo sapiens mRNA for KIAA1263 protein,  | 1.24 | 3.15 |
|    | 442680 | BE270707  | Hs.8583   | similar to APOBEC1                       | 1.22 | 3.94 |
|    | 422319 | AW403342  | Hs.115232 | splicing factor 3a, subunit 2, 66kD      | 1.21 | 3.36 |
| 75 | 402408 |           |           | NM_030920::Homo sapiens hypothetical pro | 1.04 | 3.37 |
|    | 424905 | NM_002497 | Hs.153704 | NIMA (never in mitosis gene a)-related k | 1.00 | 3.02 |

TABLE 51B:

Pkey: Unique Eos probeset identifier number  
CAT number: Gene cluster number  
Accession: Genbank accession numbers

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Pkey CAT Number Accession

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|        |           |  |
|--------|-----------|--|
| 430540 | 713_2     | BC017171 BC012195 NM_007126 AF100752 AL137377 Z70768 BM474865 BG754806 AU124376 BG757203 BG764420 BG775028 BG824418 BM045810 AU120387 BG770238 BG686740 BG913323 BI759980 BG395998 BM048875 BE881070 BE313689 BE879144 BM309834 AW245847 AI770171 BF196861 BE856897 AA663876 AI375927 AA648810 AA948193 AA490916 AI459893 AI458188 AI240408 AI191843 AI131029 AW768399 AI365196 AW337984 AW026150 BE466591 BE674599 AI818438 AA772197 AI651927 AW151143 BI198825 BG819083 BM458764 BE903567 BE732715 BM043200 BE900263 BE900706 BE731097 BE390023 BG875384 BF996406 BF988930 BM475542 AW246215 BE501897 BE903610 BE561530 BE560537 BE903782 BE732947 BI227204 BG761305 BE262642 BE391848 BE382475 BG008258 BI547991 BI459099 BE391391 BE259420 BE298109 AW245422 AI423847 AI914618 H80534 BE301004 AL531791 AI435581 BF793112 AL577303 AA373265 BE746965 BF743630 BE879296 AI359493 BM018598 AI689260 AW072450 F20201 AW151405 AW517572 AA773468 BG259694 BE391163 BG621529 AI421728 BG767231 BM462953 BG340524 W52648 AA113434 BE785431 BI041981 BG832385 BG253168 BG759470 BF369329 BF981332 BE259418 BE785738 BI091658 N72512 W58732 W85690 BG958989 AI205206 H19721 W17051 W77958 BI262010 AA844319 W74143 W72214 N85194 BE734033 BG164099 AA931069 F13645 R41394 AK025758 BG180977 BE349455 AA812018 AA740241 AI027722 AI150356 AA886395 AW977627 BE220225 AA884082 AW518114 AI243844 AA809493 AA481029 AA825718 AI347866 AI431670 AA814436 AI251109 R07704 AA765606 AA724593 AI918399 AI537550 AA491103 AW008188 R07703 AA989120 AA746235 AW028983 AA789102 AU185751 AW971465 AA489681 AW971893 AW612086 BE077936 BI860809 BE002760 BG746251 BE962912 BM454584 AL134894 BF104082 H80591 AK055109 BC019085 AA187684 BG656226 BM023227 AI932311 AW264381 AA398371 BM021483 AI432433 AI375777 AI129580 AW262782 AA134107 BM023515 AA973704 AI859222 AI348454 R69725 AA975268 BM021207 AL080074 AA129218 AW207842 N90581 AA771919 AI092259 AI028416 AI074114 BG656536 BE051677 AW193419 AA917040 W90430 AI342984 AI378957 AL036486 AW020068 BI491093 BF476021 R41226 R69631 F04125 C02343 AA115589 R56480 AI400988 R54266 R31422 AI801777 BE677762 AW008210 AW009441 BE350594 BE207949 AI091475 AI802774 AI827533 AI075363 AI659979 AA687855 AI078125 AI090285 AA670058 AA602411 AA683472 AI436058 AA612826 AI038932 BG057726 AI167355 BF449023 AI289476 AW074381 BF972912 AI991780 AA889119 AI537472 Z39730 AI868953 AI192337 BE812978 BE812939 AA115248 H99006 AI915784 F08973 T16748 D20468 AA609899 BF081234 AA115336 BE812876 BE812972 BE812982 BE813006 BE813019 R43883 BE812981 |
| 430015 | 713_2     | BC017171 BC012195 NM_007126 AF100752 AL137377 Z70768 BM474865 BG754806 AU124376 BG757203 BG764420 BG775028 BG824418 BM045810 AU120387 BG770238 BG686740 BG913323 BI759980 BG395998 BM048875 BE881070 BE313689 BE879144 BM309834 AW245847 AI770171 BF196861 BE856897 AA663876 AI375927 AA648810 AA948193 AA490916 AI459893 AI458188 AI240408 AI191843 AI131029 AW768399 AI365196 AW337984 AW026150 BE466591 BE674599 AI818438 AA772197 AI651927 AW151143 BI198825 BG819083 BM458764 BE903567 BE732715 BM043200 BE900263 BE900706 BE731097 BE390023 BG875384 BF996406 BF988930 BM475542 AW246215 BE501897 BE903610 BE561530 BE560537 BE903782 BE732947 BI227204 BG761305 BE262642 BE391848 BE382475 BG008258 BI547991 BI459099 BE391391 BE259420 BE298109 AW245422 AI423847 AI914618 H80534 BE301004 AL531791 AI435581 BF793112 AL577303 AA373265 BE746965 BF743630 BE879296 AI359493 BM018598 AI689260 AW072450 F20201 AW151405 AW517572 AA773468 BG259694 BE391163 BG621529 AI421728 BG767231 BM462953 BG340524 W52648 AA113434 BE785431 BI041981 BG832385 BG253168 BG759470 BF369329 BF981332 BE259418 BE785738 BI091658 N72512 W58732 W85690 BG958989 AI205206 H19721 W17051 W77958 BI262010 AA844319 W74143 W72214 N85194 BE734033 BG164099 AA931069 F13645 R41394 AK025758 BG180977 BE349455 AA812018 AA740241 AI027722 AI150356 AA886395 AW977627 BE220225 AA884082 AW518114 AI243844 AA809493 AA481029 AA825718 AI347866 AI431670 AA814436 AI251109 R07704 AA765606 AA724593 AI918399 AI537550 AA491103 AW008188 R07703 AA989120 AA746235 AW028983 AA789102 AU185751 AW971465 AA489681 AW971893 AW612086 BE077936 BI860809 BE002760 BG746251 BE962912 BM454584 AL134894 BF104082 H80591  |
| 420218 | 191547_1  | AW958037 R42557 AI337047 AA948360 AI638005 AA459950 AI624915 AI638047 AI467856 AI521826 AA860305 AI932315 AW003092 AW271756 AW779380 AA609879 AI634791 AI493770 AI565211 Z41145 AI627952 AA303734 BE349457 AW196765 AA256527 BE089727  |
| 410600 | 497855_1  | BF347859 AW499616 AA191322 AW499617 AL601010 AW575742 AA729043 BE463447 AO086179 BE549623 AI335824 AW408712 BM149172   |
| 400282 | 7778_2    | BC014433 Z49835 D16234 U42068 D83485 NM_005313 AI535156 AL533202 AL533596 AL531770 AL542767 AL551060 AL548510 AL542531 AL548618 BE799237 AL547374 AL560312 AL543505 AL540727 AL541255 BG765697 AU126498 BI829574 BG576125 AL519304 AL548821 AL542983 BI596431 BI829284 AL045490 BE407984 BI668702 BI713725 BE547233 BM312673 BG822625 AW239512 BM312685 BE296719 BM312059 BI712618 BM309832 BI712859 BE513604 BM310042 BI712817 BG470156 AA305870 AW408391 BE298661 BG826781 BF726052 BM315135 BG472541 BF724689 AA353713 BF477104 BI838605 BG170854 BE612762 BF917301 BF332721 BI049186 BE715514 AW392181 BE768470 AI912855 AW991405 BG739837 AA287804 AW801855 AL568814 AW384099 AW384058 AW574178 AI001019 R33917 BE814037 AI551164   |
| 417282 | 2142_2    | AK025474 U11293 AF141304 BM424202 AL539879 AI554793 AL543707 AL549509 BI753328 BG756797 BI856494 BE901116 AL556989 AU133347 BI838505 AW949559 BM012604 BG773980 BG661309 BI260149 BF436754 BG983060 BF822225 BI059728 BF917866 BF917609 BF914374 D31003 AA234248 AI420466 BM083921 BE856788 BE669957 BF430992 AW614978 AW205958 BF110763 BF222758 AA195232 AI341353 AI698676 AI093230 AI123522 AI656594 AI208758 AA975916 AI089224 AI264922 AA256604 AA659637 BE218707 AA195203 AW999239 AW39706 N31717 AW205941 R95955 N39147 BM015411 AL576975 BF689524 AL563130 BI858155 AA417889 AL513995 AI568815 AU160693 AA836028 H84388 AL517078 AL546480 AL530507 AL561042 AA024435 W47314 AI680513 AA456116 BF836679 AW975173 H24039 AW105059 BE548113 AW370257 BM011139 AW675130 BE276045 BF933396 AL517903 AA886367 BI030596 BG477193 BF973867 AI362520 D25917 AI670784 AI742347 AW269789 AI207000 AW610541 AW793036 AW793035 AW610540 AW362220 AW362166 AW362214 AW362225 AW362228 AL119827   |
| 400222 | 9287_3    | NM_002082 L16862 BG828886 BE795217 BE904064 BE294526 BE297283 BE394617 BE935127 BE935106 F12351 BG823182 H16710  |
| 409760 | 865166_1  | AA302840 T93016 T92950 AU184997 AA077551   |
| 438619 | 35124_1   | NM_016675 AB032773 AI765521 BF593742 AI497757 AI761233 AW467938 BF000670 AI818496 N24761 AL043306 BF476138 BF593836 AA132787 AI147248 AI086795 AA151317 T95298 AW083548 AA058371 N27951 AI769860 AI784548 AW205906 AI800679 AI041733 AI459902 BE327641 AI855829 AI254736 AI302433 AI744176 AI241825 AA027842 AL524933 AL749832 BF947764 BF340737 BF948700 BG996395 N53455 N21027 AI127616 N35901 AA682443 AA678249 AA719371 AA132582 T15981 H99958 N40717 AW959402 AI267251 BF909329 AI142035 T95379 H29420 R59632 H17318 H17331 H29327 R40829 R43395 R59573 AI749561 R56599 H16755 AI694500 AA027907 BI757837 AW439843 AW172765 BE018717 BE464329 BE302285 H96902 BF477981 BE674508 BE670755 H95980 T15387 M80359 NM_002376 AU132239 AU120606 AU124963 AI065116 BE900808 BF968374 AI806648 BG774205 AW250728 BE265845 AA290719 AU125196 BG428863 AA333580 AA604551 W73300 AI932646 AA082201 AA627618 BF038887 BF337051 BI021159 AW057581 AI983156 AI268004 T71931 T90093 AW194009 H93969 AI742843 AI935080 BE041751 H93970 AW979739 W05032 T87824 T82912 AW129639 AI221821 AI911810 AA703093 AA160135 AW779124 AA102559 AA969546 D29560 BI915937 AA707716 BI085679 AA700887 AA081085 H80564 T99937 T70802   |
| 416730 | 1988296_1 | BM006551 AA367152 AW953705 AI631833 AW237429 AW027804 AA729038 BE503409 AI521935 BF739953 AA702982 AA557633 AA780065   |
| 425996 | 138046_1  | AI218139 AW194264 D20120 AI082715 AI969980 BE857686 BE326711 AW953706 AI393749 AI383821 W67199 AI431759 AI796526 AI521794 AI796380 AW117545 AI749657 AI537634 N50122   |
| 430441 | 1438_6    | BG108218 BE560548 AW380115 BE269629 AI911518 AW380113 AA902964 AA455001 AI276529 AI685597 AA970496 D61084 AW380068 AW380080 R00283 C15236 AW327776 D80759  |
| 437158 | 59575_1   | AL050068 AA160485 AW173544 AW296506 AW439860 AI521563 AI702529 AI393606 AW138323 AA570109 H19504 BM021968 BF063327 BF593552 AA630766 AI597717 AI807128 AA523012 AI356250 AW451857 AA974203 AI762577 BF512552 AW007307 BE675286 AW450602 AA962057 AW516069 AI582546 BF221924 BF222543 AI801808 AW468599 AW000736 AI866625 AW235356 BM021837 AA911956 AI680606 W86516 T03370   |
| 412315 | 1163860_1 | AW611634 H41653 AI468349 H19588 AW090198 AW043993 R39847 AW936678 AW936821 AW936683 AW936822 AW936781 AW936811 AW936811 AW936653 AW936823 AW936685 AW936815 AW936637 AW936812 AW936730 AW936762 AW936682 AW936732  |
| 400235 | 3084_1    | BC001179 NM_005336 MG4098 BC014305 BI827845 BI918183 AU124191 AU125604 AU140930 AL043307 BG763670 BG824279 AU125959 BI518466 BE271867 BM264138 BE314823 BM090633 BE273657 BG419830 BM048338 AU134368 BE163486 BE163483 BG421980 BG768130 AW500482 AI910107 AW688323 BF083170 AW450290 BM466817 BG255224 BE394282 AU140278 BE887464 AL042675 BI195986 BE883385 BE544751 BE270148 BM011334 AI093482 AA029803 AI610705 BE386809 F06628 AW408605 BF814085 BC007961 BM451548 BG768053 BM452948 AU140330 BG489566 BI870474 BM014013 AU131264 BG679824 BI225752 BI457400 BE410173 BM044254 BG763690 BE251495 BG179862 BE513489  |



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BM005937 AI064815 BF569858 BI712614 BG655891 BG424940 BE175180 BM313160 BG471936 BM091124 BF885884 BF870522 BE004490  
 BE712976 BE712862 AA041033 BF569477 BE712936 BF353839 BE713042 AA316561 BE712974 BE712977 BE712938 BE712937 BE712867  
 BE713043 BE713023 N42463 BE712901 BE713041 BE712904 BE712895 BE713012 BE713049 BE713025 BE712998 BE712987 BE712986  
 BE712984 BE712982 BE712975 BE712970 BE712953 BE712929 BE712922 BE712875 BE712866 BE712861 BE712860 BE712854 BE712853  
 BE712902 BE712897 BE712912 BG984910 BE712903 BE764759 BE715723 BE715745 BE712915 AA441839 BE713040 BE715755 BF872528  
 BF060840 BG395104 BG744878 AU124081 AI889823 AI801072 AI633102 AI678870 AI493608 AW194294 AI354559 AI686736 AW152477 AI419496  
 AI720319 AI866190 AA047013 AA039625 BE045622 AA369065 AA025686 AI570198 AA706304 AW439251 H64553 AW168006 AI983753 AW081999  
 AW082909 AI951490 BF886341 AW591246 AI190143 AI151074 AI499541 AI050934 AA402167 AA382049 T16207 T03299 AI932691 AW571663  
 BC479797 BE408436 BI460153 BG386046 BE616601 AW151629 BG236164 BF852743 BF852046 T57801 W37981 AA482668 H43740 W58142  
 W25087 BM459852 AU125403 BG767992 BE258516 AI114509 BE394494 BE386905 AA450315 BG750593 AA557855 BG766487 BG766998  
 BF948864 BE279327 BE870900 AA577098 BF365851 AA745058 N29867 AI625038 AA641801 AA846174 H26395 AA025568 BF699282 R67845  
 R72666 H39554 T78959 W01317 H45860 W80837 N53985 BG757202 BE838055 BE072895 BE072658 BE867012 BM042833 AA083591 BG745462  
 AW374086 BG931326 BE715757 BG767243 BG763272 AA113402 AI024044 BF818501 BE081938 BF353818 AA746336 BM019086 BE712894 H16977  
 H45012 R10793 BE708619 BF570432 AA593938 AA064637 T28082 AA852845 T78907 AA346590 F00017 BE966368 N58726 AA732431 T54379  
 W80749 BF238314 BE279768 AA325106 T19241 BE409939 BF852119 W23803 T54011 AW392638 BI465185 AW516784 AA211335 BI159846  
 AA064680 N80615 W49676 BF851406 R88120 AA434028 H44546 T61029 N44804 AA114948 H26960 BI261965 AA582599 BG469385 BF818172  
 BF923672 BI024270 AW362633 BE883122 BM470779 BE935760 AW856056 AW856103 BE828607 AW381799 AI121058 BE828618 BE769545  
 AI102142 BG749978 BI770417 BI862544 AI110687 AF063562 BE740347 BE874864 AI305113 BE513675 BE091369 BI046660 BE091453 BI046548  
 AI673786 BF868704 AI025179 BF356840 BF866357 BF886313 BG951884 AI347880 AW627563 BF932536 AW820377 BF739372 BF831620 BE068264  
 BE613627 AA641745 W01130 T28252  
 AK055915 BE867252 AI523348 AA765350 BF446858 Z43675 R19529 AL133837 BG389444 AW382942 BE702956 AA081961 BE835247 BE835308  
 BE835295 AA376302 BE645790 AA375690 AA376592 AW954423 N85732 AA249770 AI754416 AA213816 BF592044 AA811729 AW514842 AI633486  
 AI096810 AW183016 AI635738 N27524 BE645916 AI247842 AW991230 AI754277 H16814 AI766892 BF108422 AI800361 T95129 F11313 R97946  
 R93989 AA375242 BF109388 AI860939 AI880060 AW953899 BF971486 AI972337 AW953841 AA372437 AI216746 H11384 R38484 AA249043  
 AA249732  
 BE145823 BE145830 BE145884 BE145814 BE145905 BE145833 BE145834 BE145883 BE145889  
 BM453041 AA760783 BE218582 AI340046 AW166131 BF155854 AI630296 AA461307 AI090861 AW023059 AA155797 AA115486 AI597396  
 AW889004 AW937420 AA137082 AA013374 BG619478 BG401839  
 AA430373 AA968771  
 BG775668 BG680336 AW991605 AA455904 AW265494 AW265432 BF911380 AA456370 BF911379 AA195677 BF914311 BF913866 BG775059  
 BG951874 AI572169  
 BF036043 AW190446 BG194731 AW662036 AI445021 BE937550 AW818972 AW393132 AA834685 BF112058 AV721682 H16423 AI270167 AI857345  
 AA937302 AW818444 BE929780 BG498678 BF155010 BI598271 BI599811 BE161728 AW578737 AW753711 AW379707 AW381918 BG506608  
 AW028637 AW994240 BF887392 BF790073 AW381624 AV727105 BF439618 AA443174 AI018009 N42850 AW573242 AI417258 AA463483 AI676131  
 AI167170 AA836627 AA443828 AW592922 AA235129 AA730278 AW439062 AW474332 BI043239 AW474342 BG708553 AW362423 BF090028  
 BE827256 R16550 R39478 R39479 R94368 BG540916 BM314745 AA251087 D54231 D55274 BF085805 D31589 AW966405 AW994425 D81879  
 BE093545 AW901107 AA383529 BI021552 R56420 N39976 AA573281 H82595 AA234955 BE093539 AW367006 BF358697 BF366318 AA663856  
 BE702099 BF035969 AI267384 AI267232 BE348320 AA621574 AA861212 BF083343 BF083341 AV745131 D53074 AW954476 AW954472 AA376836  
 AV724531 D53063 C14928 AA093287 AA062638 BG483558 BE940050 AA765954 T70171 BE938775 BE940057 D53502 AW373300 AL118798  
 BM128728 AA193411 AW444709 AW952455 AI887612 BF431948 BI496876 AI264159 BM128481 AI624657 AI689301 AI969467 AA861685 AA251595  
 AA625761 AA872090 AI826790 AA328366 BE827416 R75951 D56918 R68122 BE827384 AL118797 AI184164 AA164411 BI495332 BE858113  
 AI863860 H00660 T69849 AW780389 C14667 BE934995 BI018652 R92801 AA164410 H00752 AW373305 AW373299 AW373302  
 BF971018 BE513812 AA133359 AW581719 BF434402 AL600619 BG699731 BI551395 AW027136 AW055130 BF939512 AI076048 H18584 AW161061  
 AA864334 AI816101 BE049456 AW044012 AA954079 AI274682 AI370526 AW131990 AA853195 AA853191 BG118295 AA761620 BG705371  
 BF355591 BF336596 AA360497 H28072 BG198352 AW364709 H40926 H44214 AA836538 BI059563  
 AA609784 R97304  
 AL532360 BE794750 AA582906 AI015067 AW271034 BG271636 AW075177 AW071374 AI345565 AI307208 BE138953 BE049086 AI334881  
 AW075006 AW075181 AA464019 AW302733 AW075100 AW073433 AI802854 AI334909 AI802853 AI345036 AI348921 AI340734 AI307478 AI251289  
 AW303237 AW072520 AI312145 AW073656 AW072513 AW071289 AI307559 AA876186 T29587 AI307493 AI255068 AI252868 AI252839 AW074809  
 AI252926 AI252160 AI251662 AI251262 AI610913 AI270787 AI270156 AI252075 AW073469 AW072901 AW072496 AW071420 AI305762 AI254764  
 AI802837 AI251264 AW073049 AW071311 AI340643 BE138965 BE138502 AW073456 AI334733 AI054335 BE139260 AI054302 AI054060 AI054057  
 AI053722 AI289711 BE139228 AW470478 AW271039 AW302085 BE041872 AI254494 AI271496 AI252427 BF718773 BF718645 AW074866 BE857822  
 BC007350 BG766159 BG769338 BG761999 BG744385 BG770572 AW370610 AW370581 AA978353 AW327973 AW402425 AI889380 AA868504  
 AW612968 AA630644 AI751211 N26980 AI394506 AA747849 BF154926 BF477185 AA649647 R39135 AI750216 T35362 W36278 AW079375  
 AW612240 AA505495 AA515380 BG760793 AW370651 BG766029 AW370595 BF229885 BG762422 BG764907 T50662 AA025671 AW815715  
 AV703420 H65047 AA485582 R56186 H90385 R55913 BI261497 BI018403 BF376945 T75578 BF933325 BF932853 BG502266 AW868934 AV683504  
 BI018121 N41953 BF933343 BF932871 H08334 R14012 BF897622 T50816 BG698803 BF340083 Z20199  
 AK000695 AK000489 BC001688 BG235988 AW006329 AI887544 AI207230 AI148213 AI304333 AI634653 AW662636 AI281247 AA946921 AA424487  
 BE272330 AI830588 AW8159183 AA977141 BG231801 AA631793 AA975194 BF817537 AA477798 BI906631 AW083424 AA625199 NM\_057668  
 AK000334 BF984048 AW815634 AL573992 AA430612 AW828390 AA464447 AW340827 AA424290 AI927759 BG951502 AW881353 BI765535  
 AA971409  
 AK056315 AI015524 AA724079 BI713619 AI377728 AW293682 AI528140 AI092404 AI085630 AA731340 BM469629 AW968804 AA425658 AA769094  
 BF445026 AW118719 AI332765 AW500888 AW576556 AI859571 AW499664 AW614573 AW629495 AW505314 W74704 AI356361 AI923640  
 AW070509 AI521500 AL042095 AA609309 AA761319 AI381489 H45700 AA761333 AW265424 AA909524 AA635311 AA649040 AI392620 Z40708  
 AI985564 AW263513 AA913892 AI693486 AW263502 AI806164 AW291137 BI061872 BI059498 AA134476 AW084888 AA036957 AW370823 T55263  
 BI002756 AA489664 BF827261 W74741 BF963166  
 U59185 NM\_004696 AV734324 AI245349 AA369517 H88760 D79128 AA970406 H01059 H88761 H03446 BG620383 AU135008 AU136895 AU158158  
 AU155762 R73608 R65751 R23755 N74630 AW078687 BE439761 BE786351 R68994 BE785867 AW297502 AW297553 BG431545 AW814843  
 BF382644 BG429539 BE929862 BF811258  
 BG165971 BE143233 AL577712 AI400326 AA769318 AA427866 AW088714 AI150755 AI924874 AI186243 AA804195 AA768972 AW574769  
 AW341643 AW204520 AA235326 AI005076 BE826687 AW004816 AW007235 BE826639 BE826634 BF222941 BE826631 BE826643 AA292639  
 AW514133 AI690331 AI673409 AA627727 AI923685 AA931499 AI249783 AI810663 AA548622 AA702095 AA832395 BI259508 AA262993 AW075840  
 AA810885

TABLE 51C:

Pkey: Unique number corresponding to an Eos probeset  
 Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (Gi) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.  
 Strand: Indicates DNA strand from which exons were predicted.  
 Nt\_position: Indicates nucleotide positions of predicted exons.

| Pkey   | Ref     | Strand | Nt_position                              |
|--------|---------|--------|--|
| 402075 | 8117407 | Plus   | 121907-122035,122804-122921,124019-12416 |

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|    |        |         |       |                             |
|----|--------|---------|-------|-----------------------------|
| 5  | 400860 | 9757499 | Minus | 151830-152104,152649-152744 |
|    | 402609 | 9926446 | Minus | 113464-113633,114264-114654 |
|    | 400750 | 8119067 | Plus  | 198991-199168,199316-199548 |
|    | 402994 | 2996643 | Minus | 4727-4969                   |
|    | 403817 | 8962065 | Plus  | 110297-111052               |
|    | 402829 | 8918414 | Plus  | 101532-101852,102006-102263 |
|    | 403532 | 8076842 | Minus | 81750-81901                 |
|    | 405451 | 7622517 | Minus | 145949-146227               |
| 10 | 405785 | 9581533 | Minus | 98702-98925                 |
|    | 405506 | 6465489 | Plus  | 80014-80401,80593-81125     |
|    | 405486 | 6651379 | Plus  | 179441-179598               |
|    | 406382 | 9256148 | Plus  | 122336-122851               |
|    | 401454 | 9186923 | Minus | 114659-114832               |
| 15 | 405885 | 7677703 | Minus | 42574-42998                 |
|    | 403969 | 8569909 | Plus  | 31237-31375,32405-32506     |
|    | 400533 | 6981826 | Minus | 277132-277595               |
|    | 400991 | 8096825 | Plus  | 159197-159320               |
|    | 401591 | 9966977 | Minus | 55410-55835                 |
| 20 | 404067 | 3282162 | Plus  | 1415-2071                   |
|    | 404140 | 9843520 | Plus  | 37751-38147                 |
|    | 401914 | 9369520 | Plus  | 62537-62945,63155-63308     |
|    | 404700 | 9800123 | Minus | 159521-160203               |
|    | 403043 | 7768753 | Minus | 314423-316252               |
| 25 | 402408 | 9796239 | Minus | 110326-110491               |

TABLE 52A: ABOUT 204 GENES UPREGULATED IN PRIMARY MELANOMAS RELATIVE TO MELANOMA METASTASES

Table 52A lists about 204 genes upregulated in primary melanomas relative to melanoma metastases. Genes were selected from 59680 probesets on the Eos/Affymetrix Hu03 Genechip array. Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

Pkey: Unique Eos probeset identifier number

ExAccn: Exemplar Accession number, Genbank accession number

UnigenelD: Unigene number

Unigene Title: Unigene gene title

R1: 90th percentile of primary melanoma AIs divided by the 90th percentile of melanoma metastasis AIs

R2: 90th percentile of primary melanoma AIs divided by the 90th percentile of melanoma metastasis AIs, where the 15th percentile of normal tissue AIs was subtracted from both the numerator and denominator

|    | Pkey   | ExAccn    | UnigenelD | Unigene Title                            | R1    | R2    |
|----|--------|-----------|-----------|--|-------|-------|
| 40 | 421948 | L42583    | Hs.334309 | keratin 6A                               | 21.90 | 16.66 |
|    | 422168 | AA586894  | Hs.112408 | S100 calcium-binding protein A7 (psorias | 21.36 | 43.65 |
|    | 401781 |           |           | Target Exon                              | 18.70 | 18.58 |
|    | 401780 |           |           | NM_005557:Homo sapiens keratin 16 (foca  | 15.34 | 16.00 |
| 45 | 431360 | NM_000427 | Hs.251680 | loricrin                                 | 12.34 | 9.86  |
|    | 409632 | W74001    | Hs.55279  | serine (or cysteine) proteinase inhibito | 11.24 | 8.73  |
|    | 412636 | NM_004415 |           | desmoplakin (DPI, DPII)                  | 11.20 | 6.62  |
|    | 417366 | BE185289  | Hs.1076   | small proline-rich protein 1B (comifin)  | 10.46 | 12.75 |
|    | 409601 | AF237621  | Hs.80828  | keratin 1 (epidermolytic hyperkeratosis) | 10.41 | 25.49 |
| 50 | 420859 | AW468397  | Hs.100000 | S100 calcium-binding protein A8 (calgran | 9.20  | 8.63  |
|    | 420783 | AI659838  | Hs.99923  | lectin, galactoside-binding, soluble, 7  | 8.11  | 11.14 |
|    | 422511 | AU076442  | Hs.117938 | collagen, type XVII, alpha 1             | 7.90  | 8.92  |
|    | 422158 | L10343    | Hs.112341 | protease inhibitor 3, skin-derived (SKAL | 7.14  | 22.14 |
|    | 427666 | AI791495  | Hs.180142 | calmodulin-like skin protein (CLSP)      | 7.03  | 8.90  |
| 55 | 430686 | NM_001942 | Hs.2633   | desmoglein 1                             | 6.88  | 5.39  |
|    | 431369 | BE184455  | Hs.251754 | secretory leukocyte protease inhibitor ( | 6.60  | 12.79 |
|    | 456525 | AW468397  | Hs.100000 | S100 calcium-binding protein A8 (calgran | 6.44  | 6.19  |
|    | 437191 | NM_006846 | Hs.331555 | serine protease inhibitor, Kazal type, 5 | 6.34  | 7.77  |
|    | 422166 | W72424    | Hs.112405 | S100 calcium-binding protein A9 (calgran | 6.15  | 8.91  |
| 60 | 418067 | AI127958  | Hs.83393  | cystatin E/M                             | 6.08  | 9.24  |
|    | 408536 | AW381532  | Hs.135188 | ESTs                                     | 6.04  | 17.40 |
|    | 402075 |           |           | ENSP00000251056*:Plasma membrane calcium | 5.96  | 8.41  |
|    | 413554 | AA319146  | Hs.75426  | secretogranin II (chromogranin C)        | 5.46  | 3.32  |
|    | 410001 | AB041036  | Hs.57771  | kalikrein 11                             | 5.38  | 5.36  |
| 65 | 421100 | AW351839  | Hs.124660 | Homo sapiens cDNA: FLJ21763 fis, clone C | 5.32  | 3.84  |
|    | 407788 | BE514982  | Hs.38991  | S100 calcium-binding protein A2          | 5.19  | 5.30  |
|    | 419329 | AY007220  | Hs.288998 | S100-type calcium binding protein A14    | 5.03  | 7.94  |
|    | 429504 | X99133    | Hs.204238 | lipocalin 2 (oncogene 24p3) (NGAL)       | 4.86  | 5.22  |
|    | 421773 | W69233    | Hs.112457 | ESTs                                     | 4.82  | 12.41 |
| 70 | 442577 | AA292998  | Hs.163900 | ESTs                                     | 4.82  | 4.40  |
|    | 401760 |           |           | Target Exon                              | 4.60  | 11.03 |
|    | 408522 | AI541214  | Hs.46320  | Small proline-rich protein SPRK (human,  | 4.50  | 11.35 |
|    | 417515 | L24203    | Hs.82237  | ataxia-telangiectasia group D-associated | 4.47  | 12.43 |
|    | 431211 | M86849    | Hs.323733 | gap junction protein, beta 2, 26kD (conn | 4.45  | 2.99  |
| 75 | 446989 | AK001898  | Hs.16740  | hypothetical protein FLJ11036            | 4.39  | 4.23  |
|    | 423017 | AW178761  | Hs.227948 | serine (or cysteine) proteinase inhibito | 4.38  | 4.55  |
|    | 418663 | AK001100  | Hs.41690  | desmocollin 3                            | 4.36  | 5.16  |
|    | 424520 | AA101043  | Hs.151254 | kalikrein 7 (chymotryptic, stratum com   | 4.29  | 5.19  |
|    | 401747 |           |           | Homo sapiens keratin 17 (KRT17)          | 4.28  | 5.41  |
| 80 | 414807 | AI738616  | Hs.77348  | hydroxyprostaglandin dehydrogenase 15-(N | 4.24  | 2.30  |
|    | 411274 | NM_002776 | Hs.69423  | kalikrein 10                             | 4.22  | 4.82  |
|    | 439496 | BE616501  | Hs.32343  | Homo sapiens, Similar to RIKEN cDNA 1110 | 4.21  | 8.26  |
|    | 420039 | NM_004605 | Hs.94581  | sulfotransferase family, cytosolic, 2B,  | 4.18  | 4.73  |
|    | 429538 | BE182592  | Hs.139322 | small proline-rich protein 2A            | 4.16  | 7.30  |

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|    |        |           |           |  |      |       |
|----|--------|-----------|-----------|--|------|-------|
|    | 418686 | Z36830    | Hs.87268  | annexin A8                               | 4.12 | 4.09  |
|    | 407366 | AF026942  | Hs.17518  | gb:Homo sapiens cig33 mRNA, partial sequ | 4.08 | 2.13  |
|    | 421733 | AL119671  | Hs.1420   | fibroblast growth factor receptor 3 (ach | 4.08 | 4.38  |
| 5  | 416091 | AF295370  | Hs.283082 | defensin, beta 3                         | 4.05 | 5.38  |
|    | 442757 | AI739528  | Hs.28345  | ESTs                                     | 3.94 | 4.28  |
|    | 427318 | AF186081  | Hs.175783 | zinc transporter                         | 3.92 | 3.07  |
|    | 453309 | AI791809  | Hs.32949  | defensin, beta 1                         | 3.90 | 4.30  |
|    | 422192 | AA305159  | Hs.113019 | fts485                                   | 3.88 | 2.81  |
| 10 | 424012 | AW368377  | Hs.137569 | tumor protein 63 kDa with strong homolog | 3.86 | 5.03  |
|    | 429365 | AA451798  | Hs.99249  | ESTs                                     | 3.76 | 4.05  |
|    | 423634 | AW959908  | Hs.1690   | heparin-binding growth factor binding pr | 3.72 | 6.35  |
|    | 425580 | L11144    | Hs.1907   | galanin                                  | 3.68 | 3.65  |
|    | 448966 | AW372914  | Hs.86149  | phosphoinositol 3-phosphate-binding prot | 3.68 | 2.75  |
|    | 444946 | AW139205  | Hs.156457 | hypothetical protein FLJ22408            | 3.59 | 5.72  |
| 15 | 408591 | AF015224  | Hs.46452  | mammaglobin 1                            | 3.58 | 4.73  |
|    | 431009 | BE149762  | Hs.48956  | gap junction protein, beta 6 (connexin 3 | 3.58 | 2.62  |
|    | 438501 | Z44110    | Hs.86149  | phosphoinositol 3-phosphate-binding prot | 3.56 | 2.61  |
|    | 421574 | AJ000152  | Hs.105924 | defensin, beta 2                         | 3.56 | 4.04  |
|    | 402294 |           |           | Target Exon                              | 3.48 | 4.38  |
| 20 | 428666 | AL080190  | Hs.189242 | Homo sapiens mRNA; cDNA DKFZp434A202 (fr | 3.44 | 2.95  |
|    | 401785 |           |           | NM_002275*:Homo sapiens keratin 15 (KRT1 | 3.42 | 4.92  |
|    | 418007 | M13509    | Hs.83169  | matrix metalloproteinase 1 (interstitial | 3.36 | 4.24  |
|    | 418394 | AF132818  | Hs.84728  | Kruppel-like factor 5 (intestinal)       | 3.31 | 5.42  |
|    | 452392 | L20815    | Hs.507    | comedosmosin                             | 3.30 | 8.56  |
| 25 | 445183 | AB007877  | Hs.12385  | KIAA0417 gene product                    | 3.30 | 2.35  |
|    | 433124 | U51712    | Hs.13775  | hypothetical protein SMAP31              | 3.26 | 2.15  |
|    | 419098 | AA234041  | Hs.87271  | ESTs                                     | 3.25 | 4.34  |
|    | 421978 | AJ243662  | Hs.110196 | NICE-1 protein                           | 3.17 | 5.86  |
|    | 445493 | AI915771  |           | metallothionein 1E (functional)          | 3.16 | 2.98  |
| 30 | 448111 | AA053486  | Hs.20315  | Interferon-induced protein with tetratri | 3.14 | 2.07  |
|    | 445745 | AB007924  | Hs.13245  | KIAA0455 gene product                    | 3.10 | 2.39  |
|    | 410268 | AA316181  | Hs.61635  | six transmembrane epithelial antigen of  | 3.06 | 2.71  |
|    | 407839 | AA045144  | Hs.161566 | ESTs                                     | 3.06 | 3.54  |
| 35 | 432374 | W68815    | Hs.301885 | Homo sapiens cDNA FLJ11346 fis, clone PL | 3.04 | 4.64  |
|    | 439706 | AW872527  | Hs.59761  | ESTs, Weakly similar to DAP1_HUMAN DEATH | 3.04 | 2.78  |
|    | 452240 | AI591147  | Hs.61232  | ESTs                                     | 3.00 | 4.79  |
|    | 409190 | AU076536  | Hs.50984  | sarcoma amplified sequence               | 2.96 | 3.05  |
|    | 408015 | AW136771  | Hs.244349 | epidermal differentiation complex protei | 2.94 | 10.53 |
| 40 | 420798 | W93774    | Hs.99935  | keratin 10 (epidermolytic hyperkeratosis | 2.91 | 3.01  |
|    | 406964 | M21305    |           | FGENES predicted novel secreted protein  | 2.90 | 5.34  |
|    | 451541 | BE279383  | Hs.26557  | plakophilin 3                            | 2.89 | 6.64  |
|    | 454027 | R40192    | Hs.21527  | Human DNA sequence from clone GS1-115M3  | 2.86 | 2.81  |
|    | 414737 | AI160386  | Hs.125087 | ESTs                                     | 2.84 | 1.76  |
| 45 | 428330 | L22524    | Hs.2256   | matrix metalloproteinase 7 (matrilysin,  | 2.82 | 1.83  |
|    | 405542 |           |           | Target Exon                              | 2.80 | 2.77  |
|    | 442503 | AF147078  | Hs.150853 | p53-responsive gene 5                    | 2.78 | 5.17  |
|    | 402970 |           |           | C20000886*:gi 9280563 gb AAF86472.1  (AF | 2.78 | 3.37  |
|    | 416730 | T99937    |           | gb:ye72d04.r1 Soares fetal liver spleen  | 2.76 | 2.76  |
| 50 | 433435 | BE545277  | Hs.340959 | Ts translation elongation factor, mitoch | 2.75 | 2.76  |
|    | 447164 | AF026941  | Hs.17518  | viprin; similar to inflammatory respon   | 2.72 | 2.86  |
|    | 409453 | AI885516  | Hs.95612  | ESTs                                     | 2.70 | 6.68  |
|    | 428824 | W23624    | Hs.173059 | ESTs                                     | 2.67 | 2.75  |
|    | 437233 | D81448    | Hs.339352 | Homo sapiens brother of CDO (BOC) mRNA,  | 2.65 | 3.07  |
| 55 | 430530 | AW269920  | Hs.2621   | cystatin A (stefin A)                    | 2.63 | 2.38  |
|    | 433339 | AF019226  | Hs.8036   | glioblastoma overexpressed               | 2.61 | 2.44  |
|    | 444670 | H58373    | Hs.332938 | hypothetical protein MGC5370             | 2.57 | 1.74  |
|    | 414602 | AW630088  | Hs.76550  | Homo sapiens mRNA; cDNA DKFZp564B1264 (f | 2.54 | 3.66  |
|    | 400995 |           |           | C11000295*:gi 12737279 ref XP_012163.1   | 2.54 | 2.93  |
| 60 | 423515 | AA327017  | Hs.176594 | ESTs                                     | 2.53 | 7.36  |
|    | 417359 | T99264    | Hs.191117 | ESTs                                     | 2.53 | 2.54  |
|    | 432426 | AW973152  | Hs.31050  | ESTs                                     | 2.52 | 2.15  |
|    | 413822 | R08950    | Hs.272044 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 2.52 | 3.05  |
|    | 414987 | AA524394  | Hs.294022 | hypothetical protein FLJ14950            | 2.52 | 3.85  |
| 65 | 407748 | AL079409  | Hs.38176  | KIAA0606 protein; SCN Circadian Oscillat | 2.48 | 1.76  |
|    | 426990 | AL044315  | Hs.173094 | Homo sapiens mRNA for KIAA1750 protein,  | 2.47 | 1.92  |
|    | 413392 | AW021404  | Hs.13021  | ESTs                                     | 2.47 | 2.56  |
|    | 442762 | AF035119  | Hs.8700   | deleted in liver cancer 1                | 2.46 | 1.90  |
|    | 444781 | NM_014400 | Hs.11950  | GPI-anchored metastasis-associated prote | 2.46 | 7.90  |
| 70 | 424364 | AW383226  | Hs.163834 | ESTs, Weakly similar to G01763 atrophin- | 2.46 | 2.66  |
|    | 420568 | F09247    | Hs.247735 | protocadherin alpha 10                   | 2.46 | 3.01  |
|    | 405885 |           |           | Target Exon                              | 2.46 | 2.82  |
|    | 412633 | AF001691  | Hs.74304  | periplakin                               | 2.46 | 5.01  |
|    | 429852 | AB010445  | Hs.225948 | small inducible cytokine subfamily A (Cy | 2.45 | 3.35  |
| 75 | 429624 | AA458648  | Hs.99476  | ESTs, Weakly similar to 1313184B alpha1  | 2.44 | 2.33  |
|    | 407325 | AA291180  | Hs.328476 | ESTs, Weakly similar to alternatively sp | 2.44 | 2.11  |
|    | 431441 | U81961    | Hs.2794   | sodium channel, nonvoltage-gated 1 alpha | 2.43 | 3.66  |
|    | 432543 | AA552690  | Hs.152423 | Homo sapiens cDNA: FLJ21274 fis, clone C | 2.42 | 3.12  |
|    | 430168 | AW968343  | Hs.145582 | DKFZP434I1735 protein                    | 2.41 | 2.75  |
| 80 | 408000 | L11690    | Hs.198689 | bullous pemphigoid antigen 1 (230/240kD) | 2.40 | 3.67  |
|    | 404049 |           |           | NM_018937*:Homo sapiens protocadherin be | 2.39 | 1.89  |
|    | 433576 | BE080715  | Hs.161091 | ESTs                                     | 2.39 | 1.59  |
|    | 444083 | AI123195  |           | gb:cc17a10.x1 Soares_NSF_F8_9W_OT_PA_P_S | 2.38 | 2.59  |
|    | 408208 | BE018717  |           | ESTs                                     | 2.37 | 2.12  |

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|    |        |           |           |  |      |      |
|----|--------|-----------|-----------|--|------|------|
| 5  | 431842 | NM_005764 | Hs.271473 | epithelial protein up-regulated in carci | 2.36 | 2.23 |
|    | 453931 | AL121278  | Hs.25144  | ESTs                                     | 2.34 | 1.99 |
|    | 452308 | AI167560  | Hs.61297  | ESTs                                     | 2.31 | 3.82 |
|    | 431048 | RS0253    | Hs.249129 | cell death-inducing DFFA-like effector a | 2.31 | 2.18 |
|    | 403752 |           |           | NM_002753*:Homo sapiens mitogen-activate | 2.30 | 2.38 |
| 10 | 402525 |           |           | NM_002699*:Homo sapiens POU domain, clas | 2.30 | 2.36 |
|    | 420223 | N27807    |           | ribosomal protein L4                     | 2.30 | 1.73 |
|    | 452023 | AB032999  | Hs.27566  | KIAA1173 protein                         | 2.29 | 4.54 |
|    | 443172 | AW662964  | Hs.199061 | p300/CBP-associated factor               | 2.28 | 2.02 |
|    | 439979 | AW600291  | Hs.6823   | hypothetical protein FLJ10430            | 2.28 | 1.71 |
| 15 | 414004 | AA737033  | Hs.7155   | ESTs, Moderately similar to 2115357A TYK | 2.27 | 1.81 |
|    | 429554 | NM_012275 | Hs.207224 | interleukin 1, delta                     | 2.26 | 2.17 |
|    | 436895 | AF037335  | Hs.5338   | carbonic anhydrase XII                   | 2.26 | 2.51 |
|    | 404029 |           |           | NM_018936*:Homo sapiens protocadherin be | 2.26 | 2.19 |
|    | 424049 | AB014524  | Hs.138380 | KIAA0624 protein                         | 2.26 | 2.99 |
| 20 | 442423 | BE326264  | Hs.246842 | ESTs                                     | 2.26 | 1.75 |
|    | 408452 | AA054683  | Hs.192455 | ESTs, Weakly similar to ALU7_HUMAN ALU S | 2.26 | 2.29 |
|    | 428471 | X57348    | Hs.184510 | stratifin                                | 2.25 | 2.40 |
|    | 410541 | AA065003  | Hs.64179  | syntenin-2 protein                       | 2.24 | 2.46 |
|    | 415539 | AI733881  | Hs.72472  | BMP-R1B                                  | 2.22 | 1.64 |
| 25 | 425701 | AA361850  | Hs.240443 | Human clone 137308 mRNA, partial cds     | 2.22 | 3.04 |
|    | 423973 | AF038461  | Hs.136574 | arachidonate 12-lipoxygenase, 12R type   | 2.22 | 3.24 |
|    | 409178 | BE393948  | Hs.50915  | kallikrein 5                             | 2.19 | 4.74 |
|    | 433091 | Y12642    | Hs.3185   | lymphocyte antigen 6 complex, locus D    | 2.19 | 7.96 |
|    | 430171 | AF086289  | Hs.234766 | skin-specific protein                    | 2.17 | 3.56 |
| 30 | 401994 |           |           | Target Exon                              | 2.14 | 3.34 |
|    | 449228 | AJ403107  | Hs.148590 | protein related with psoriasis           | 2.11 | 5.52 |
|    | 446292 | AF081497  | Hs.279682 | Rh type C glycoprotein                   | 2.11 | 5.78 |
|    | 426150 | NM_003658 | Hs.167218 | Bar1-like homeobox 2                     | 2.05 | 2.96 |
|    | 452554 | AW452434  | Hs.58006  | ESTs, Weakly similar to ALU5_HUMAN ALU S | 2.04 | 4.17 |
| 35 | 443162 | T49951    | Hs.9029   | DKFZP434G032 protein                     | 1.98 | 3.20 |
|    | 400304 | AF005082  | Hs.113261 | Homo sapiens skin-specific protein (xp33 | 1.94 | 3.20 |
|    | 407395 | AF005082  |           | gb:Homo sapiens skin-specific protein (x | 1.92 | 3.24 |
|    | 412507 | L36645    | Hs.73964  | EphA4                                    | 1.92 | 3.06 |
|    | 410310 | J02931    | Hs.62192  | coagulation factor III (thromboplastin,  | 1.90 | 3.18 |
| 40 | 425415 | M13903    | Hs.157091 | involucrin                               | 1.89 | 5.26 |
|    | 417324 | AW265494  |           | ESTs                                     | 1.88 | 3.82 |
|    | 412446 | AI768015  |           | ESTs                                     | 1.88 | 3.36 |
|    | 451092 | AI207256  | Hs.13766  | Homo sapiens mRNA for FLJ00074 protein,  | 1.87 | 3.75 |
|    | 444726 | NM_006147 |           | interferon regulatory factor 6           | 1.86 | 4.11 |
| 45 | 424399 | AI905687  |           | AI905687:IL-BT095-190199-019 BT095 Homo  | 1.85 | 4.20 |
|    | 434346 | AA630445  |           | ESTs                                     | 1.84 | 3.08 |
|    | 446051 | BE048061  | Hs.37054  | ephrin-A3                                | 1.83 | 3.44 |
|    | 423725 | AJ403108  | Hs.132127 | hypothetical protein LOC57822            | 1.78 | 3.45 |
|    | 413859 | AW992356  | Hs.8364   | Homo sapiens pyruvate dehydrogenase kina | 1.76 | 2.99 |
| 50 | 411908 | L27943    | Hs.72924  | cytidine deaminase                       | 1.74 | 3.60 |
|    | 445656 | W22050    | Hs.21299  | ESTs, Weakly similar to AF151840 1 CGI-8 | 1.71 | 3.56 |
|    | 413966 | AA133935  | Hs.173704 | ESTs, Moderately similar to A53959 throm | 1.71 | 3.38 |
|    | 424046 | AF027866  | Hs.138202 | serine (or cysteine) proteinase inhibito | 1.70 | 3.92 |
|    | 425650 | NM_001944 | Hs.1925   | desmoglein 3 (pemphigus vulgaris antigen | 1.68 | 3.25 |
| 55 | 429299 | AI620463  | Hs.347408 | hypothetical protein MGC13102            | 1.67 | 2.92 |
|    | 429002 | AW248439  | Hs.2340   | junction plakoglobin                     | 1.66 | 3.35 |
|    | 421335 | X99977    | Hs.103505 | ARS component B                          | 1.66 | 4.31 |
|    | 433662 | W07162    | Hs.150826 | RAB25 RAB25, member RAS oncogene family  | 1.65 | 3.55 |
|    | 429211 | AF052693  | Hs.198249 | gap junction protein, beta 5 (connexin 3 | 1.64 | 4.04 |
| 60 | 414214 | DA9958    | Hs.75819  | glycoprotein M6A                         | 1.64 | 3.59 |
|    | 437897 | AA770561  | Hs.146170 | hypothetical protein FLJ22969            | 1.62 | 3.13 |
|    | 426350 | NM_003245 | Hs.2022   | transglutaminase 3 (E polypeptide, prote | 1.62 | 2.92 |
|    | 413163 | Y00815    | Hs.75216  | protein tyrosine phosphatase, receptor t | 1.57 | 3.09 |
|    | 422106 | D84239    | Hs.111732 | Fc fragment of IgG binding protein       | 1.53 | 3.39 |
| 65 | 427751 | AF000150  |           | conserved gene amplified in osteosarcoma | 1.52 | 3.53 |
|    | 416881 | N32520    | Hs.141358 | ESTs                                     | 1.52 | 3.06 |
|    | 435013 | H91923    | Hs.110024 | NM_020142:Homo sapiens NADH:ubiquinone o | 1.49 | 2.91 |
|    | 434574 | AI424458  | Hs.33470  | ESTs                                     | 1.48 | 3.05 |
|    | 454478 | AW805749  |           | superoxide dismutase 2, mitochondrial    | 1.48 | 3.54 |
| 70 | 447330 | BE279949  | Hs.18141  | ladinin 1                                | 1.46 | 4.48 |
|    | 414583 | AA362907  | Hs.76494  | proline arginine-rich end leucine-rich r | 1.41 | 2.99 |
|    | 433640 | AW390125  | Hs.240443 | Homo sapiens cDNA: FLJ23538 fis, clone L | 1.40 | 3.71 |
|    | 427461 | AA531527  | Hs.332040 | hypothetical protein MGC13010            | 1.36 | 2.98 |
|    | 430205 | AB025904  | Hs.235168 | carbonic anhydrase XIV                   | 1.36 | 3.14 |
| 75 | 450796 | NM_001988 | Hs.25482  | envoptakin                               | 1.34 | 3.74 |
|    | 407394 | AF005081  |           | gb:Homo sapiens skin-specific protein (x | 1.30 | 3.26 |
|    | 430513 | AJ012008  | Hs.241586 | G6C protein                              | 1.28 | 3.26 |
|    | 411388 | X72925    | Hs.69752  | desmocollin 1                            | 1.22 | 3.64 |
|    | 431089 | BE041395  |           | ESTs, Weakly similar to unknown protein  | 1.14 | 3.71 |
| 80 | 444107 | T46839    | Hs.10319  | UDP glycosyltransferase 2 family, polype | 1.00 | 3.20 |
|    | 443672 | AA323362  | Hs.9667   | butyrobetaine (gamma), 2-oxoglutarate di | 1.00 | 3.25 |

TABLE 52B:

Pkey: Unique Eos probeset identifier number  
CAT number: Gene cluster number  
Accession: Genbank accession numbers

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| Pkey   | CAT Number | Accession  |
|--------|------------|--|
| 412636 | 1438_1     | M77830 NM_004415 AF139065 BG681115 BG740377 BI712964 BG000656 AA128470 BI438324 H27408 BE931630 BE167165 AW370827 AW370813 J05211 BG698865 BG740734 BG680618 BG739778 BI765807 BM353403 BM353248 AW177784 AW205789 AW951576 AW848592 BE182164 BF149266 BE940187 BI060445 BI0350983 BE720095 BE720069 BE715154 BE082584 BE082576 BE004047 BE1039774 BE173818 BE713548 AW170253 BE160433 BI039775 AW886475 BM462504 BE931734 BF149264 AA340777 BF381183 BG621737 AU127260 AW364859 BF993352 BG223489 BE819009 BF381184 BE715956 R58704 AA852212 AW366566 BI090358 BF087707 BE819046 BE819005 AA377127 BE073467 BE819069 BE819048 BI036306 BG990973 BI040954 BF919911 AU140155 AI951765 AI434518 AW804674 BF752969 BE837009 BE925826 BF149265 AW995615 BE814264 BI039782 AU140407 BE144243 BE709863 BF985642 BE001923 BF933510 AW265328 BG436319 BE182166 AW365175 AW847588 BE818280 AW177933 BF873579 AW178000 BE082526 BF476866 BF086994 BF592276 BE082507 BE082514 BE082505 BF873693 AW068840 AW847678 BF804153 AW365157 BE813930 BE002030 AW365153 BE184941 BF749421 BE184920 BF839562 BE184933 BF842254 BE698470 BE931048 BF999889 BF368816 BE184924 BE159646 BE714632 BE184948 BG986845 AA131128 AA099891 W39488 C04715 BF096124 BE865341 AW799304 AL603116 BE149760 BE705967 BE705966 BE705968 AW848723 AW376699 AW376817 AW376697 BG005097 BF751115 BE696084 AW848371 AW376782 AW848789 AW849074 AW361413 BF927725 BF094211 AW997139 BE865474 BE185187 BE156621 BE715089 BE713297 BE713298 BE179915 AW799309 BF872345 BF088676 BE705939 AW752599 BG005197 BF350086 BE715196 BE715155 BF752396 BF093817 BF831190 BF752409 BE006561 BG959922 BF094833 BF094748 BF094583 AW377699 AW607238 BE082519 AW377700 BF349467 AI190590 AI554403 AI392925 AU158477 BM457252 AU159919 AI760816 BF082516 AI439101 AA451923 AI340326 AI590975 BI791553 BI700963 AI142882 AA035975 AA946936 AA644381 BI671484 AA702424 AI417612 AW190555 AI220573 AI304772 AI270345 AI627383 AA552300 AI911702 AI166807 AI346078 W95070 AA149191 AA026864 AI830049 AW780435 AI078449 AI819984 AI858282 BI468588 AI860584 AI025932 AA026047 AA703232 AA658154 AA515500 AW192085 AA918281 T77861 AI927207 AI205263 BF082491 AW021347 AI568096 BE939862 AA088866 D12062 AA056527 AA782109 W19287 W02156 AW150038 AA022701 T87181 H44405 AI910434 BF082513 AI494069 AI270027 AI635878 AA123330 BG681425 BE706078 R20904 BG680059 BG676647 BF764409 AA026654 AV745530 BI762796 BG287391 AW798780 BE706045 BE926470 AW799118 BF087996 BE002273 AW879451 AI571075 BE067786 AV721320 AI022862 N29754 C03378 N84767 AA131077 H30146 BE714290 AI686869 AI568892 AI915596 AW105614 AI887258 AI538577 BE926474 BE067737 BG319486 AA247685 AW798883 AW103521 BF989173 AW686078 BE939707 BE185750 BE714064 BE713903 BE713868 BE713763 BG950164 BE713810 AW365151 BG955489 BE005272 BF915937 AW365148 AI905927 BF992780 AW853812 BG954443 BI770853 BG679406 BG740832 BG681087 BG698430 AA455100 T87267 BE696209 BE696210 BI089483 BE006273 BE872225 AW391912 BE825515 BG577012 BG741970 AA026480 BE705999 BG677157 BE009090 BG681378 BE712291 BG961498 BG678984 BI040941 AA337720 AW384371 AW847442 BI058659 BE813665 W95048 W25458 AW177786 AA025851 BE931733 BF154837 BG949393 BE714441 AW996245 BE711801 AI284090 BE064323 BE719390 BE940148 BG991212 BF375714 BF349522 BG996267 T48793 BI013292 BE001925 AW365156 AW365154 AW608653 BF763109 BE931637 BE167181 BE713879 BF354008 BF678726 H90899 AW365145 W38382 AI498487 AV711317 AI809938 AI808768 AI240593 AI915771 H80564 T99937 T70802 BI836699 AI123195 BI757837 AW439843 AW127655 BE018717 BE464329 BE302285 H96902 BF477981 BE674508 BE670755 H95980 T15387 N27807 AA256634 BE276324 BG775668 BG680336 AW991605 AA455904 AW265494 AW265432 BF911380 AA456370 BF911379 AA195677 BF914311 BF913866 BG775059 BG951874 AI572169 BC021735 AI669212 AL120184 AI769949 BE701002 BE184363 BE819031 BG702238 BF090049 BF963318 BF961912 BF943013 AA934514 AA151245 BF960559 AA987907 Z14449 BF908059 BF908053 BF908049 BE699424 BF908060 BF962832 BF952020 BF963134 BI035538 BF908052 BF908057 BF090026 BF943158 AI632924 BF512340 BF952021 BF960776 BF943437 BF942847 AI768015 F09778 F04816 F02721 AA102645 AI633838 AA617929 BF947001 BI035448 BE935876 AW890837 AW898604 BF957405 BF963433 BG704815 BG285809 BE940673 BG432524 BE157554 BG676980 AU144284 AI745383 AU159045 AI693500 AW293668 AW371408 BE856107 AI338042 AW188320 AI698246 BE673290 AW297653 AA156532 AI017342 AI916754 AI190644 AI184302 AA857671 BE857018 AI307420 AI318157 AW204327 AW664668 AW274339 AA582788 AI345741 AW301433 AI873468 AW137388 BF178731 BF178413 AA877495 BF001575 AI824693 AW849604 AW849405 AW849396 AW849173 BE673179 AI611327 AA705753 BE715478 AW849414 AW849399 AI085759 AI140849 T67412 AI889885 AW104647 AI912495 AI898974 AI744241 BE717113 BE717108 BE715564 AI872527 AA029457 C00338 AI469558 BE715577 AA045413 BF843813 NM_058173 AF414087 W72837 BF742809 AW070916 BE092421 AI905687 AA340069 BE074512 AI905623 AI905633 BG202312 W72838 AI139456 BG218084 BE926938 BE186013 AW176044 AW291950 BG185269 BG197186 BG192597 BG183176 BG207535 AI127172 BE815819 AI905624 R75793 BG202313 AI905837 BE815853 AK056896 AI924216 AI660493 AI984141 AI991272 AA593860 AI983793 AI346155 AI274929 AI281211 AI821178 BC020841 BF352476 BF843140 BF917041 W80832 AA630445 BF350167 BE162052 BE931808 AI572329 BG536379 BE875818 AW751975 W39241 BF808798 W22600 BF082190 AA031290 R42801 H98235 H17925 AI631236 AI933786 H42736 AF000152 AU123911 AW410526 BM354207 BF800492 BM142340 BE019322 ALS97008 AW327818 BI041915 AW504825 AW504941 BF987969 NM_005730 U81556 AI422831 AU154008 AA147822 AA873109 AI089244 AI360868 AW168024 AI819848 AA811327 AI355616 AA281629 AI880578 AI274316 AW014622 AI288660 AI270283 AA171981 AI349410 AA402469 AI411985 AI004864 AI23497 AI361503 AI363096 AW805345 AI539979 AA553967 AW502264 AI290698 N22420 AI281054 AI500699 AW342095 C75122 AW504577 AI130811 AI423557 R79086 AI860451 BE222885 AI697830 AI279575 BF438693 AW576277 BE218210 AI952376 AA506609 AI147566 AI391690 AA991622 AI696368 AI784664 AA741555 AI002681 AW474554 AW474508 D25623 AI493929 AA179800 W73566 AW411368 AA147971 AA088581 BF804510 AU145809 AU148108 AA232319 AU157840 AW169757 AI537862 N42341 AI128667 AW327853 AA713915 W15255 W56743 AA058322 H81878 AA723464 N27523 R37745 AA613566 AI526353 AI905211 BF802713 AW04338 AA249397 BF752939 BE250441 H64761 BF853011 H81877 H96088 AL576453 W73585 H39990 AW438965 BF899684 AI040299 AL561879 AA293821 H27760 BC018922 AL533396 BE513580 BF432649 AI884985 AA404264 AW024396 AW167863 AW027036 AI302177 AI660487 AW026086 BF432564 BF091011 AI193156 AA744623 AI859510 BI063081 BI061541 AA777036 BG058486 BI063555 AI349411 BF874521 AW139801 AI268585 AA401267 AI905209 R64276 N72043 AF022231 BI256540 AU134437 BG826972 BE298386 AW134499 AW206089 BF846730 AW500331 BF849336 BI041697 AI857745 AW192840 AW410527 AI697435 AW006631 AW504124 AL048926 AI085476 AW327855 AA459344 AW207516 AW204875 BM142514 BF436650 AA960980 AW242609 BI012363 AW837102 BE703126 BE814612 BE837981 BE703141 BF343101 R47375 AA031413 N40264 BG027363 BF526360 BE391263 AA280192 BE294042 BE250630 AU147734 AU146610 AA196787 N59465 AW575791 H16738 H96089 H64762 AW006603 BE857292 AI719393 AU155418 BG770385 AA339673 BG337748 H42694 BE834346 AA090896 BE619985 BM006968 R46008 BF304621 AA172280 AW957721 BF304885 BF933455 BF809973 BG386280 AW079808 T51091 AL520569 BE694350 T06360 BF347780 BE560703 BE296629 AW796921 AW798102 AW805749 AW805872 BF985060 AW794380 BF380449 AW794466 AW794538 AF005081 BG193848 BG940189 AW063489 AA715980 BF001091 BF880066 AA666102 AA621946 AA491826 |

|    |              |   |  |
|----|--------------|---|--|
| 75 | TABLE 52C:   |   |  |
|    | Pkey:        | Unique number corresponding to an Eos probeset  |  |
|    | Ref:         | Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495. |  |
|    | Strand:      | Indicates DNA strand from which exons were predicted.   |  |
| 80 | Nt_position: | Indicates nucleotide positions of predicted exons.  |  |
|    | Pkey         | Ref   | Strand                                   |
|    | 401781       | 7249190   | Minus                                    |
|    | 401780       | 7249190   | Minus                                    |
| 80 | 402075       | 8117407   | Plus                                     |
|    | 401780       | 9929699   | Plus                                     |
|    |              |   |  |
|    |              |   | 83215-83435,83531-83656,83740-83901,8423 |
|    |              |   | 28397-28617,28920-29045,29135-29296,2941 |
|    |              |   | 121907-122035,122804-122921,124019-12416 |
|    |              |   | 83126-83250,85320-85540,94719-95287      |

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|    |        |         |       |  |
|----|--------|---------|-------|--|
| 5  | 401747 | 9789672 | Minus | 118596-118816,119119-119244,119609-11976 |
|    | 402294 | 2282012 | Minus | 2575-3000                                |
|    | 401785 | 7249190 | Minus | 165776-165996,166189-166314,166408-16656 |
|    | 405542 | 9857564 | Plus  | 71331-72183                              |
|    | 402970 | 9650703 | Minus | 124891-125049                            |
| 10 | 400995 | 8099094 | Plus  | 141186-141601                            |
|    | 405885 | 7677703 | Minus | 42574-42998                              |
|    | 404049 | 3688074 | Minus | 75765-78155                              |
|    | 403752 | 7678857 | Plus  | 33704-33828                              |
|    | 402525 | 9800048 | Minus | 19748-20683                              |
|    | 404029 | 7671252 | Plus  | 108716-111112                            |
|    | 401994 | 4153858 | Minus | 42904-43124,43211-43336,44607-44763,4519 |

## 15 TABLE 53A: ABOUT 298 GENES UPREGULATED IN MELANOMA METASTASES RELATIVE TO PRIMARY MELANOMAS

Table 53A lists about 298 genes upregulated in melanoma metastases relative to primary melanomas. Genes were selected from 59680 probesets on the Eos/Affymetrix Hu03 Genechip array. Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

|    |                |  |
|----|----------------|--|
| 20 | Pkey:          | Unique Eos probeset identifier number  |
|    | ExAccn:        | Exemplar Accession number, Genbank accession number  |
|    | UnigenelD:     | Unigene number   |
|    | Unigene Title: | Unigene gene title   |
| 25 | R1             | 90th percentile of melanoma metastasis AIs divided by the 90th percentile of primary melanoma AIs  |
|    | R2             | 90th percentile of melanoma metastasis AIs divided by the 90th percentile of primary melanoma AIs, where the 15th percentile of normal tissue AIs was subtracted from both the numerator and denominator |

|    | Pkey   | ExAccn    | UnigenelD | Unigene Title                            | R1    | R2    |
|----|--------|-----------|-----------|--|-------|-------|
| 30 | 407245 | X90568    | Hs.172004 | titin                                    | 10.56 | 11.32 |
|    | 412228 | AW503785  | Hs.73792  | complement component (3d/Epstein Barr vi | 9.22  | 6.14  |
|    | 426752 | X69490    | Hs.172004 | titin                                    | 8.78  | 10.44 |
|    | 418310 | AA814100  | Hs.86693  | ESTs                                     | 8.65  | 6.49  |
|    | 414522 | AW518944  | Hs.76325  | Immunoglobulin J chain                   | 8.37  | 4.39  |
| 35 | 433447 | U29195    | Hs.3281   | neuronal pentraxin II                    | 8.27  | 7.25  |
|    | 456373 | BE247706  | Hs.89751  | membrane-spanning 4-domains, subfamily A | 7.78  | 6.70  |
|    | 425545 | N98529    | Hs.158295 | Homo sapiens, clone MGC:12401, mRNA, com | 7.49  | 9.02  |
|    | 428087 | AA100573  | Hs.182421 | troponin C2, fast                        | 7.45  | 7.65  |
|    | 436485 | X59135    | Hs.156110 | immunoglobulin kappa constant            | 7.35  | 6.18  |
| 40 | 414646 | AA353776  | Hs.901    | CD48 antigen (B-cell membrane protein)   | 6.97  | 5.75  |
|    | 412519 | AA196241  | Hs.73980  | troponin T1, skeletal, slow              | 6.15  | 6.33  |
|    | 430280 | AA361258  | Hs.237868 | interleukin 7 receptor                   | 6.07  | 3.11  |
|    | 449078 | AK001256  | Hs.22975  | KIAA1576 protein                         | 6.05  | 8.55  |
|    | 437952 | D63209    | Hs.5944   | solute carrier family 11 (proton-coupled | 6.03  | 5.36  |
| 45 | 412561 | NM_002286 | Hs.74011  | lymphocyte-activation gene 3             | 5.85  | 5.57  |
|    | 431574 | AW572659  | Hs.261373 | hypothetical protein dJ434014.3          | 5.74  | 6.40  |
|    | 458079 | AI796870  | Hs.54277  | DNA segment on chromosome X (unique) 992 | 5.72  | 4.76  |
|    | 417880 | BE241595  | Hs.82848  | selectin L (lymphocyte adhesion molecule | 5.71  | 5.00  |
|    | 429412 | NM_006235 | Hs.2407   | POU domain, class 2, associating factor  | 5.69  | 3.84  |
| 50 | 420338 | AA825595  | Hs.88269  | Homo sapiens, clone MGC:17339, mRNA, com | 5.37  | 4.12  |
|    | 430580 | AA806105  | Hs.300697 | immunoglobulin heavy constant gamma 3 (G | 5.31  | 6.02  |
|    | 428804 | AK000713  | Hs.193736 | hypothetical protein FLJ20706            | 5.29  | 7.97  |
|    | 410361 | BE391804  | Hs.62661  | guanylate binding protein 1, interferon- | 5.26  | 2.93  |
|    | 445784 | AI253155  | Hs.146065 | ESTs                                     | 5.12  | 3.10  |
| 55 | 409461 | AA382169  | Hs.54483  | N-myc (and STAT) interactor              | 5.05  | 3.41  |
|    | 414020 | NM_002984 | Hs.75703  | small inducible cytokine A4 (homologous  | 4.59  | 4.00  |
|    | 420301 | AA767526  | Hs.22030  | paired box gene 5 (B-cell lineage specif | 4.47  | 3.92  |
|    | 453857 | AL080235  | Hs.35861  | DKFZP585E1621 protein                    | 4.46  | 3.61  |
|    | 428242 | H55709    | Hs.2250   | leukemia inhibitory factor (cholinergic  | 4.37  | 3.22  |
| 60 | 414829 | AA321568  | Hs.77436  | pleckstrin                               | 4.35  | 3.35  |
|    | 417878 | U90916    | Hs.82845  | Homo sapiens cDNA: FLJ21930 fis, clone H | 4.35  | 2.68  |
|    | 422603 | BE242587  | Hs.118651 | hematopoietically expressed homeobox     | 4.27  | 2.67  |
|    | 451099 | R52795    | Hs.25954  | interleukin 13 receptor, alpha 2         | 4.27  | 3.67  |
|    | 441623 | AA315805  |           | desmoglein 2                             | 4.24  | 3.66  |
| 65 | 422241 | Y00062    | Hs.170121 | protein tyrosine phosphatase, receptor t | 4.22  | 3.60  |
|    | 417022 | NM_014737 | Hs.80905  | Ras association (RalGDS/AF-6) domain fam | 4.20  | 2.58  |
|    | 426317 | AA312350  | Hs.169294 | transcription factor 7 (T-cell specific, | 4.16  | 5.82  |
|    | 430770 | AA765694  | Hs.123296 | ESTs                                     | 4.15  | 5.10  |
|    | 420931 | AF044197  | Hs.100431 | small inducible cytokine B subfamily (Cy | 4.12  | 5.06  |
| 70 | 406707 | S73840    | Hs.931    | myosin, heavy polypeptide 2, skeletal mu | 4.11  | 3.82  |
|    | 444863 | AW384082  | Hs.104879 | serine (or cysteine) proteinase inhibito | 4.10  | 2.68  |
|    | 432306 | Y18207    | Hs.303090 | protein phosphatase 1, regulatory (inhib | 4.04  | 4.10  |
|    | 417105 | X60992    | Hs.81226  | CD6 antigen                              | 4.03  | 4.51  |
|    | 409041 | AB033025  | Hs.50081  | Hypothetical protein, XP_051860 (KIAA119 | 4.02  | 3.72  |
| 75 | 432485 | N90866    | Hs.276770 | CDW52 antigen (CAMPATH-1 antigen)        | 3.99  | 4.87  |
|    | 415165 | AW887604  | Hs.78065  | complement component 7                   | 3.97  | 3.98  |
|    | 421181 | NM_005574 | Hs.184585 | LIM domain only 2 (rhombotin-like 1)     | 3.96  | 3.19  |
|    | 421712 | AK000140  | Hs.107139 | hypothetical protein                     | 3.95  | 7.34  |
|    | 408380 | AF123050  | Hs.44532  | diubiquitin                              | 3.94  | 2.45  |
| 80 | 422423 | AF283777  | Hs.116481 | CD72 antigen                             | 3.93  | 3.29  |
|    | 408989 | AW361666  | Hs.49500  | KIAA0746 protein                         | 3.90  | 3.02  |
|    | 424321 | W74048    | Hs.1765   | lymphocyte-specific protein tyrosine kin | 3.84  | 3.40  |
|    | 420137 | AA306478  | Hs.95327  | CD3D antigen, delta polypeptide (TIT co  | 3.84  | 4.84  |
|    | 424922 | BE386547  | Hs.217112 | hypothetical protein MGC10825            | 3.78  | 3.04  |
|    | 400440 | X83957    | Hs.83870  | nebulin                                  | 3.77  | 4.89  |

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|    |        |           |           |  |      |       |
|----|--------|-----------|-----------|--|------|-------|
| 5  | 418870 | AF147204  | Hs.89414  | chemokine (C-X-C motif), receptor 4 (fus | 3.74 | 3.91  |
|    | 450293 | N36754    | Hs.171118 | hypothetical protein FLJ00026            | 3.74 | 2.89  |
|    | 432606 | NM_002104 | Hs.3066   | granzyme K (serine protease, granzyme 3; | 3.72 | 2.65  |
|    | 408548 | AA055449  | Hs.63187  | ESTs, Weakly similar to ALUC_HUMAN !!!   | 3.72 | 2.43  |
|    | 429490 | AI971131  | Hs.23889  | ESTs, Weakly similar to ALU7_HUMAN ALU S | 3.71 | 2.23  |
| 10 | 414821 | M63835    | Hs.77424  | Fc fragment of IgG, high affinity Ia, re | 3.70 | 2.36  |
|    | 419749 | X73608    | Hs.93029  | sparc/osteonectin, cwcv and kazal-like d | 3.67 | 3.30  |
|    | 410016 | AA297977  | Hs.57907  | small inducible cytokine subfamily A (Cy | 3.67 | 6.72  |
|    | 433658 | L03678    | Hs.156110 | immunoglobulin kappa constant            | 3.66 | 2.49  |
|    | 424153 | AA451737  | Hs.141496 | MAGE-like 2                              | 3.64 | 2.65  |
| 15 | 421666 | AL035250  | Hs.1408   | endothelin 3                             | 3.64 | 5.92  |
|    | 417696 | BE241624  | Hs.82401  | CD69 antigen (p60, early T-cell activati | 3.61 | 2.69  |
|    | 429732 | U20158    | Hs.2488   | lymphocyte cytosolic protein 2 (SH2 doma | 3.60 | 1.95  |
|    | 422173 | BE385828  | Hs.250619 | phorbol-like protein MDS019 (CEM15)      | 3.59 | 3.08  |
|    | 413778 | AA090235  | Hs.75535  | myosin, light polypeptide 2, regulatory, | 3.57 | 11.26 |
| 20 | 442379 | NM_004613 | Hs.8265   | transglutaminase 2 (C polypeptide, prote | 3.56 | 4.91  |
|    | 439859 | AW292872  | Hs.124554 | ESTs                                     | 3.53 | 4.15  |
|    | 453064 | R40334    | Hs.89463  | potassium large conductance calcium-acti | 3.51 | 2.88  |
|    | 411252 | AB018549  | Hs.69328  | MD-2 protein                             | 3.46 | 1.82  |
|    | 414324 | Y14768    | Hs.890    | lymphotoxin beta (TNF superfamily, membe | 3.45 | 4.65  |
| 25 | 420286 | AI796395  | Hs.111377 | ESTs                                     | 3.42 | 2.47  |
|    | 413385 | M34455    | Hs.840    | indoleamine-pyrrole 2,3 dioxygenase      | 3.42 | 3.09  |
|    | 442104 | L20971    | Hs.188    | phosphodiesterase 4B, cAMP-specific (dun | 3.41 | 2.22  |
|    | 405545 |           |           | Target Exon                              | 3.40 | 2.46  |
|    | 416373 | AA195845  |           | ESTs, Weakly similar to S12558 cysteine- | 3.40 | 5.64  |
| 30 | 417410 | AF053020  | Hs.82110  | PC4 and SFRS1 interacting protein 1      | 3.37 | 4.27  |
|    | 418522 | AA605038  | Hs.7149   | Homo sapiens cDNA: FLJ21950 fis, clone H | 3.33 | 2.37  |
|    | 433470 | AW960564  |           | transmembrane 4 superfamily member 1     | 3.33 | 3.13  |
|    | 416975 | NM_004131 | Hs.1051   | granzyme B (granzyme 2, cytotoxic T-lymp | 3.32 | 2.51  |
|    | 442149 | AB014550  | Hs.8118   | KIAA0650 protein                         | 3.30 | 2.29  |
| 35 | 411852 | AA528140  | Hs.107515 | ESTs, Weakly similar to T00329 hypotheti | 3.29 | 3.85  |
|    | 447023 | AA356764  | Hs.17109  | integral membrane protein 2A             | 3.24 | 2.79  |
|    | 421566 | NM_000399 | Hs.1395   | early growth response 2 (Krox-20 (Drosop | 3.23 | 1.78  |
|    | 414176 | BE140638  | Hs.75794  | EDG-2 (endothelial differentiation, lys  | 3.22 | 2.90  |
|    | 447513 | AW955776  | Hs.313500 | ESTs, Moderately similar to ALU7_HUMAN A | 3.18 | 4.16  |
| 40 | 421893 | NM_001078 | Hs.109225 | vascular cell adhesion molecule 1        | 3.17 | 3.59  |
|    | 424148 | BE242274  | Hs.1741   | integrin, beta 7                         | 3.14 | 2.29  |
|    | 406648 | AA563730  | Hs.277477 | major histocompatibility complex, class  | 3.13 | 3.05  |
|    | 429505 | AW820035  | Hs.278679 | a disintegrin and metalloproteinase doma | 3.13 | 2.36  |
|    | 446619 | ALU076643 | Hs.313    | secreted phosphoprotein 1 (osteopontin,  | 3.12 | 2.55  |
| 45 | 406704 | M21665    | Hs.929    | myosin, heavy polypeptide 7, cardiac mus | 3.12 | 5.54  |
|    | 443885 | H91806    | Hs.15284  | ESTs                                     | 3.08 | 3.55  |
|    | 418203 | X54942    | Hs.83758  | CDC28 protein kinase 2                   | 3.08 | 2.20  |
|    | 417640 | D30857    | Hs.82353  | protein C receptor, endothelial (EPCR)   | 3.06 | 3.21  |
|    | 447232 | AW499834  | Hs.327    | interleukin 10 receptor, alpha           | 3.05 | 3.36  |
| 50 | 409103 | AF251237  | Hs.112208 | XAGE-1 protein                           | 3.04 | 2.07  |
|    | 413719 | BE439580  | Hs.75498  | small inducible cytokine subfamily A (Cy | 3.04 | 2.24  |
|    | 421834 | BE543205  | Hs.288771 | DKFZP586A0522 protein                    | 3.03 | 1.91  |
|    | 444666 | BE293347  | Hs.11638  | long-chain fatty acid coenzyme A ligase  | 3.01 | 3.43  |
|    | 425295 | AA431366  | Hs.37251  | ESTs                                     | 3.01 | 3.07  |
| 55 | 429109 | AL008637  | Hs.196352 | neutrophil cytosolic factor 4 (40kD)     | 2.99 | 2.55  |
|    | 420340 | NM_000734 | Hs.97087  | CD3Z antigen, zeta polypeptide (TIT3 com | 2.98 | 5.98  |
|    | 418968 | NM_000078 | Hs.89538  | cholesteryl ester transfer protein, plas | 2.97 | 2.68  |
|    | 438914 | N93892    | Hs.10727  | ESTs                                     | 2.97 | 2.19  |
|    | 418391 | NM_003281 | Hs.84673  | troponin I, skeletal, slow               | 2.96 | 2.68  |
| 60 | 419056 | M89957    | Hs.89575  | CD79B antigen (immunoglobulin-associated | 2.96 | 3.94  |
|    | 449523 | NM_000579 | Hs.54443  | chemokine (C-C motif) receptor 5         | 2.96 | 4.02  |
|    | 450847 | NM_003155 | Hs.25590  | stanniocalcin 1                          | 2.96 | 3.24  |
|    | 418460 | M26315    | Hs.85258  | CD8 antigen, alpha polypeptide (p32)     | 2.95 | 2.73  |
|    | 426711 | AA383471  | Hs.343800 | conserved gene amplified in osteosarcoma | 2.94 | 2.36  |
| 65 | 426559 | AB001914  | Hs.170414 | paired basic amino acid cleaving system  | 2.93 | 2.17  |
|    | 424528 | AW073971  | Hs.238954 | ESTs, Weakly similar to KIAA1204 protein | 2.93 | 2.70  |
|    | 408633 | AW963372  | Hs.46677  | PRO2000 protein                          | 2.92 | 2.16  |
|    | 443195 | BE148235  | Hs.193063 | Homo sapiens cDNA FLJ14201 fis, clone NT | 2.92 | 2.92  |
|    | 425234 | AW152225  | Hs.165909 | ESTs, Weakly similar to I38022 hypotheti | 2.90 | 2.09  |
| 70 | 437802 | AI475995  | Hs.122910 | ESTs                                     | 2.90 | 3.71  |
|    | 417771 | AA804698  | Hs.82547  | retinoic acid receptor responder (tazaro | 2.90 | 3.56  |
|    | 438000 | AI825880  | Hs.5985   | non-kinase Cdc42 effector protein SPEC2  | 2.90 | 2.60  |
|    | 414555 | N98569    | Hs.76422  | phospholipase A2, group IIA (platelets,  | 2.87 | 2.07  |
|    | 421958 | AA357185  | Hs.109918 | ras homolog gene family, member H        | 2.87 | 3.48  |
| 75 | 420224 | M84371    | Hs.96023  | CD19 antigen                             | 2.86 | 4.77  |
|    | 434883 | AW381538  | Hs.19807  | hypothetical protein MGC12959            | 2.85 | 5.44  |
|    | 452852 | AK001972  | Hs.30822  | hypothetical protein FLJ11110            | 2.84 | 2.55  |
|    | 427527 | AI809057  | Hs.153261 | immunoglobulin heavy constant mu         | 2.84 | 4.16  |
|    | 446231 | NM_002163 | Hs.14453  | interferon consensus sequence binding pr | 2.83 | 2.97  |
| 80 | 408838 | AI669535  | Hs.40369  | ESTs                                     | 2.82 | 1.82  |
|    | 429124 | AW505086  | Hs.196914 | minor histocompatibility antigen HA-1    | 2.82 | 4.21  |
|    | 425023 | AW956889  | Hs.154210 | EDG-1 (endothelial differentiation, sph  | 2.79 | 4.00  |
|    | 425388 | AA329384  | Hs.156110 | immunoglobulin kappa constant            | 2.79 | 2.28  |
|    | 414290 | AI568801  | Hs.71721  | ESTs                                     | 2.78 | 3.19  |
|    | 418255 | AW135405  | Hs.37251  | ESTs                                     | 2.76 | 3.27  |
|    | 451952 | AL120173  | Hs.301663 | ESTs                                     | 2.75 | 1.74  |
|    | 424865 | AF011333  | Hs.153563 | lymphocyte antigen 75                    | 2.75 | 3.10  |

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|    |        |           |           |  |      |      |
|----|--------|-----------|-----------|--|------|------|
|    | 409245 | AA361037  |           | tRNA isopentenylpyrophosphate transferas   | 2.74 | 2.12 |
|    | 453920 | A1133148  | Hs.36602  | I factor (complement)                      | 2.74 | 3.08 |
|    | 443968 | AA287702  | Hs.10031  | KIAA0955 protein                           | 2.74 | 2.34 |
| 5  | 434094 | AA305599  | Hs.238205 | hypothetical protein PRO2013               | 2.73 | 1.67 |
|    | 436476 | AA326108  | Hs.33829  | bHLH protein DEC2                          | 2.72 | 1.70 |
|    | 428398 | A1249368  | Hs.98558  | ESTs                                       | 2.72 | 2.06 |
|    | 417141 | U22662    |           | nuclear receptor subfamily 1, group H, m   | 2.70 | 2.55 |
|    | 427080 | AW068287  | Hs.301175 | ras-related C3 botulinum toxin substrate   | 2.69 | 3.15 |
|    | 442485 | BE092285  | Hs.29724  | hypothetical protein FLJ13187              | 2.69 | 1.99 |
| 10 | 429317 | AA831552  | Hs.268016 | Homo sapiens cDNA: FLJ21243 fis; clone C   | 2.69 | 1.70 |
|    | 443998 | A1620661  | Hs.296276 | ESTs                                       | 2.69 | 2.30 |
|    | 417542 | J04129    | Hs.82269  | progesteragen-associated endometrial prote | 2.68 | 3.23 |
|    | 414291 | A1289619  | Hs.13040  | G protein-coupled receptor 86              | 2.68 | 3.01 |
|    | 448861 | AL049951  | Hs.22370  | Homo sapiens mRNA: cDNA DKFZp564O0122 (f   | 2.66 | 2.51 |
| 15 | 432435 | BE218886  | Hs.282070 | ESTs                                       | 2.65 | 3.28 |
|    | 430132 | AA204686  | Hs.234149 | hypothetical protein FLJ20647              | 2.65 | 3.04 |
|    | 427792 | M63928    | Hs.180841 | tumor necrosis factor receptor superfami   | 2.64 | 3.82 |
|    | 414696 | AF002020  | Hs.76918  | Niemann-Pick disease, type C1              | 2.64 | 1.94 |
| 20 | 420991 | AW504814  | Hs.287379 | Homo sapiens mRNA for FLJ00111 protein,    | 2.64 | 2.51 |
|    | 401566 |           |           | NM_005159:Homo sapiens actin, alpha, car   | 2.63 | 3.74 |
|    | 444119 | R41231    | Hs.184261 | ESTs, Weakly similar to T26586 hypotheti   | 2.63 | 2.13 |
|    | 425231 | AA527161  |           | ESTs                                       | 2.61 | 2.95 |
|    | 417427 | M90391    | Hs.82127  | interleukin 16 (lymphocyte chemoattracta   | 2.61 | 1.90 |
| 25 | 437669 | A1358105  | Hs.123154 | ESTs, Weakly similar to match to ESTs AA   | 2.60 | 4.45 |
|    | 413856 | D13639    | Hs.75586  | cyclin D2                                  | 2.60 | 5.71 |
|    | 407928 | NM_002262 | Hs.41682  | killer cell lectin-like receptor subfami   | 2.59 | 2.68 |
|    | 443247 | BE614387  | Hs.333893 | c-Myc target JPO1                          | 2.58 | 2.77 |
|    | 447131 | NM_004585 | Hs.17466  | retinoic acid receptor responder (tazaro   | 2.58 | 9.28 |
| 30 | 443021 | AA368546  | Hs.8904   | Ig superfamily protein                     | 2.58 | 4.49 |
|    | 424779 | AL046851  | Hs.153053 | CD37 antigen                               | 2.58 | 3.88 |
|    | 425235 | AA353113  | Hs.112497 | Homo sapiens cDNA: FLJ22743 fis, clone H   | 2.57 | 2.09 |
|    | 424265 | AF173901  | Hs.144287 | hairy/enhancer-of-split related with YRP   | 2.57 | 3.57 |
|    | 426780 | BE242284  | Hs.172199 | adenylate cyclase 7                        | 2.57 | 1.86 |
| 35 | 452721 | AJ269529  | Hs.301871 | solute carrier family 37 (glycerol-3-pho   | 2.56 | 2.90 |
|    | 442904 | AW575008  | Hs.11355  | thymopoietin                               | 2.56 | 3.39 |
|    | 433646 | AA603319  | Hs.155195 | ESTs                                       | 2.54 | 2.19 |
|    | 417289 | D86962    | Hs.81875  | growth factor receptor-bound protein 10    | 2.53 | 4.56 |
|    | 422640 | M37984    | Hs.118845 | troponin C, slow                           | 2.53 | 5.38 |
| 40 | 448413 | A1745379  | Hs.42911  | ESTs                                       | 2.53 | 2.08 |
|    | 429536 | AA873016  | Hs.206097 | oncogene TC21                              | 2.52 | 2.49 |
|    | 446272 | BE268912  | Hs.14601  | hematopoietic cell-specific Lyn substrat   | 2.52 | 3.46 |
|    | 424378 | W28020    | Hs.167988 | neural cell adhesion molecule 1            | 2.52 | 2.91 |
|    | 410257 | BE244044  | Hs.61469  | hypothetical protein                       | 2.51 | 3.67 |
| 45 | 427609 | AK000436  | Hs.179791 | hypothetical protein FLJ20429              | 2.51 | 3.11 |
|    | 424868 | A1568170  | Hs.96886  | ESTs                                       | 2.51 | 2.30 |
|    | 418945 | BE246762  | Hs.89499  | arachidonate 5-lipoxygenase                | 2.50 | 2.64 |
|    | 420899 | NM_001629 | Hs.100194 | arachidonate 5-lipoxygenase-activating p   | 2.50 | 3.04 |
|    | 413441 | A1929374  | Hs.75367  | Src-like-adaptor                           | 2.49 | 2.37 |
| 50 | 414761 | AU077228  | Hs.77256  | enhancer of zeste (Drosophila) homolog 2   | 2.49 | 1.82 |
|    | 429493 | AL134708  | Hs.145998 | ESTs                                       | 2.49 | 2.40 |
|    | 419631 | AW188117  |           | popeye protein 3                           | 2.48 | 1.85 |
|    | 437175 | AW968078  | Hs.87773  | protein kinase, cAMP-dependent, catalyti   | 2.48 | 2.32 |
|    | 421552 | AF026692  | Hs.105700 | secreted frizzled-related protein 4        | 2.47 | 4.17 |
| 55 | 420158 | A1791905  | Hs.95549  | hypothetical protein                       | 2.47 | 2.62 |
|    | 453987 | AA323750  | Hs.235026 | Homo sapiens, clone IMAGE:4247529, mRNA,   | 2.47 | 2.49 |
|    | 429640 | U83508    | Hs.2463   | angiotensin 1                              | 2.47 | 2.57 |
|    | 437330 | AL353944  | Hs.50115  | Homo sapiens mRNA; cDNA DKFZp761J1112 (f   | 2.46 | 2.42 |
|    | 426969 | A1936504  |           | CDC-like kinase 1                          | 2.46 | 2.41 |
| 60 | 427674 | NM_003528 | Hs.2178   | H2B histone family, member Q               | 2.46 | 2.17 |
|    | 405547 |           |           | NM_018833*:Homo sapiens transporter 2, A   | 2.46 | 2.84 |
|    | 406678 | U77534    |           | gb:Human clone 1A11 immunoglobulin varia   | 2.45 | 2.89 |
|    | 407013 | U35637    | Hs.83870  | gb:Human nebulin mRNA, partial cds         | 2.45 | 3.40 |
|    | 428746 | AW503820  | Hs.192861 | Spi-B transcription factor (Spi-1/PU.1 r   | 2.43 | 6.25 |
| 65 | 453953 | AW408337  | Hs.36972  | CD7 antigen (p41)                          | 2.39 | 4.01 |
|    | 427759 | BE245578  | Hs.2200   | perforin 1 (pore forming protein)          | 2.39 | 4.56 |
|    | 443071 | AL080021  | Hs.8986   | complement component 1, q subcomponent,    | 2.39 | 3.31 |
|    | 437211 | AA382207  | Hs.5509   | ecotropic viral integration site 2B        | 2.38 | 3.15 |
|    | 440596 | H13032    | Hs.103378 | hypothetical protein MGC11034              | 2.37 | 3.68 |
| 70 | 452651 | A1218918  | Hs.30209  | KIAA0854 protein                           | 2.36 | 4.08 |
|    | 421563 | NM_006433 | Hs.105806 | granulysin                                 | 2.34 | 3.25 |
|    | 421924 | BE514514  | Hs.109606 | coronin, actin-binding protein, 1A         | 2.33 | 3.38 |
|    | 449092 | U91641    |           | alpha2,8-sialyltransferase                 | 2.32 | 3.53 |
|    | 425367 | BE271188  | Hs.155975 | protein tyrosine phosphatase, receptor t   | 2.32 | 7.02 |
| 75 | 418117 | A1922013  | Hs.83496  | linker for activation of T cells           | 2.30 | 3.56 |
|    | 425795 | AJ000479  | Hs.159543 | EDG-6 (endothelial differentiation, G-p    | 2.26 | 3.42 |
|    | 428111 | S76617    | Hs.2243   | B lymphoid tyrosine kinase                 | 2.25 | 3.69 |
|    | 439981 | A1348408  | Hs.124675 | ESTs, Weakly similar to T14742 hypotheti   | 2.25 | 4.05 |
|    | 425722 | A1659076  | Hs.97031  | hypothetical protein MGC13047              | 2.25 | 3.44 |
| 80 | 436648 | R18656    |           | ESTs                                       | 2.24 | 3.23 |
|    | 452250 | BE618654  | Hs.28607  | hypothetical protein A-211C6.1             | 2.23 | 3.08 |
|    | 441715 | A1929453  | Hs.342655 | Homo sapiens cDNA FLJ13289 fis, clone OV   | 2.23 | 3.30 |
|    | 423397 | NM_001838 | Hs.1652   | chemokine (C-C motif) receptor 7           | 2.22 | 3.25 |
|    | 449626 | AA774247  | Hs.301637 | zinc finger protein 258                    | 2.21 | 3.14 |



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|    |        |           |           |   |      |       |
|----|--------|-----------|-----------|---|------|-------|
|    | 412975 | T70956    | Hs.75106  | clusterin (complement lysis inhibitor, S      | 2.18 | 3.41  |
|    | 418739 | AA310964  | Hs.88012  | SHP2 interacting transmembrane adaptor        | 2.15 | 3.62  |
|    | 418185 | AW958272  | Hs.347326 | intercellular adhesion molecule 2 (ICAM       | 2.09 | 5.21  |
|    | 436420 | AA443966  | Hs.31595  | ESTs  | 2.07 | 3.81  |
| 5  | 418174 | L20688    | Hs.83656  | Rho GDP dissociation inhibitor (GDI) bet      | 2.05 | 3.14  |
|    | 420626 | AF043722  | Hs.99491  | RAS guanyl releasing protein 2 (calcium       | 2.01 | 4.42  |
|    | 428289 | M26301    | Hs.2253   | complement component 2                        | 2.00 | 3.33  |
|    | 429683 | AF148213  | Hs.211604 | a disintegrin-like and metalloprotease (      | 2.00 | 3.75  |
| 10 | 421445 | AA913059  | Hs.104433 | Homo sapiens, clone IMAGE:4054868, mRNA       | 1.96 | 3.68  |
|    | 450300 | AL041440  | Hs.58210  | ESTs, Highly similar to ITH4_HUMAN INTER      | 1.91 | 4.84  |
|    | 416445 | AL043004  | Hs.79337  | KIAA0135 protein                              | 1.91 | 3.41  |
|    | 409817 | BE295464  | Hs.56607  | Williams-Beuren syndrome chromosome regi      | 1.87 | 3.53  |
|    | 416967 | BE616731  | Hs.80645  | interferon regulatory factor 1                | 1.86 | 3.55  |
|    | 437740 | AA810265  | Hs.122915 | ESTs  | 1.86 | 3.79  |
| 15 | 437938 | AI950087  |           | gb:wg05c02.x1 NCL_CGAP_Kid12 Homo sapien      | 1.83 | 3.42  |
|    | 425240 | AA306495  | Hs.1869   | phosphoglucosyltransferase 1                  | 1.83 | 3.75  |
|    | 406972 | M32053    |           | gb:Human H19 RNA gene, complete cds.          | 1.80 | 4.03  |
|    | 430378 | Z29572    | Hs.2556   | tumor necrosis factor receptor superfam       | 1.78 | 3.53  |
| 20 | 437470 | AL390147  | Hs.134742 | hypothetical protein DKFZp547D065             | 1.78 | 3.39  |
|    | 416350 | AF188625  | Hs.189507 | phospholipase A2, group IID                   | 1.78 | 5.48  |
|    | 417852 | AJ250562  | Hs.82749  | transmembrane 4 superfamily member 2          | 1.78 | 4.88  |
|    | 414682 | AL021154  | Hs.76884  | inhibitor of DNA binding 3, dominant neg      | 1.77 | 5.79  |
|    | 444090 | S69115    | Hs.10306  | natural killer cell group 7 sequence          | 1.74 | 3.41  |
|    | 427278 | AL031428  | Hs.174174 | KIAA0601 protein                              | 1.74 | 3.80  |
| 25 | 418618 | U66097    | Hs.86724  | GTP cyclohydrolase 1 (dopa-responsive dy      | 1.73 | 4.21  |
|    | 420397 | NM_007018 | Hs.97437  | centrosomal protein 1                         | 1.73 | 3.21  |
|    | 418678 | NM_001327 | Hs.167379 | cancer/testis antigen (NY-ESO-1)              | 1.73 | 3.77  |
|    | 459245 | BE242623  | Hs.31939  | manic fringe (Drosophila) homolog             | 1.72 | 3.12  |
| 30 | 425356 | BE244879  | Hs.155939 | inositol polyphosphate-5-phosphatase, 14      | 1.71 | 3.55  |
|    | 423984 | AF163825  | Hs.136713 | pre-B lymphocyte gene 3                       | 1.70 | 7.70  |
|    | 422355 | AW403724  | Hs.300697 | coagulation factor VII (serum prothrombi      | 1.70 | 3.10  |
|    | 451579 | AW607731  | Hs.26670  | Human PAC clone RP3-515N1 from 22q11.2-q      | 1.68 | 4.19  |
|    | 451287 | AK002158  | Hs.26194  | likely homolog of mouse immunity-associa      | 1.68 | 5.76  |
| 35 | 416819 | U77735    | Hs.80205  | pim-2 oncogene                                | 1.67 | 3.17  |
|    | 409896 | AW205479  | Hs.279780 | NY-REN-18 antigen                             | 1.67 | 3.74  |
|    | 447532 | AK000614  | Hs.18791  | hypothetical protein FLJ20607                 | 1.66 | 3.62  |
|    | 426666 | AW500131  | Hs.171763 | CD22 antigen                                  | 1.65 | 4.67  |
|    | 412265 | AA101325  | Hs.86154  | hypothetical protein FLJ12457                 | 1.65 | 3.43  |
| 40 | 416971 | R34657    | Hs.80658  | uncoupling protein 2 (mitochondrial, pro      | 1.64 | 3.66  |
|    | 430449 | AA352723  | Hs.241471 | RNB6  | 1.62 | 3.09  |
|    | 424661 | M29551    | Hs.151531 | protein phosphatase 3 (formerly 2B), cat      | 1.61 | 3.37  |
|    | 453027 | AI879341  | Hs.539    | ribosomal protein S29                         | 1.61 | 11.60 |
|    | 410068 | AI633888  | Hs.58435  | FYN-binding protein (FYB-120/130)             | 1.60 | 3.28  |
| 45 | 440446 | NM_013385 | Hs.7189   | pleckstrin homology, Sec7 and coiled/coi      | 1.59 | 3.14  |
|    | 453657 | W23237    | Hs.296162 | AD037 protein                                 | 1.59 | 3.12  |
|    | 418102 | R58958    | Hs.26608  | hypothetical protein MGC15880                 | 1.58 | 3.55  |
|    | 424614 | X54486    | Hs.151242 | serine (or cysteine) proteinase inhibito      | 1.58 | 3.07  |
|    | 406791 | AI220684  | Hs.347939 | hemoglobin, alpha 2                           | 1.55 | 5.06  |
| 50 | 421703 | AI936513  | Hs.1416   | Fc fragment of IgE, low affinity II, rec      | 1.53 | 3.59  |
|    | 421859 | AA356620  | Hs.108947 | KIAA0050 gene product                         | 1.52 | 3.41  |
|    | 416783 | AA206186  | Hs.79889  | monocyte to macrophage differentiation-a      | 1.52 | 3.28  |
|    | 456086 | AL161999  | Hs.77324  | eukaryotic translation termination facto      | 1.47 | 3.34  |
|    | 425783 | AI026740  | Hs.1948   | ribosomal protein S21                         | 1.46 | 4.95  |
| 55 | 407682 | AL035858  | Hs.3807   | FXRD domain-containing ion transport reg      | 1.46 | 3.48  |
|    | 409169 | F00991    | Hs.50889  | (clone PWHLC2-24) myosin light chain 2        | 1.45 | 3.25  |
|    | 435624 | AF218942  | Hs.24889  | formin 2                                      | 1.45 | 3.11  |
|    | 413969 | X14034    | Hs.75648  | phospholipase C, gamma 2 (phosphatidyl        | 1.45 | 3.33  |
|    | 426530 | U24578    | Hs.278625 | complement component 4A                       | 1.44 | 4.27  |
| 60 | 425928 | S55736    | Hs.238852 | ESTs, Weakly similar to hypothetical pro      | 1.44 | 3.65  |
|    | 418219 | AA731836  | Hs.137319 | ESTs  | 1.43 | 4.01  |
|    | 429071 | AW794126  | Hs.195453 | ribosomal protein S27 (metalloprotein-stimuli | 1.41 | 4.23  |
|    | 418473 | AA243335  | Hs.309943 | nuclear body protein Sp140                    | 1.41 | 3.29  |
|    | 423766 | AA303799  | Hs.300141 | ribosomal protein L39                         | 1.40 | 3.22  |
| 65 | 430150 | L05148    | Hs.234569 | zeta-chain (TCR) associated protein kina      | 1.39 | 3.29  |
|    | 416370 | N90470    | Hs.203697 | CD38 antigen (p45)                            | 1.36 | 3.08  |
|    | 406758 | AA552326  | Hs.77039  | ATP synthase, H transporting, mitochondr      | 1.32 | 3.29  |
|    | 448610 | NM_006157 | Hs.21602  | nel (chicken)-like 1                          | 1.31 | 3.85  |
|    | 444674 | BE562200  | Hs.244    | amino-terminal enhancer of split              | 1.30 | 3.10  |
| 70 | 407694 | U77594    | Hs.37682  | retinoic acid receptor responder (tazaro      | 1.30 | 3.91  |
|    | 427349 | AA360154  | Hs.177415 | Finkel-Biskis-Reilly murine sarcoma viru      | 1.28 | 3.59  |
|    | 419032 | W81330    | Hs.99877  | ESTs, Highly similar to JAK3B [H.sapiens      | 1.28 | 3.21  |
|    | 436553 | AW407157  | Hs.8997   | immunoglobulin lambda locus                   | 1.27 | 4.00  |
|    | 415138 | C18356    | Hs.295944 | tissue factor pathway inhibitor 2             | 1.24 | 3.25  |
| 75 | 406623 | X69392    |           | ribosomal protein L26                         | 1.24 | 3.31  |
|    | 437895 | AB014568  | Hs.5898   | KIAA0668 protein                              | 1.21 | 3.33  |
|    | 421143 | AB024536  | Hs.102171 | immunoglobulin superfamily containing le      | 1.18 | 3.35  |

TABLE 53B:

Pkey: Unique Eos probeset identifier number  
CAT number: Gene cluster number  
Accession: Genbank accession numbers

Pkey CAT Number Accession

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|    |        |          |   |
|----|--------|----------|---|
| 5  | 441623 | 3362_1   | BC022413 BE395396 BF754175 AA506621 BE706665 BE706678 AA723159 BE153169 BE706729 BE706558 BE153312 BE706706 AW371853<br>AW371849 BE153241 BC017410 AI337912 AI090244 AW090300 BE219837 AI623661 BE501576 BE501734 AI742232 AI023964 AI458424 AA975373<br>AI288904 AI984583 AA890325 N32562 AI358102 AW241694 AI038448 AI672071 AI018389 AA576391 AA977874 AW189392 W37448 AA612694<br>AI277548 H89551 AI699774 H89365 AA579186 BC014584 BC014581 AW780125 AI672414 BE328145 AW600919 BF031306 AW172758<br>BE708322 AA345675 BE875779 H28241 H25318 BF540913 BG179688 BF110202 AA528775 W37573 BE041644 AW366504 BM129522 BM129822<br>AI122760 BE718200 AW887496 AA149420 BE706307 BE539395 BE748765 AI373653 R75904 BF979185 BF691393 BG495595 BI094458 BE706702<br>BG496559 BF248373 BG494800  |
|    | 416373 | 3442_1   | AK056582 AW755252 AL596757 BF827376 BF827373 BF827375 BF827369 BF826900 F01252 BC022888 BE850312 AA195845 BF825671 BF574821<br>Z21696 F32854 AA211780 F21569 AI288453 AI803678 AA180309 AI074627 AA192950 AA661688 F36698 F32290 F28773 F22692 AA424993   |
| 10 | 433470 | 6624_1   | AW340328 AA192247 BF672229 BF575143 BF673106 BF693623<br>X75684 AL573167 AI445461 AI453743 AI983655 AI564644 AA977180 AI694111 AI591358 AW071625 AI678712 AI720939 AI927769 BE439796<br>AI963432 AA292956 AW192593 AI865838 AI696905 AI424384 AI161312 AI911921 AI597801 BI494959 AI240988 AI492554 AW262737 BE044033<br>AW008570 AW629505 BI494958 AA088439 AA706057 BF222820 BF593608 BE501957 AA524526 BE044134 AW572531 AW015724 BE349186<br>AA043217 BE219784 AI799814 AI129575 AI671727 AI470033 BE646195 AW779725 AA903050 AA147228 AA404570 AI075878 W38161 AI972739<br>AW673152 AA723200 C06123 BF057147 AA627686 AA157944 AI990245 AA662517 T32487 AI800106 AI333170 AI859160 W45410 AI990627<br>AW275048 AA182640 AA478328 AI298935 AW085158 AW471421 AW103470 AW300456 AW191997 AI823466 AA952397 AA136658 AI251817<br>AW339104 AA724739 AA411100 AA191349 AA757735 AA037696 AI769516 AW772283 AA010631 AI692846 AI061065 H80983 R79933 AI950693<br>AI245632 AI349390 AA148284 AI798502 AA487893 AI621320 AW194272 C06365 AA953883 BE858936 AI918523 AI872628 AI927217 AI453453<br>AI189366 AW338678 AI261359 AI500576 BF477735 AI032569 AI972899 AI985583 Z28771 AI363829 AI693030 AA603586 BE773488 AW339301<br>BE173489 BE773462 BE773495 AI650038 BE773499 AI745717 BE811475 BE811470 BE811464 BE811418 BE811415 BE811410 BE811398<br>BE811388 BE811352 BE773501 BE773494 BE773486 BE773474 BE773473 BE773470 BE773461 BE811350 BE811337 BF953847 BG055071<br>AW675302 BF003068 AA719173 BE811348 AI582462 AI686240 BE773500 AI244845 AI565439 AI918453 AI472527 AI446740 AA035576 AA191414<br>AW674145 C05782 AI589264 D57558 AI468237 AI432033 AA989662 R21752 BF002457 AA988297 AL574095 AL575200 AL571074 AL574525<br>AL578810 BG498381 AI928364 BE879732 AA479834 AA479712 C17732 BM091258 BF843901 AW820230 C17476 BE327120 AA129574 AA136645<br>BF843900 AW806193 AA502832 AA649494 AI568520 AL547960 BE706937 BE811360 BE773498 BE811401 BE773484 BE811437 BE811380<br>BE811399 BF997171 BF757734 BE926037 AI377596 C06111 AW088968 BE811404 BE811472 AI865912 AI925607 AI871950 AI093510 BE905927<br>BE811435 AA191387 AW772000 BE811453 BE614379 BF844522 BI044896 AI744233 AW984527 C17504 BF843883 AI248307 BE773483 AI567995<br>W60075 BF941183 AI738844 BE811458 BE773481 AI262930 AA948565 BE706942 BE156360 T65026 AW242958 AW197954 BE905184 AA722206<br>AI344943 AI348877 AI334860 BE621857 BE156280 AA454099 AA037722 BF843897 AW806183 AA043216 BC482896 AA182734 AA877242<br>AW372926 H27252 R38114 BF851858 BE156214 AA190427 T91762 AA035067 AA837326 T10930 BF906587 BI755027 BG506731 BC008442<br>BC010166 AL550134 AL553096 AL548700 AL550751 AL547978 AL545286 AL540643 AU118627 AL601379 BI259821 CG741786 BI868522 AU135866<br>BI552770 BI259210 BI256520 BI255569 BG485098 BI258228 BG498501 BM044512 AU133984 AL556586 BE745111 BI222633 AU133917 BG288151<br>BI260715 BI505050 BG500773 BI551761 BG707601 BI818593 BF691383 BG721129 BG541578 BE906666 BG751098 BI224135 BG400746 BG478065<br>BE790436 AW080238 AU137549 BG429896 BE392486 AW961686 BG721056 BE908365 BE546656 BG541235 AW583735 BG528290 BI260895<br>AW651691 BM048974 BM043805 BG142185 AA315188 AI446615 C06300 BG497644 AA088544 AI815987 BG528631 BE619182 AW239185<br>AW062910 AW062902 AA347236 F11933 AA488005 AA301631 AA376800 D56120 AA343532 AA308636 F00242 AA376086 AA316968 AA343799<br>BI870221 BE910282 BG538748 AW960564 AV732879 D16854 AA192519 BF922148 AA216013 BG624091 BE544387 BG507008 AW176446<br>BF790033 BE088925 BE088854 AA921353 R21800 AA011222 T97525 |
|    | 409245 | 3199_2   | AF030234 BC017465 BG008526 AW505550 BM460141 N47324 AA361037 AA321632 N45606 AV752798 AV657116 AA296632 AU137857 AW467027<br>AI742080 AI624350 H58206 AA478518 AW439997 AW393555 AW393523 AI559753 AI808732 R66856 H01374 BI257369 BI259830 AW960845<br>BM456252 AW956813 BE768647 AV658853 BM055248 BF372070 BF372055 BF372061 AA347852 AA905863 BG505078 AV654024 BF093291<br>AW021929 H22650 AA459715 BG496341 BE697763 BI254209 BG499543 H42946 BI059780 BI086741 H87896 H87599 BF691752 BE768511<br>BG940948 W37195 BF372041 BE883796 BF372082 BF367329 BF909744 AW966003 AV714014 BI492868 BI495144 AA921845 AI693426 AI652147<br>AI435449 N47325 AI434429 AA573137 AI183429 AI829962 AI332526 BF513937 AI189561 AI221962 AI378034 AW118897 AW665247 AW340077<br>N41605 AA478519 AA463875 AI858260 AA463379 AI292305 BE045947 AA971089 AI215820 BG940947 AI080245 AA884954 AI125702 AI382934<br>AA931835 AI358631 AW439905 AI027833 AI399648 AI014533 AA347851 AA738261 N67374 N69081 AI768667 AA948472 AI819214 AA293133<br>AI186725 AA889214 AI222635 BI495143 N29605 N48812 AA769041 AI492769 D56771 AA059311 BE222062 D56772 AW372265 BM054985 D12465<br>BG534562 AW003511 H87486 H42880 AW190293 BF594697 BF377611 H22043 BI255749 BI492848 H16217 H21980 H22651 H88179 H87354 H44052<br>H25165 H44128   |
| 50 | 417141 | 9517_1   | AI391712 U22662 NM_005693 AW166878 BF339795 AI970974 AI521157 AI336082 AW339789 AI288682 BF477594 BF477593 AI703008 AI290961<br>AI049684 AW770753 AI208561 AI699406 F33996 AA630563 AI985346 AI927058 AA533982 AW204589 AI205938 AW590068 AI263769 AA91550<br>AI192005 AI558945 AL524337 AL516239 AL580848 AL580658 AI719135 AW026500 AI698217 AI872977 AI670983 AI654870 AA493407 AA548525<br>AI016420 AA843563 W15576 H61726 AA913245 BF438146 AL524338 BI762380 AU136488 BI759892 AV655930 T78977 BI524075 BE538944<br>AA527161 BG211784 AA527065 AA505489 AW512550<br>BC022323 AF204171 NM_022361 BM264431 BE670789 AW188117 AI025298 AA861832 H84897 AI382294 AA662874 AW993380 BE813742 H84368<br>AI188074 N20482 H84369  |
|    | 425231 | 235504_1 | M59287 AI936504 AI694705 AI679216 AI679235 BF110184 AW518110 AI679811 AW054981 BE465531 BE327409 AW339105 BI714787 AI871568<br>AW129115 AU145080 AI223299 AW129986 AA780771 BG654629 AU144657 BF437422 AI478374 AA492513 AU157562 AI826962 AU145528<br>AI951093 AW513819 AA042856 AA725690 AA733176 AI028702 AI251890 AI811729 AW975208 AW339589 AI147868 AU157862 AA629327 BF476670<br>BE464796 AW510511 AA399098 AA398210 AI291998 AI160296 AU158075 N34811 BE326407 AI270552 AA496923 AA508002 AI270284 AI139504<br>BF437009 AI354626 AI936336 AA287250 AA491855 BF445818 AA688026 AA284510 AW151564 AA412072 AA705241 H89332 BF445769 BF989466<br>BF989472 AA631105 AI129915 W96362 AA515277 AA541513 L29222 AV758119 D82109 AL040956 BE244413 AV645640 BE246321 BE246314<br>D82116 AL036176 AA331779 AU100106 BE243857 AU076865 AW972327 AA497087 AI687039 AW072798 AI174455 AU156788 AA044401 AA046086<br>BE244986 AI634456 BE242945 BE242089 AU156034 BE244982 AL567955 BI005141 AA040426 AW630506 BF155668 AU118544 BG573573 W96436<br>AA373395 BE710347 AL564154 AI708332 AA729530 N92729 AI573015 T29655 H89333 H85847 AI886473 AW189980 H02905 AI811986 AU157753<br>W86829 AA020844 AU158204 AA057356 AA283466 AA405504 AA017027 W94754 AA225498 W72391 H56461 C00442 H01925 BI912232  |
| 55 | 419631 | 2743_1   | U77534 U77537<br>AK056270 AV706896 AI692935 AI681140 AW162481 AW087114 AW157019 AI689795 AW251085 AW206911 BF438207 AW134945 BE041668<br>BF111425 U91641 NM_013305 BF968902 U55966 AU130750 BE174853 AI929731 AW161524 R43753 BE779688<br>AIJ002788 AL118666 AI381600 BE572862 AW500520 BF223709 AW593740 AA262174 AA810597 AA810596 AA810595 F09382 BF976590 AW968002<br>AA262288 BF931698 AW968014 R18656 BM459356 AW794189 BF954184 Z42558 BF891641 BF963380 Z45874 F05187 X93079 BF742651 BF742649<br>R51324 D80031 BI457883 F06613 Z43128 F12243 BF950830 H19040 BF950829 F06439 R14947 F06702 R61037 R52173 R14953 R12174 R13610<br>H10426 R11851 T65264 R18737   |
|    | 426969 | 12113_1  | U71456 AA482911 W78802 AW856538 BF373212 N36809 N35320 AA282915 AW505512 AI653832 W87891 AI961530 T85904 H59397 R97278<br>W01059 AI820532 T82391 AI820501 T63226 R66056 R67840 AW961101 AA337499 W37181 AA180009 AW205882 AA988777 AA856975 BF172457<br>BG751124 AI741346 AI950344 AI689062 AI872193 AW102898 AW173586 AI763273 AI890387 AW150329 AI762688 AA488892 AI356394 AI539642<br>AA642789 AI950087 BF589902 N70208 AA283144 AA488964 H60052 R97040 BF886630 AW967677 AW971573 AW967671 AI308119 AA251875<br>AA908598 AI819225 AI564269 AA908741 AA923273 AA969759 AW276905 AA044209 H83488 T92487<br>X69392 T24055  |
| 60 | 406678 | 0_0      |   |
|    | 449092 | 4406_1   |   |
| 65 | 436648 | 52977_1  |   |
|    | 437938 | 66997_1  |   |
| 70 |        |          |   |
|    |        |          |   |
| 75 |        |          |   |
|    |        |          |   |
| 80 | 406623 | 0_0      |   |
|    |        |          |   |

TABLE 53C:

Pkey:

Unique number corresponding to an Eos probeset

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Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.

Strand: Indicates DNA strand from which exons were predicted.

Nt\_position: Indicates nucleotide positions of predicted exons.

| Pkey   | Ref     | Strand | Nt_position                              |
|--------|---------|--------|--|
| 405545 | 1054740 | Plus   | 118677-118807,119091-119296,121626-12182 |
| 401566 | 8469090 | Minus  | 96277-96420,96979-97160                  |
| 405547 | 1054740 | Plus   | 124361-124520,124914-125050              |

TABLE 54A: ABOUT 161 GENES UPREGULATED IN PRIMARY MELANOMAS FROM TUMORS THAT LATER METASTASIZED RELATIVE TO PRIMARY MELANOMAS THAT DID NOT METASTASIZE LATER

Table 54A lists about 161 genes upregulated in primary melanomas from tumors that later metastasized relative to primary melanomas that did not metastasize later. These genes were selected from 59680 probesets on the Eos/Affymetrix Hu03 Genechip array. Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

Pkey: Unique Eos probeset identifier number

ExAccn: Exemplar Accession number, Genbank accession number

UnigenelD: Unigene number

Unigene Title: Unigene gene title

R1: 90th percentile of AIs for primary melanomas that later metastasized divided by the 90th percentile of AIs for primary melanomas that did not metastasize later

R2: 90th percentile of AIs for primary melanomas that later metastasized divided by the 90th percentile of AIs for primary melanomas that did not metastasize later, where the 15th percentile of normal tissue AIs was subtracted from both the numerator and denominator

| Pkey   | ExAccn   | UnigenelD | Unigene Title                             | R1   | R2   |
|--------|----------|-----------|---|------|------|
| 448966 | AW372914 | Hs.85149  | phosphoinositid 3-phosphate-binding prot  | 7.15 | 3.41 |
| 413916 | N49813   | Hs.75615  | apolipoprotein C-II                       | 5.93 | 6.55 |
| 414807 | A1738616 | Hs.77348  | hydroxyprostaglandin dehydrogenase 15-(N  | 5.64 | 2.98 |
| 415668 | AW957684 | Hs.306814 | hypothetical protein FLJ21889             | 5.03 | 4.56 |
| 440274 | R24595   | Hs.7122   | scrapie responsive protein 1              | 4.98 | 4.83 |
| 417542 | J04129   | Hs.82269  | progesterone-associated endometrial prote | 4.96 | 7.07 |
| 427882 | AA640987 | Hs.193767 | ESTs                                      | 4.68 | 4.68 |
| 452744 | A1267652 | Hs.246107 | Homo sapiens mRNA; cDNA DKFZp434E082 (fr  | 4.29 | 3.06 |
| 407907 | A1752235 | Hs.41270  | procollagen-lysine, 2-oxoglutarate 5-dio  | 3.94 | 3.86 |
| 424410 | V79027   | Hs.271752 | ESTs                                      | 3.67 | 3.19 |
| 429083 | Y09397   | Hs.227817 | BCL2-related protein A1                   | 3.46 | 2.49 |
| 407951 | W77762   | Hs.79015  | antigen identified by monoclonal antibod  | 3.31 | 3.06 |
| 428330 | L22524   | Hs.2256   | matrix metalloproteinase 7 (matrilysin,   | 3.27 | 2.12 |
| 440099 | AL080058 | Hs.6909   | DKFZP564G202 protein                      | 3.22 | 2.69 |
| 428001 | H97428   | Hs.219907 | ESTs, Moderately similar to Transforming  | 3.20 | 1.85 |
| 451099 | R52795   | Hs.25954  | interleukin 13 receptor, alpha 2          | 3.18 | 4.61 |
| 442432 | BE093589 | Hs.38178  | hypothetical protein FLJ23468             | 3.13 | 2.11 |
| 430643 | AW970065 | Hs.287425 | MEGF10 protein                            | 3.10 | 3.31 |
| 412252 | W26406   |           | seven in absentia (Drosophila) homolog 1  | 3.06 | 3.94 |
| 438328 | A1492261 | Hs.32450  | ESTs                                      | 3.05 | 3.09 |
| 409760 | AA302840 |           | gb:EST10534 Adipose tissue, white I Homo  | 3.01 | 2.65 |
| 453912 | AL121031 |           | SWI/SNF related, matrix associated, acti  | 2.94 | 1.86 |
| 416426 | AA180256 | Hs.210473 | Homo sapiens cDNA FLJ14872 fis, clone PL  | 2.91 | 3.70 |
| 407744 | AB020629 | Hs.38095  | ATP-binding cassette, sub-family A (ABC1  | 2.88 | 2.53 |
| 453935 | A1633770 | Hs.42572  | ESTs                                      | 2.88 | 2.00 |
| 452689 | F33868   | Hs.284176 | transferrin                               | 2.84 | 6.47 |
| 449550 | AA353125 | Hs.184721 | ESTs                                      | 2.83 | 4.74 |
| 409417 | AA156247 | Hs.104879 | serine (or cysteine) proteinase inhibito  | 2.82 | 2.43 |
| 438898 | A1819863 | Hs.106243 | ESTs                                      | 2.81 | 2.08 |
| 430191 | A1149880 | Hs.188809 | ESTs                                      | 2.80 | 2.69 |
| 408418 | AW963897 | Hs.44743  | KIAA1435 protein                          | 2.79 | 1.75 |
| 450157 | AW961576 | Hs.60178  | ESTs                                      | 2.77 | 3.40 |
| 420380 | AA640891 | Hs.102406 | ESTs                                      | 2.77 | 4.28 |
| 443172 | AW662964 | Hs.199061 | p300/CBP-associated factor                | 2.75 | 2.88 |
| 456629 | AW891965 |           | histone deacetylase 3                     | 2.72 | 2.24 |
| 407857 | A1928445 | Hs.92254  | synaptotagmin-like 2                      | 2.72 | 1.93 |
| 421097 | A1280112 | Hs.125232 | Homo sapiens cDNA FLJ13266 fis, clone OV  | 2.68 | 2.59 |
| 436280 | A1690734 |           | Homo sapiens cDNA: FLJ22562 fis, clone H  | 2.67 | 2.79 |
| 407550 | Y10515   |           | gb H.sapiens mRNA for CD58 T7 protein.    | 2.65 | 1.98 |
| 427871 | AW992405 | Hs.59622  | Homo sapiens, clone IMAGE:3507281, mRNA,  | 2.64 | 1.76 |
| 427899 | AA829286 | Hs.332053 | serum amyloid A1                          | 2.59 | 3.01 |
| 442793 | A1017798 |           | ESTs, Weakly similar to T147_HUMAN CARGO  | 2.58 | 1.60 |
| 446619 | AU076543 | Hs.313    | secreted phosphoprotein 1 (osteopontin,   | 2.57 | 1.91 |
| 444381 | BE387335 | Hs.283713 | ESTs, Weakly similar to S64054 hypothe    | 2.57 | 2.13 |
| 458247 | R14439   | Hs.209194 | ESTs                                      | 2.56 | 2.61 |
| 451668 | Z43948   | Hs.326444 | cartilage acidic protein 1                | 2.52 | 2.74 |
| 433980 | AA137152 | Hs.286049 | phosphoserine aminotransferase            | 2.51 | 1.88 |
| 412719 | AW016610 | Hs.816    | ESTs                                      | 2.50 | 1.68 |
| 441789 | D52059   | Hs.7972   | KIAA0871 protein                          | 2.50 | 3.11 |
| 405885 |          |           | Target Exon                               | 2.50 | 3.15 |
| 453464 | A1884911 | Hs.32989  | receptor (calcitonin) activity modifying  | 2.48 | 3.33 |
| 417821 | BE245149 | Hs.82643  | protein tyrosine kinase 9                 | 2.48 | 1.66 |
| 450202 | AW969756 | Hs.34145  | ESTs, Weakly similar to B49647 GTP-bind   | 2.47 | 2.79 |
| 436825 | AW341123 | Hs.120275 | ESTs                                      | 2.47 | 2.55 |
| 424762 | AL119442 | Hs.183684 | eukaryotic translation initiation factor  | 2.42 | 2.28 |
| 432426 | AW973152 | Hs.31050  | ESTs                                      | 2.42 | 1.76 |
| 409095 | AW337272 | Hs.293656 | ESTs, Moderately similar to S72481 proba  | 2.41 | 2.41 |
| 403752 |          |           | NM_002753~Homo sapiens mitogen-activate   | 2.41 | 2.87 |

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|    |        |           |   |      |      |
|----|--------|-----------|---|------|------|
|    | 404489 |           | Target Exon                               | 2.39 | 1.97 |
|    | 411690 | AA669253  | RNA, U2 small nuclear                     | 2.37 | 2.54 |
|    | 439195 | H89360    | gb: yw28d08.s1 Morton Fetal Cochlea Homo  | 2.37 | 2.27 |
| 5  | 453582 | AW854339  | Hs.33476                                  | 2.36 | 2.81 |
|    | 438461 | AW075485  | Hs.286049                                 | 2.35 | 2.91 |
|    | 432878 | BE386490  | Hs.279663                                 | 2.35 | 2.28 |
|    | 416647 | BE297139  | Hs.79411                                  | 2.33 | 1.97 |
|    | 428666 | AL080190  | Hs.189242                                 | 2.32 | 2.92 |
| 10 | 413645 | AA130992  | gb: zo15e02.s1 Stratagene colon (937204)  | 2.31 | 2.63 |
|    | 421282 | AA286914  | Hs.40782                                  | 2.31 | 1.85 |
|    | 434418 | AF134707  | Hs.278679                                 | 2.31 | 2.21 |
|    | 413204 | BE071603  | gb: QV3-BT0510-161299-032-f03 BT0510 Homo | 2.31 | 1.49 |
|    | 449720 | AA311152  | Hs.288708                                 | 2.30 | 1.78 |
|    | 451838 | AW005866  | Hs.193969                                 | 2.28 | 2.05 |
| 15 | 410943 | AW968322  | Hs.11156                                  | 2.28 | 2.39 |
|    | 459711 | BE386801  | Hs.21858                                  | 2.27 | 2.39 |
|    | 429489 | AF008203  | Hs.204039                                 | 2.26 | 1.97 |
|    | 429493 | AL134708  | Hs.145998                                 | 2.26 | 2.77 |
|    | 422283 | AW411307  | Hs.114311                                 | 2.26 | 1.78 |
| 20 | 441989 | AA306207  | Hs.286241                                 | 2.26 | 1.84 |
|    | 419352 | AI675008  | Hs.199493                                 | 2.25 | 1.47 |
|    | 427393 | AB029018  | Hs.177635                                 | 2.25 | 1.83 |
|    | 418522 | AA605038  | Hs.7149                                   | 2.24 | 2.42 |
|    | 433468 | AA832055  | Hs.172843                                 | 2.24 | 1.76 |
| 25 | 452782 | AA028166  | Hs.17733                                  | 2.24 | 2.34 |
|    | 443910 | AW051711  | Hs.132440                                 | 2.24 | 1.79 |
|    | 408832 | AW085690  | Hs.63428                                  | 2.22 | 1.52 |
|    | 407283 | TS1008    | gb: yb55e08.s1 Stratagene ovary (937217)  | 2.22 | 1.31 |
| 30 | 437376 | AA749400  | Hs.257890                                 | 2.22 | 2.44 |
|    | 450712 | AI732130  | Hs.270496                                 | 2.22 | 1.62 |
|    | 421362 | AK000050  | Hs.103853                                 | 2.22 | 2.36 |
|    | 445183 | AB007877  | Hs.12385                                  | 2.20 | 1.84 |
|    | 438501 | Z44110    | Hs.86149                                  | 2.20 | 1.76 |
| 35 | 432882 | NM_013257 | Hs.279696                                 | 2.19 | 1.59 |
|    | 414900 | AW452420  | Hs.248678                                 | 2.18 | 1.89 |
|    | 427704 | AW971063  | Hs.292882                                 | 2.17 | 1.86 |
|    | 404942 |           | splicing factor, arginine/serine-rich 9   | 2.17 | 1.86 |
|    | 448019 | AW947164  | Hs.195641                                 | 2.17 | 1.64 |
| 40 | 459254 | AA694386  | Hs.290914                                 | 2.16 | 1.61 |
|    | 418965 | AI002238  | Hs.11482                                  | 2.16 | 1.79 |
|    | 443357 | AW016773  | low molecular mass ubiquinone-binding pr  | 2.16 | 2.32 |
|    | 412432 | AA126311  | Hs.9879                                   | 2.15 | 2.73 |
|    | 449567 | AI907090  | Hs.188614                                 | 2.08 | 2.85 |
| 45 | 433179 | AW362945  | Hs.162459                                 | 2.07 | 4.77 |
|    | 408243 | Y00787    | Hs.624                                    | 2.05 | 3.12 |
|    | 435294 | T84084    | Hs.196008                                 | 1.97 | 2.89 |
|    | 449656 | AA002008  | Hs.188633                                 | 1.94 | 3.60 |
|    | 412649 | NM_002206 | Hs.74369                                  | 1.93 | 2.76 |
| 50 | 445162 | AB011131  | Hs.12376                                  | 1.93 | 2.66 |
|    | 419356 | AI656166  | Hs.7331                                   | 1.92 | 3.39 |
|    | 424263 | M77640    | Hs.1757                                   | 1.89 | 3.10 |
|    | 414694 | NM_015362 | Hs.76907                                  | 1.88 | 4.25 |
|    | 415825 | Y18024    | Hs.78877                                  | 1.87 | 2.66 |
| 55 | 409105 | AW467539  | Hs.255877                                 | 1.87 | 2.96 |
|    | 444784 | D12485    | Hs.11951                                  | 1.85 | 2.80 |
|    | 404149 |           | ectonucleotide pyrophosphatase/phosphodi  | 1.84 | 2.93 |
|    | 406387 |           | C6002509*:g 5031885 re NP_005568.1  i     | 1.82 | 2.96 |
|    | 420871 | AA702972  | Hs.65300                                  | 1.76 | 3.12 |
| 60 | 455797 | BE091833  | gb: IL2-BT0731-260400-076-F04 BT0731 Homo | 1.75 | 3.12 |
|    | 418751 | BE389014  | phosphoinositide-3-kinase, regulatory su  | 1.70 | 3.20 |
|    | 412347 | AW970026  | Hs.73818                                  | 1.67 | 3.65 |
|    | 413211 | AW967107  | Hs.109274                                 | 1.66 | 2.89 |
|    | 459317 | BRCA1b    | Eos Control                               | 1.61 | 7.34 |
| 65 | 425525 | AA358883  | Hs.23871                                  | 1.59 | 2.67 |
|    | 436823 | AW749865  | Hs.117077                                 | 1.56 | 2.76 |
|    | 433669 | AL047879  | Hs.194251                                 | 1.55 | 2.76 |
|    | 424389 | AA339786  | lymphocyte-specific protein 1             | 1.53 | 2.95 |
|    | 426672 | AW270555  | Hs.171774                                 | 1.51 | 3.39 |
| 70 | 415977 | AL037622  | Hs.78935                                  | 1.47 | 2.65 |
|    | 404780 |           | methionine aminopeptidase; eIF-2-associa  | 1.43 | 2.77 |
|    | 436476 | AA326108  | Hs.33829                                  | 1.41 | 3.04 |
|    | 428284 | AA535762  | Hs.183435                                 | 1.38 | 2.94 |
|    | 448571 | AA486794  | Hs.66915                                  | 1.37 | 2.80 |
| 75 | 428156 | BE269388  | Hs.182698                                 | 1.36 | 3.29 |
|    | 447752 | M73700    | Hs.105938                                 | 1.35 | 2.70 |
|    | 447455 | H38335    | Hs.6750                                   | 1.35 | 3.03 |
|    | 453281 | W46280    | Hs.55940                                  | 1.34 | 2.69 |
|    | 413142 | M81740    | Hs.75212                                  | 1.33 | 2.96 |
| 80 | 407194 | AA621644  | gb: af54a01.s1 Soares_total_fetus_Nb2HF8_ | 1.32 | 2.70 |
|    | 444107 | T46839    | Hs.10319                                  | 1.26 | 3.27 |
|    | 406797 | AI432224  | UDP glycosyltransferase 2 family, polype  | 1.26 | 2.72 |
|    | 406711 | N25514    | Hs.77385                                  | 1.25 | 7.10 |
|    | 414608 | BE396215  | Hs.76572                                  | 1.24 | 2.72 |
|    |        |           | ATP synthase, H transporting, mitochondr  |      |      |

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|    |        |           |           |  |      |      |
|----|--------|-----------|-----------|--|------|------|
| 5  | 401846 |           |           | NM_000988*:Homo sapiens ribosomal protei | 1.24 | 2.82 |
|    | 432982 | AA531058  | Hs.182248 | truncated calcium binding protein        | 1.23 | 3.10 |
|    | 428578 | BE391797  | Hs.343588 | ribosomal protein S12                    | 1.23 | 2.74 |
|    | 400199 |           |           | Eos Control                              | 1.21 | 3.58 |
|    | 400079 |           |           | Eos Control                              | 1.20 | 2.99 |
|    | 412623 | R28898    | Hs.74170  | metallothionein 1E (functional)          | 1.19 | 2.63 |
|    | 406713 | U02629    | Hs.77385  | myosin, light polypeptide 6, alkali, smo | 1.19 | 4.15 |
|    | 406712 | M31212    | Hs.77385  | myosin, light polypeptide 6, alkali, smo | 1.18 | 4.75 |
| 10 | 442492 | AA528489  | Hs.234518 | ribosomal protein L23                    | 1.17 | 2.74 |
|    | 431526 | Y10129    | Hs.258742 | myosin-binding protein C, cardiac        | 1.17 | 3.15 |
|    | 436398 | H87136    | Hs.5174   | ribosomal protein S17                    | 1.16 | 3.22 |
|    | 432205 | AI806583  | Hs.125291 | ESTs                                     | 1.15 | 2.76 |
|    | 406859 | AI581134  | Hs.181357 | laminin receptor 1 (67kD, ribosomal prot | 1.09 | 2.66 |
| 15 | 401254 |           |           | Target Exon                              | 1.00 | 3.08 |
|    | 405752 |           |           | Target Exon                              | 1.00 | 2.87 |
|    | 445772 | AI733941  | Hs.145493 | ESTs, Weakly similar to ALU7_HUMAN ALU S | 1.00 | 2.70 |
|    | 452916 | AA642831  | Hs.31016  | putative DNA binding protein             | 1.00 | 2.62 |
|    | 451411 | AA017492  | Hs.135655 | EST                                      | 1.00 | 2.64 |
|    | 415658 | BE501921  | Hs.270471 | ESTs                                     | 1.00 | 2.82 |
| 20 | 448610 | NM_006157 | Hs.21602  | nel (chicken)-like 1                     | 1.00 | 3.30 |

|             |                                       |  |  |
|-------------|---------------------------------------|--|--|
| TABLE 54B:  |                                       |  |  |
| Pkey:       | Unique Eos probeset identifier number |  |  |
| CAT number: | Gene cluster number                   |  |  |
| Accession:  | Genbank accession numbers             |  |  |

|    |        |            |   |
|----|--------|------------|---|
| 25 | Pkey   | CAT Number | Accession   |
|    | 412262 | 4362_1     | AK056051 AI971258 AI681134 AU146134 AI803300 AA917325 AA923663 BF895068 AI304442 AI167464 AI284188 AA054272 AA829262 AI351910 T90930 AI86230 U70055 AW119916 BF446537 BE503207 BE502849 AI698102 AA258553 AV718529 AV719917 BF724133 BI438668 AI804000 BE349103 AI912294 BE645117 AA227954 AA446520 AA879147 AA281770 AW136872 AA807907 AI435989 AI339626 AI383274 AA418512 BE771804 BF894509 AA52593 AI379061 AI150855 BF759906 R17298 AU138740 BF808607 BE74633 AV700132 AA227789 AA253099 AW975199 AA935418 T74315 F12666 AA022923 T89028 AA258606 W26406 BE838620 AV700706 AA101321 R41382 H14479 AA253044 R54810 R42784 R44804 R41278 AA302840 T93016 T92590 AU184997 AA077551 BM472224 R1966849 BI966735 AW973032 BI962894 BI963048 AA548765 AI926504 AA041551 AW043754 AI086702 AW008105 AA974849 AW614893 AA553737 AA916996 AW262982 AI580991 BF726843 AV693312 W35325 AA039927 BG460936 AW388482 AW388420 BF374777 W01360 N94710 H87967  |
| 30 | 409760 | 865166_1   | AW891965 AW604749 BE080872 R15559 BE177623 AW883520 AW945343 AI246167 T07082 AW805679 W96278 AA135796 W32615 AW995418 AW801688 BE003837 AW801621 AW385721 AW385742 AW385714 AW604757 W87409 AW504738 AW385757 AW580796 AW801247 BE003239 BE003183 AA847112 AW580875 AW604760 AW385727 BE164590 BE003090 AW362791 AW604759 AW866589 AW604758 N44337 AI378548 AW890438 AW071772 AI288683 AA229639 AA091945 AW945454 AA063629 AA702504 AW861938 AW894816 AW580841 AA094372 T06399 AW865686 BE244086 BE006035 AW861913 AA551773 AW858460 AW370926 AW754352 AW889695 AW384408 AI907428 BE067491 AW861939 AA248197 AW381373 AW177325 AW806879 AA935217 BE067498 BE083742 BE067440 AW894935 BE082529 AI249811 BE179917 BE002200 AW607506 AW392889 AW894560 AW381360 AI904206 AW863533 C00609 AW381372 BE082530 AW898120 BE075323 AW392799 AW601420 AI695314 BE083790 AW865858 AW945550 BE177153 AW970506 BE350419 AI906919 AW360794 AI906917 AW885979 AW794240 AW945566 AI688683 AI688694 AW009660 AW601421 AW360793 BE066524 BE083901 AW369847 AW381871 AW935435 AW664582 AW877775 AW838449 BE180466 AW858501 BE180464 AI371163 AI778231 AI174991 BE011720 AW877776 AW877800 AW877795 T19900 AW866365 AW898059 BE011715 BE167842 BE011718 BE011724 AW363639 AW878658 AW878662 AW894887 BE082356 AW389211 AW804286 AW610312 AI904717 AW610318 AW996909 AW610296 AW901923 AW880003 AI762171 AW062582 AW368713 AW062593 AW176663 AW842064 AW842089 AW842095 AI243049 AW902074 AW062592 AW176664 AW751692 BE087703 AI907439 BE009686 BE172115 BE077030 AW608556 AW835577 AI909628 BE077029 AW176241 BE077552 BE160370 BE160288 AW835656 AW606765 AW606770 AW835678 AW606758 AW606778 AI907484 BE172821 AW606768 AW999517 AW844165 BE171738 AW751683 AW610493 BE177484 BE177487 AA090510 AW844117 BE173367 AW999878 AI124870 BE163472 AW841823 AW379762 AW893297 AI290296 BE089132 AA610287 AW176676 AW607622 BE172639 AW893232 AA329629 AW089008 BE178350 BE178214 BE063291 AW820236 AW999663 BE089486 BE173126 BE171775 BE185787 AA558280 AI174840 AW999112 BE218391 BE172734 BE178021 BE172738 BE173324 AW603494 AL036722 R38192 R50905 H53721 H41052 AL037917 R37795 AW998972 AA767189 AW044272 H50689 AA768399 AA767764 AI087888 H44202 BE222792 N90597 W81396 N90615 AI935353 BE501168 F10945 AW118215 AI970480 AI627641 AW236081 AA574090 AI627652 AI681913 AI759983 N69591 N69276 BE467722 AW392780 BE172467 H92861 AI524921 F02589 Z39328 F02705 F01414 T88678 AI215165 H87220 AW374781 |
| 35 | 456629 | 207_22     | AK026215 AI201248 BE571206 AA860436 AA730787 AA834507 D79304 D79806 AW961628 AI017068 BE044373 AA322458 AA987927 AA385869 BI492783 AW021853 R79299 N73208 AI016622 N24609 AW192569 AA707819 AI690734 R79189 AI535900 AW589301 AI128434 BE838011 BE837891 BF894555 H95408  |
| 40 |        |            | BG741247 BG741022 AI017798 AI953594 AW445065 AI245087   |
| 45 | 442793 | 417820_2   | BE027091 BF514593 BF768430 BI037830 BE175161 BG000114 BG897171 AA745391 AA669569 AA669253 BI049453 BE304449 BG010136  |
| 50 | 411690 | 53926_1    | BG830874 BF091358 BF762561 T56173 BC003629 BF091330 BE697323 BF091340 BE843330 AA744150 AA745471 W26276 BI037837  |
| 55 | 439195 | 21979_1    | AF086037 H89360 H89546  |
| 60 | 413645 | 1234345_1  | AI130992 AW969537 AA503835  |
| 65 | 413204 | 1494523_1  | BE071616 BE071613 BE071603 BE071587 BE071607 BE071615 BE071636  |
|    | 443357 | 427117_1   | AV715934 BG654600 AI052778 BG057892 AW016773 AI452937 AW085293  |
|    | 455797 | 1511159_1  | BE091833 BE091874 BE091871  |
| 70 | 418751 | 21393_1    | BFG90141 BE159368 AI937311 AU151256 AW341542 AW0574231 AW341609 AW405447 AA843698 AW188066 AW007171 AW007027 AI075008   |
|    | 424389 | 1059_4     | AL520351 AA008892 AW151842 AA6622181 AI273454 AI005661 AA205946 AA677899 AW473512 AW296620 AA872899 AI094216 AI025188 AA256998 AI539154 AI500192 AI289493 AI040740 BE167841 AW151374 BE167754 BF036108 AW2499181 N23237 T62967 W96060 AA574412 AW606697 W96059 R51303 R09158 R59113 T48473 T59023 AW412206 AW606643 R38386 R06567   |
| 75 |        |            | BG190758 AW961118 W77994 AA339877 AW845121 AW845129 BG181820 BE716719 AI125483 AI161017 W73951 AI250771 AA912611 AA339786 BE838286 BE838282 BE716536 AW477158 W94063 BE716628 BE16625 BE838371 BF371044 BE716631 BE716402 AI432224 AW726890 AI499346 AA937014 AA653573 AI318525 AI246219 AA961591 AI270640  |

TABLE 54B:

Pkey: Unique Eos probeset identifier number  
CAT number: Gene cluster number  
Accession: Genbank accession numbers

|    |        |            |   |
|----|--------|------------|---|
| 25 | Pkey   | CAT Number | Accession   |
|    | 412262 | 4362_1     | AK056051 A1971258 AI681134 AU146134 AI803300 AA917325 AA923663 BF895068 AI304442 AI167464 AI284188 AA054272 AA829262 AI351910 T90930 AI886230 U70056 AU119916 BF446537 BE503207 BE502849 AI698102 AA258553 AV718529 AV719917 BF724133 BI438668 AI804000 BE349103 AI912294 BE645117 AA227954 AA446520 AA879147 AA281770 AW136872 AA807907 AI435989 AI339626 AI383274 AA418512 BE771804 BF894509 AA455093 AI379061 AI150855 BF769906 R17298 AU138740 BF808607 BE674633 AV700132 AA227789 AA253099 AW975199 AA935418 T74315 F12666 AA022923 T89028 AA258606 W26406 BE838620 AV700706 AA101321 R41382 H14479 AA253044 R54810 R42784 R44804 R41278 AA302840 T93016 T92950 AU184997 AA077551  |
|    | 409760 | 865166_1   | BM472224 BI966849 BI966735 AW973032 BI962894 BI963048 AA548765 AI926504 AA041551 AW043754 AI086702 AW008105 AA974849 AW614893   |
|    | 453912 | 32562_3    | AA553737 AA916996 AW262962 AI580991 BF726843 AV693312 W35325 AA039927 BG460936 AW388482 AW388420 BF374777 W01360 N94710 H87967  |
|    | 456629 | 207_22     | AW891965 AW604749 BE080872 R15559 BE177623 AW883520 AW945343 AI246167 T07082 AW805679 W96278 AA135796 W32615 AW995418 AW801688 BE003837 AW801621 AW385721 AW385742 AW385714 AW604757 W87409 AW604738 AW385757 AW580796 AW801247 BE003239 BE003183 AA847112 AW580975 AW604760 AW385727 BE164590 BE003090 AW362791 AW604759 AW866589 AW604758 NA4337 AI378548 AW890438 AA077172 AI288683 AA229639 AA091945 AW945454 AA063629 AA702504 AW861938 AW894816 AW580841 AA094372 T06399 AW885686 BE244086 BE005035 AW861913 AA551773 AW858460 AW370926 AW754352 AW889695 AW384408 AI907428 BE067491 AW861939 AA248197 AW381373 AW177325 AW806879 AA935217 BE067498 BE083742 BE067470 AW894935 BE082529 AI248811 BE179917 BE002200 AW607506 AW392889 AW894560 AW381360 AI904206 AW863533 C00609 AW381372 BE082530 AW896120 BE075323 AW392799 AW601420 AI695314 BE083790 AW858568 AW945550 BE177153 AW970506 BE350419 AI906919 AW360794 AI906917 AW885979 AW794240 AW945566 AI688683 AI688694 AW009660 AW601421 AW360793 BE066524 BE083901 AW369847 AW381871 AW935435 AW664582 AW877775 AW838449 BE180466 AW858501 BE180464 AI371163 AA778231 AI174991 BE011720 AW877776 AW877800 AW877795 T19900 AW856365 AW898099 BE011715 BE167842 BE011718 BE011724 AW363639 AW878658 AW878662 AW894887 BE082356 AW389211 AW804286 AW610312 AI904717 AW610318 AW996909 AW610296 AW901923 AW880003 AI762171 AW062582 AW368713 AW062593 AW176663 AW842064 AW842089 AW842095 AI243049 AW902074 AW062592 AW176664 AW751692 BE087703 AI907439 BE009686 BE172115 BE077030 AW608556 AW835577 AI909628 BE077029 AW176241 BE077552 BE160370 BE160288 AW835656 AW606765 AW606770 AW835678 AW606758 AW606778 AI907484 BE172821 AW606768 AW999517 AW844165 BE171738 AW751683 AW610493 BE177484 BE177487 AA090510 AW844117 BE173367 AW999878 AI124870 BE163472 AW841823 AW379762 AW893297 AI290296 BE089132 AA610287 AW176676 AW607622 BE172639 AW893232 AA329629 BE089008 BE178350 BE178214 BE063291 AW820236 AW999653 BE089486 BE173126 BE171775 BE185787 AA558280 AI174840 AW999112 BE218391 BE172734 BE178021 BE172738 BE173324 AW603494 AL036722 R38192 R60905 H53721 H41052 AL037917 R37795 AW998972 AA767189 AW044272 H50689 AA768399 AA767764 AI087888 H44202 BE222792 N90597 W81396 N90615 AI935353 BE501168 F10945 AW118215 AI970480 AI627641 AW236081 AA574090 AI627652 AI681913 AI759983 N69591 N69276 BE467722 AW392780 BE172467 H92861 AI524921 F02989 Z39328 F02705 F01414 T88678 AI215165 H87220 AW374781 |
|    | 436280 | 36296_1    | AK026215 AI201248 BE671206 AA860436 AA730787 AA834507 D79304 D79806 AW961628 AI017068 BE044373 AA322458 AA987927 AA385869 BI492783 AW021853 R79299 N73208 AI016622 N24609 AW192569 AA707819 AI690734 R79189 AI535900 AW589301 AI128434 BE838011 BE837891 BF894555 H95408  |
| 60 | 442793 | 417820_2   | BG741247 BG741022 AI017798 AI953594 AW445065 AI245087   |
|    | 411690 | 53926_1    | AK027091 BF514593 BF768430 BI037830 BE175161 BG000114 BG897171 AA745391 AA669569 AA669253 BI049453 BE304449 BG010136 BG830874 BF091358 BF762561 T56173 BC003629 BF091330 BE697323 BF091340 BE843330 AA744150 AA745471 W26276 BI037837 AF086037 H89360 H89546  |
|    | 439195 | 21979_1    | AA130992 AW969537 AA503835  |
|    | 413645 | 1234345_1  | BE071616 BE071613 BE071603 BE071587 BE071615 BE071636   |
|    | 413204 | 1494523_1  | AV715934 BG654600 AI052778 BG057892 AW016773 AI452937 AW085293  |
| 65 | 443357 | 427117_1   | BE091833 BE091874 BE091871  |
|    | 455797 | 1511159_1  | BF690141 BE159368 AI937311 AU151256 AW341542 AW274231 AW341609 AW450447 AA843698 AW189066 AW007171 AW007027 AI075008  |
|    | 418751 | 21393_1    | AL520351 AA608992 AW151842 AA622181 AI273454 AI005561 AA205946 AA677899 AW473512 AW296620 AA872899 AI094216 AI025188 AA256998 AI539154 AI500192 AI289493 AI040740 BE167841 AW151374 BE167754 BF036108 AA299181 N23237 BE2967 W96060 AA574412 AW606697 W96059 R51303 R09158 R59113 T48473 T59023 AA122066 AW606643 R38386 R06567   |
|    | 424389 | 1059_4     | BG190758 AW961118 W77994 AA339877 AW845121 AW845129 BG181820 BE716719 AI125483 AI161017 W73951 AI250771 AA912611 AA339786 BE838286 BE838282 BE716636 AA777158 W94063 BE716628 BE716625 BE838371 BF371044 BE716631 BE716402  |
|    | 406797 | 0_0        | AI432224 AW276890 AI499346 AA937014 AA653573 AI318525 AI246219 AA961591 AI270640  |

TABLE 54C:

Pkey: Unique number corresponding to an Eos probeset  
Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) Nature 402:489-495.  
Strand: Indicates DNA strand from which exons were predicted.  
NL\_position: Indicates nucleotide positions of predicted exons.

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|    |        |         |        |                             |
|----|--------|---------|--------|-----------------------------|
|    | Pkey   | Ref     | Strand | Nt_position                 |
|    | 405885 | 7677703 | Minus  | 42574-42998                 |
|    | 403752 | 7678857 | Plus   | 33704-33828                 |
| 5  | 404489 | 8113772 | Plus   | 98183-98480                 |
|    | 404942 | 7382153 | Plus   | 92095-92252                 |
|    | 404149 | 7534008 | Plus   | 121831-121951,124044-124150 |
|    | 406387 | 9256180 | Plus   | 115229-116371,117512-117651 |
|    | 404780 | 9887810 | Minus  | 175708-175871               |
| 10 | 401846 | 7712190 | Minus  | 82775-82823,82912-83022     |
|    | 401254 | 9796309 | Plus   | 152209-152383               |
|    | 405752 | 9212305 | Plus   | 91392-91528                 |

|    |   |   |  |  |
|----|---|---|--|--|
| 15 | TABLE 55A: ABOUT 201 GENES UPREGULATED IN PRIMARY MELANOMAS FROM TUMORS THAT DID NOT METASTASIZE RELATIVE TO PRIMARY MELANOMAS THAT LATER METASTASIZED  |   |  |  |
|    | Table 55A lists about 201 genes upregulated in primary melanomas from tumors that did not metastasize relative to primary melanomas that metastasized later. Genes were selected from 59680 probesets on the Eos/Affymetrix Hu03 Genechip array. Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression. |   |  |  |
| 20 | Pkey:   | Unique Eos probeset identifier number   |  |  |
|    | ExAccn:   | Exemplar Accession number, Genbank accession number   |  |  |
|    | UnigenelD:  | Unigene number  |  |  |
|    | Unigene Title:  | Unigene gene title  |  |  |
|    | R1:   | 90th percentile of AIs for primary melanomas that did not metastasize divided by the 90th percentile of AIs from primary melanomas that metastasized later  |  |  |
| 25 | R2:   | 90th percentile of AIs for primary melanomas that did not metastasize divided by the 90th percentile of AIs from primary melanomas that metastasized later, where the 15th percentile of normal tissue AIs was subtracted from both the numerator and denominator |  |  |

|    |        |           |           |  |      |      |
|----|--------|-----------|-----------|--|------|------|
|    | Pkey   | ExAccn    | UnigenelD | Unigene Title                            | R1   | R2   |
|    | 413554 | AA319146  | Hs.75426  | secretogranin II (chromogranin C)        | 8.08 | 5.48 |
|    | 404854 |           |           | Target Exon                              | 5.18 | 8.18 |
| 30 | 406636 | L12064    |           | gb:Homo sapiens (clone WR4.12VL) anti-th | 4.89 | 4.95 |
|    | 433435 | BE545277  | Hs.340959 | Ts translation elongation factor, mitoch | 4.83 | 4.86 |
|    | 408471 | NM_012317 | Hs.45231  | leucine zipper, down-regulated in cancer | 4.71 | 4.70 |
|    | 433658 | L03678    | Hs.156110 | immunoglobulin kappa constant            | 4.71 | 3.85 |
|    | 412802 | U41518    | Hs.74602  | aquaporin 1 (channel-forming integral pr | 3.98 | 4.01 |
| 35 | 415801 | R24219    | Hs.278443 | Fc fragment of IgG, low affinity IIb, re | 3.92 | 3.35 |
|    | 400417 | X72475    |           | Target                                   | 3.83 | 2.78 |
|    | 419870 | AW403911  | Hs.266175 | phosphoprotein associated with GEMs      | 3.67 | 2.29 |
|    | 409190 | AU076536  | Hs.50984  | sarcoma amplified sequence               | 3.62 | 3.68 |
|    | 408692 | AL040127  | Hs.34074  | dipeptidylpeptidase VI                   | 3.61 | 3.89 |
| 40 | 423619 | T48691    | Hs.249159 | adrenergic, alpha-2A-, receptor          | 3.56 | 3.61 |
|    | 442117 | AW664964  | Hs.128899 | ESTs, hypothetical protein for IMAGE:447 | 3.55 | 2.85 |
|    | 445745 | AB007924  | Hs.13245  | KIAA0455 gene product                    | 3.38 | 2.55 |
|    | 406663 | U24683    |           | immunoglobulin heavy constant mu         | 3.34 | 6.16 |
|    | 414522 | AW518944  | Hs.76325  | Immunoglobulin J chain                   | 3.32 | 2.75 |
| 45 | 419235 | AW470411  | Hs.288433 | neurotrophin                             | 3.32 | 2.74 |
|    | 441598 | AI733219  | Hs.58262  | ESTs                                     | 3.31 | 3.71 |
|    | 402294 |           |           | Target Exon                              | 3.24 | 2.35 |
|    | 402737 |           |           | Target Exon                              | 3.22 | 2.87 |
|    | 414135 | NM_004419 | Hs.2128   | dual specificity phosphatase 5           | 3.20 | 3.04 |
| 50 | 410268 | AA316181  | Hs.61635  | six transmembrane epithelial antigen of  | 3.18 | 2.81 |
|    | 427335 | AA448542  | Hs.251677 | G antigen TB                             | 3.17 | 4.62 |
|    | 404995 |           |           | ENSP00000251890*:Monocytic leukemia zinc | 3.13 | 2.34 |
|    | 430540 | AW245422  |           | Homo sapiens cDNA: FLJ22105 fis, clone H | 3.12 | 2.21 |
| 55 | 430015 | AW768399  |           | ESTs                                     | 3.12 | 1.93 |
|    | 414340 | AI022656  | Hs.296272 | ESTs                                     | 3.09 | 2.87 |
|    | 400072 |           |           | Eos Control                              | 3.08 | 3.16 |
|    | 422567 | AF111178  | Hs.118407 | glypican 6                               | 3.06 | 2.73 |
|    | 401284 |           |           | Target Exon                              | 3.04 | 2.56 |
| 60 | 455839 | BE145814  |           | gb:MR0-HT0208-101299-202-a04 HT0208 Homo | 3.02 | 2.76 |
|    | 454027 | R40192    | Hs.21527  | Human DNA sequence from clone GS1-115M3  | 3.00 | 3.15 |
|    | 437258 | AL041243  | Hs.174104 | ESTs                                     | 2.99 | 2.44 |
|    | 445612 | N94126    | Hs.12969  | hypothetical protein                     | 2.98 | 2.40 |
|    | 417777 | AI823763  | Hs.7055   | ESTs, Weakly similar to I78885 serine/th | 2.97 | 2.13 |
| 65 | 437723 | AI672731  | Hs.13256  | ESTs                                     | 2.95 | 2.46 |
|    | 439668 | AI091277  | Hs.302634 | frizzled (Drosophila) homolog 8          | 2.95 | 2.77 |
|    | 424321 | W74048    | Hs.1765   | lymphocyte-specific protein tyrosine kin | 2.94 | 2.68 |
|    | 424761 | AA534528  | Hs.152944 | loss of heterozygosity, 11, chromosomal  | 2.92 | 3.81 |
|    | 405757 |           |           | Target Exon                              | 2.92 | 3.00 |
|    | 406521 | X57809    | Hs.8997   | immunoglobulin lambda locus              | 2.92 | 6.71 |
| 70 | 409060 | AI815867  | Hs.50130  | necdin (mouse) homolog                   | 2.86 | 2.16 |
|    | 431712 | R26584    | Hs.267993 | hypothetical protein FLJ10143            | 2.82 | 2.50 |
|    | 413441 | AI929374  | Hs.75367  | Src-like-adaptor                         | 2.82 | 2.48 |
|    | 452651 | AI218918  | Hs.30209  | KIAA0854 protein                         | 2.82 | 1.13 |
|    | 422386 | AF105374  | Hs.115830 | heparan sulfate (glucosamine) 3-O-sulfot | 2.78 | 2.77 |
| 75 | 439778 | AL109729  | Hs.99364  | putative transmembrane protein           | 2.77 | 1.92 |
|    | 434293 | NM_004445 | Hs.3796   | EphB6                                    | 2.75 | 2.89 |
|    | 406642 | AJ245210  |           | gb:Homo sapiens mRNA for immunoglobulin  | 2.70 | 2.03 |
|    | 406638 | M13861    |           | gb:Human T-cell receptor active beta-cha | 2.69 | 2.67 |
|    | 432331 | W37862    | Hs.274368 | MSTP032 protein                          | 2.68 | 3.08 |
| 80 | 408989 | AW361666  | Hs.49500  | KIAA0746 protein                         | 2.68 | 2.58 |
|    | 401731 |           |           | NM_017990*:Homo sapiens hypothetical pro | 2.68 | 2.53 |
|    | 401979 |           |           | C17000767.gij11990770[emb]CAC19651.1[ (A | 2.68 | 3.42 |
|    | 415539 | AI733881  | Hs.72472  | BMP-R1B                                  | 2.68 | 2.51 |

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|    |        |           |           |  |      |      |
|----|--------|-----------|-----------|--|------|------|
| 5  | 425032 | NM_001186 | Hs.154276 | BTB and CNC homology 1, basic leucine zi | 2.67 | 2.13 |
|    | 406837 | R70292    | Hs.156110 | immunoglobulin kappa constant            | 2.66 | 3.25 |
|    | 422550 | BE297626  | Hs.296049 | microfibrillar-associated protein 4      | 2.66 | 2.74 |
|    | 425100 | AF051850  | Hs.154567 | supervillin                              | 2.65 | 2.80 |
|    | 452933 | AW391423  | Hs.288555 | Homo sapiens cDNA: FLJ22425 fis, clone H | 2.65 | 2.63 |
| 10 | 439706 | AW872527  | Hs.59761  | ESTs, Weakly similar to DAP1_HUMAN DEATH | 2.64 | 1.84 |
|    | 447232 | AW499834  | Hs.327    | interleukin 10 receptor, alpha           | 2.63 | 2.63 |
|    | 425580 | L11144    | Hs.1907   | galanin                                  | 2.62 | 2.00 |
|    | 450680 | AF131784  | Hs.25318  | Homo sapiens clone 25194 mRNA sequence   | 2.61 | 1.80 |
|    | 412482 | AI499930  | Hs.334885 | mitochondrial GTP binding protein        | 2.61 | 1.82 |
| 15 | 433470 | AW960564  |           | transmembrane 4 superfamily member 1     | 2.60 | 2.44 |
|    | 419138 | U48508    | Hs.89631  | ryanodine receptor 1 (skeletal)          | 2.60 | 2.47 |
|    | 401112 |           |           | NM_024997*:Homo sapiens hypothetical pro | 2.60 | 2.58 |
|    | 411802 | AA733204  |           | nuclear transcription factor Y, gamma    | 2.59 | 2.32 |
|    | 407856 | AA045281  | Hs.266175 | phosphoprotein associated with GEMs      | 2.59 | 1.88 |
| 20 | 425209 | AL049761  | Hs.155140 | casein kinase 2, alpha 1 polypeptide     | 2.58 | 2.81 |
|    | 417165 | R80137    | Hs.302738 | Homo sapiens cDNA: FLJ21425 fis, clone C | 2.56 | 2.10 |
|    | 442560 | AA365042  | Hs.325531 | ESTs, Weakly similar to 2004399A chromos | 2.55 | 3.97 |
|    | 408491 | AI088063  | Hs.7882   | ESTs                                     | 2.54 | 2.74 |
|    | 420223 | N27807    |           | ribosomal protein L4                     | 2.54 | 2.02 |
| 25 | 444467 | AI150368  | Hs.143844 | ESTs                                     | 2.54 | 2.59 |
|    | 436729 | BE621807  |           | transmembrane 4 superfamily member 1     | 2.53 | 2.29 |
|    | 449217 | AA278536  | Hs.23262  | ribonuclease, RNase A family, k6         | 2.53 | 1.80 |
|    | 453507 | AF083217  | Hs.33085  | WD repeat domain 3                       | 2.52 | 1.99 |
|    | 420315 | NM_006299 | Hs.96448  | zinc finger protein 193                  | 2.52 | 2.50 |
| 30 | 443060 | D78874    | Hs.8944   | procollagen C-endopeptidase enhancer 2   | 2.50 | 2.35 |
|    | 453500 | AI478427  | Hs.43125  | esophageal cancer related gene 4 protein | 2.50 | 2.44 |
|    | 402692 |           |           | Target Exon                              | 2.50 | 1.73 |
|    | 427792 | M63928    | Hs.180841 | tumor necrosis factor receptor superfam  | 2.50 | 4.55 |
|    | 440065 | W03476    | Hs.266331 | hypothetical protein MGC4595             | 2.49 | 2.95 |
| 35 | 420568 | F09247    | Hs.247735 | protocadherin alpha 10                   | 2.49 | 3.55 |
|    | 444115 | AW954585  | Hs.271920 | ESTs, Weakly similar to Z195_HUMAN ZINC  | 2.49 | 2.52 |
|    | 404049 |           |           | NM_018937*:Homo sapiens protocadherin be | 2.48 | 2.67 |
|    | 417694 | R09486    | Hs.193118 | ESTs                                     | 2.48 | 2.09 |
|    | 420600 | BE011657  | Hs.165695 | ESTs, Weakly similar to unnamed protein  | 2.48 | 2.00 |
| 40 | 429922 | Z97630    | Hs.226117 | H1 histone family, member 0              | 2.47 | 2.01 |
|    | 404752 |           |           | NM_024778:Homo sapiens hypothetical prot | 2.47 | 3.07 |
|    | 421429 | NM_014922 | Hs.104305 | death effector filament-forming Ced-4-li | 2.47 | 2.46 |
|    | 436378 | AJ227874  | Hs.99244  | ESTs                                     | 2.46 | 1.88 |
|    | 429852 | AB010445  | Hs.225948 | small inducible cytokine subfamily A (Cy | 2.44 | 2.98 |
| 45 | 431190 | AL134172  | Hs.120852 | ESTs                                     | 2.44 | 2.48 |
|    | 439979 | AW600291  | Hs.6823   | hypothetical protein FLJ10430            | 2.44 | 2.96 |
|    | 436608 | AA628980  | Hs.192371 | down syndrome critical region protein DS | 2.44 | 3.16 |
|    | 445547 | D86181    | Hs.273    | galactosylceramidase (Krabbe disease)    | 2.43 | 3.33 |
|    | 443030 | R68048    | Hs.9238   | hypothetical protein FLJ23516            | 2.43 | 2.07 |
| 50 | 416908 | AA333990  | Hs.80424  | coagulation factor XIII, A1 polypeptide  | 2.43 | 3.36 |
|    | 406782 | AA430373  |           | gb:zw20f11.s1 Soares ovary tumor NbHOT H | 2.40 | 3.38 |
|    | 407260 | L09095    |           | gb:Homo sapiens mRNA fragment.           | 2.38 | 3.78 |
|    | 419556 | U29615    | Hs.91093  | chitinase 1 (chitotriosidase)            | 2.36 | 3.56 |
|    | 431365 | AA504080  | Hs.191958 | immunoglobulin superfamily receptor tran | 2.34 | 2.84 |
| 55 | 414555 | N98569    | Hs.76422  | phospholipase A2, group IIA (platelets,  | 2.33 | 3.21 |
|    | 436485 | X59135    | Hs.156110 | immunoglobulin kappa constant            | 2.31 | 2.94 |
|    | 403632 |           |           | Target Exon                              | 2.27 | 2.80 |
|    | 434232 | AW297064  | Hs.131862 | ESTs                                     | 2.24 | 2.98 |
|    | 428114 | AI821548  | Hs.98363  | ESTs, Weakly similar to I38022 hypotheti | 2.23 | 2.81 |
| 60 | 403294 |           |           | Target Exon                              | 2.19 | 2.81 |
|    | 429249 | X81479    | Hs.2375   | egf-like module containing, mucin-like,  | 2.16 | 3.13 |
|    | 403295 |           |           | Target Exon                              | 2.15 | 2.95 |
|    | 427817 | AA503373  | Hs.186678 | ESTs                                     | 2.13 | 2.80 |
|    | 425154 | NM_001851 | Hs.154850 | collagen, type IX, alpha 1               | 2.08 | 3.28 |
| 65 | 443176 | AI696081  | Hs.223770 | ESTs                                     | 2.04 | 3.50 |
|    | 401770 |           |           | C17001739*:gij2327052[gb]AAC48759.1] (U9 | 2.04 | 5.39 |
|    | 407124 | R08160    |           | gb:yf18a07.s1 Soares fetal liver spleen  | 2.03 | 2.95 |
|    | 456060 | C14904    | Hs.45184  | Homo sapiens cDNA FLJ12284 fis, clone MA | 2.03 | 2.97 |
|    | 413053 | AW963263  | Hs.65377  | ESTs, Moderately similar to KIAA1399 pro | 2.01 | 3.42 |
| 70 | 426653 | AA530892  | Hs.171695 | dual specificity phosphatase 1           | 2.01 | 3.05 |
|    | 410677 | NM_003278 | Hs.65424  | tetranectin (plasminogen-binding protein | 2.01 | 3.58 |
|    | 401673 |           |           | C16001416*:gij12743112[ref]XP_010131.2]  | 1.99 | 4.99 |
|    | 420983 | W95228    | Hs.100764 | cathepsin G                              | 1.95 | 5.47 |
|    | 413624 | BE177019  | Hs.75445  | SPARC-like 1 (mast9, hev9)               | 1.94 | 4.58 |
| 75 | 433554 | AW957666  | Hs.8108   | disabled (Drosophila) homolog 1          | 1.93 | 2.82 |
|    | 405121 |           |           | mitogen-activated protein kinase 8 inter | 1.92 | 2.82 |
|    | 436456 | AW292677  | Hs.248122 | G protein-coupled receptor 24            | 1.92 | 2.80 |
|    | 450852 | AI983354  | Hs.7740   | oxysterol binding protein-like 1         | 1.91 | 5.08 |
|    | 432902 | U75697    |           | histone deacetylase 3                    | 1.90 | 2.84 |
| 80 | 422100 | AI096988  | Hs.111554 | ADP-ribosylation factor-like 7           | 1.89 | 3.04 |
|    | 420162 | BE378432  | Hs.95577  | cyclin-dependent kinase 4                | 1.87 | 2.85 |
|    | 424398 | BE397787  | Hs.146393 | homocysteine-inducible, endoplasmic reti | 1.85 | 3.71 |
|    | 416714 | AF283770  | Hs.79630  | CD79A antigen (immunoglobulin-associated | 1.85 | 3.38 |
|    | 433465 | AV657778  | Hs.3314   | selenoprotein P, plasma, 1               | 1.85 | 3.57 |
|    | 447990 | BE048821  | Hs.20144  | small inducible cytokine subfamily A (Cy | 1.82 | 6.17 |
|    | 421563 | NM_006433 | Hs.105806 | granulysin                               | 1.80 | 3.50 |
|    | 453804 | AA300204  | Hs.35276  | KIAA0852 protein                         | 1.78 | 2.87 |

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|    |        |           |           |  |      |      |
|----|--------|-----------|-----------|--|------|------|
| 5  | 429412 | NM_006235 | Hs.2407   | POU domain, class 2, associating factor  | 1.78 | 3.54 |
|    | 437866 | AA156781  |           | metallothionein 1E (functional)          | 1.77 | 2.97 |
|    | 427751 | AF000152  |           | conserved gene amplified in osteosarcoma | 1.75 | 6.89 |
|    | 400442 |           |           | DKFZP586G1722 protein                    | 1.74 | 3.60 |
|    | 456898 | NM_001928 | Hs.155597 | D component of complement (adipsin)      | 1.74 | 3.45 |
| 10 | 414477 | U41635    | Hs.76228  | amplified in osteosarcoma                | 1.71 | 4.99 |
|    | 432870 | AW974124  |           | gb:EST386227 MAGE resequences, MAGM Homo | 1.68 | 2.86 |
|    | 456642 | AW451623  | Hs.109752 | putative c-Myc-responsive                | 1.68 | 3.09 |
|    | 456694 | AW016382  | Hs.105642 | Homo sapiens cDNA: FLJ23271 fis, clone H | 1.66 | 2.83 |
|    | 430449 | AA352723  | Hs.241471 | RNB6                                     | 1.65 | 2.84 |
| 15 | 401029 |           |           | v-myc avian myelocytomatosis viral relat | 1.65 | 2.88 |
|    | 402742 |           |           | NM_002508:Homo sapiens nidogen (enactin) | 1.64 | 3.37 |
|    | 402559 |           |           | Rho GTPase activating protein 1          | 1.63 | 3.07 |
|    | 418271 | NM_000919 | Hs.83920  | peptidylglycine alpha-amidating monooxyg | 1.62 | 3.11 |
|    | 406851 | AA609784  |           | major histocompatibility complex, class  | 1.62 | 2.86 |
| 20 | 450912 | AW939251  | Hs.25647  | v-fos FBJ murine osteosarcoma viral onco | 1.60 | 3.94 |
|    | 447029 | AL137281  | Hs.17110  | Homo sapiens mRNA: cDNA DKFZp434C2016 (f | 1.60 | 3.75 |
|    | 417739 | Z43995    |           | gb:HSC1QB121 normalized infant brain cDN | 1.59 | 2.96 |
|    | 452950 | AA428123  | Hs.302766 | tyrosine 3-monooxygenase/tryptophan 5-mo | 1.58 | 2.95 |
|    | 427461 | AA531527  | Hs.332040 | hypothetical protein MGC13010            | 1.58 | 4.11 |
| 25 | 444182 | AW160432  | Hs.296450 | craniofacial development protein 1       | 1.57 | 2.98 |
|    | 407815 | AW373860  | Hs.183860 | hypothetical protein FLJ20277            | 1.57 | 3.88 |
|    | 452887 | AI702223  | Hs.107253 | hypothetical protein DKFZp761F241        | 1.56 | 2.88 |
|    | 416819 | U77735    | Hs.80205  | pim-2 oncogene                           | 1.56 | 3.59 |
|    | 414583 | AA362907  | Hs.76494  | proline arginine-rich end leucine-rich r | 1.56 | 4.38 |
| 30 | 426104 | AI204418  | Hs.190080 | ESTs                                     | 1.55 | 3.47 |
|    | 441591 | AF055992  | Hs.183    | Duffy blood group                        | 1.52 | 4.28 |
|    | 446406 | AI553681  |           | Arg/Abl-interacting protein ArgBP2       | 1.49 | 2.87 |
|    | 427343 | AI880044  | Hs.176977 | protein kinase C binding protein 2       | 1.49 | 2.88 |
|    | 415550 | L13720    | Hs.78501  | growth arrest-specific 6                 | 1.47 | 4.62 |
| 35 | 411961 | AI478432  | Hs.72956  | hypermethylated in cancer 1              | 1.46 | 3.48 |
|    | 406213 |           |           | ENSP00000246202:DJ63M2.2 (similar to AC  | 1.42 | 3.19 |
|    | 400847 |           |           | NM_003105*:Homo sapiens sortilin-related | 1.41 | 2.97 |
|    | 404642 |           |           | NM_021965*:Homo sapiens phosphoglucomuta | 1.40 | 3.02 |
|    | 452650 | AW270150  | Hs.254516 | ESTs                                     | 1.40 | 2.86 |
| 40 | 432894 | AW167668  | Hs.279772 | brain specific protein                   | 1.37 | 5.52 |
|    | 404030 |           |           | NM_015669*:Homo sapiens protocadherin be | 1.37 | 3.03 |
|    | 422033 | AW245805  | Hs.110903 | claudin 5 (transmembrane protein deleted | 1.35 | 3.15 |
|    | 413762 | AW411479  | Hs.848    | FK506-binding protein 4 (59kD)           | 1.34 | 3.09 |
|    | 425367 | BE271188  | Hs.155975 | protein tyrosine phosphatase, receptor t | 1.32 | 3.29 |
| 45 | 415198 | AW009480  | Hs.943    | natural killer cell transcript 4         | 1.32 | 2.89 |
|    | 406908 | Z25437    |           | gb:H.sapiens protein-tyrosine kinase gen | 1.31 | 2.89 |
|    | 423959 | AA333025  |           | gb:EST37122 Embryo, 8 week I Homo sapien | 1.31 | 2.88 |
|    | 408135 | AA317248  | Hs.42957  | methyltransferase-like 1                 | 1.29 | 3.81 |
|    | 427523 | BE242779  | Hs.179526 | upregulated by 1,25-dihydroxyvitamin D-3 | 1.29 | 3.25 |
| 50 | 415512 | Y16270    | Hs.78482  | paralemmin                               | 1.29 | 2.85 |
|    | 413531 | AL036958  | Hs.75416  | DAZ associated protein 2                 | 1.28 | 3.06 |
|    | 419608 | AL037237  | Hs.91586  | transmembrane 9 superfamily member 1     | 1.27 | 2.80 |
|    | 424614 | X54486    | Hs.151242 | serine (or cysteine) proteinase inhibito | 1.26 | 2.90 |
|    | 422934 | BE244189  | Hs.122492 | hypothetical protein                     | 1.25 | 3.41 |
| 55 | 450935 | BE514743  |           | tumor suppressor deleted in oral cancer- | 1.25 | 3.63 |
|    | 416630 | H69392    | Hs.174051 | small nuclear ribonucleoprotein 70kD pol | 1.24 | 2.93 |
|    | 416950 | AL049798  | Hs.80552  | dermatopontin                            | 1.22 | 2.81 |
|    | 412558 | AW962019  |           | gb:EST374092 MAGE resequences, MAGG Homo | 1.21 | 3.02 |
|    | 419593 | W73092    | Hs.58282  | ESTs                                     | 1.19 | 2.84 |
| 60 | 403470 |           |           | Target Exon                              | 1.14 | 2.82 |
|    | 402230 |           |           | Fgenesh predicted: CYTOCHROME P450 4F5 ( | 1.12 | 2.96 |
|    | 400559 |           |           | Target Exon                              | 1.00 | 2.90 |
|    | 412695 | AW984439  |           | gb:PM3-HN0011-220300-002-c05 HN0011 Homo | 1.00 | 2.84 |
|    | 427072 | H38046    | Hs.293981 | ESTs                                     | 1.00 | 2.89 |
| 65 | 430439 | AL133561  |           | DKFZP434B061 protein                     | 1.00 | 3.09 |
|    | 418183 | NM_001772 | Hs.83731  | CD33 antigen (gp67)                      | 1.00 | 2.93 |

TABLE 55B:

Pkey: Unique Eos probeset identifier number  
 CAT number: Gene cluster number  
 Accession: Genbank accession numbers

|    |        |            |   |
|----|--------|------------|---|
| 70 | Pkey   | CAT Number | Accession   |
|    | 406636 | 0_0        | L12064 L12083 L12065 L12075 L12066 L12085 L12072 L12082 L12081 L12062 L12080  |
|    | 430540 | 713_2      | BC017171 BC012195 NM_007126 AF100752 AL137377 Z70768 BM474865 BG754806 AU124376 BG757203 BG764420 BG775028 BG824418<br>BM045810 AU120387 BG770238 BG686740 BG913323 BI755980 BG395998 BM048875 BE881070 BE313689 BE879144 BM309834 AW245847<br>AI770171 BF196861 BE856897 AA463876 AI375927 AA548810 AA948193 AA490916 AI459893 AI458188 AI240408 AI91843 AI131029 AW768399<br>AI365196 AW337984 AW026150 BE455591 BE674599 AI818438 AA772197 AI651927 AW151143 BI198825 BG819083 BM458764 BE903567<br>BE732715 BM043200 BE900263 BE900706 BE731097 BE390023 BG875384 BF996406 BF988930 BM475542 AW246215 BE501897 BE903610<br>BE561530 BE560537 BE903782 BE732947 BI227204 BG761305 BE262642 BE391848 BE382475 BG008258 BI547991 BI459099 BE391391 BE259420<br>BE298109 AW245422 AI423847 AI914618 H80534 BE301004 AL531791 AI435581 BF793112 AL577303 AA373265 BE746965 BF743630 BE879296<br>AI359493 BM018598 AI689260 AW072450 F20201 AW151405 AW517572 AA773468 BG259694 BE391163 BG621529 AI421728 BG757231 BM462953<br>BG340524 W52648 AA113434 BE785431 BI041981 BG832385 BG253168 BG759470 BF369329 BF981332 BE259418 BE785738 BI091658 N72512<br>W58732 W85690 BG958989 AI205206 H19721 W17051 W77958 BI262010 AA844319 W74143 W72214 N85194 BE734033 BG164099 AA931059<br>F13645 R41394 AK025758 BG180977 BE349455 AA812018 AA740241 AI027722 AI150356 AA886395 AW977627 BE220225 AA884082 AW518114<br>AI243844 AA809493 AA481029 AA825718 AI347866 AI431670 AA814436 AI251109 R07704 AA765606 AA724593 AI918359 AI537550 AA491103 |



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AW008188 R07703 AA989120 AA746235 AW028983 AA789102 AU185751 AW971465 AA489681 AW971893 AW612086 BE077936 B1860809  
BE002760 BG746251 BE962912 BM454584 AL134894 BF104082 H80591  
430015 713\_2  
BC017171 BC012195 NM\_007126 AF100752 AL133737 Z70768 BM474865 BG754806 AU124376 BG757203 BG764420 BG775028 BG824418  
B0405810 AU120387 BG770238 BG686740 BG913323 B1759980 BG395998 BM048875 BE881070 BE313689 BE879144 BM309834 AW245847  
15  
A1770171 BF196861 BE856897 AA463876 A1375927 AA648810 AA948193 AA490916 A1459893 A1458188 A1240408 A191843 A131029 AW768399  
A1365196 AW337984 AW026150 BE465591 BE674599 A1818438 AA772197 A1651927 AW151143 B1198825 BG819083 BM458764 BE903567  
BE732715 BM043200 BE900263 BE900706 BE731097 BE390023 BG875384 BF996406 BF988930 BM475542 AW246215 BE501897 BE903610  
10  
BE561530 BE560537 BE903782 BE732947 B1227204 BG761305 BE262642 BE391848 BE382475 BG008258 B1547991 B1459099 BE391391 BE259420  
BE298109 AW245422 A1423847 A1914618 H80534 BE301004 AL531791 A1435581 BF793112 A1577303 AA373265 BE746965 BF743630 BE879296  
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406642 0\_0  
406638 0\_0  
20 433470 6624\_1  
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411802 609\_6  
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AW674145 C05782 A1589264 D57558 A1468237 A1432033 AA989662 R21752 BF002457 AA988297 AL574095 AL576200 AL571074 AL574525  
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B1870221 BE910282 BG538748 AW960564 AV732879 D16854 AA192519 BF922148 AA216013 BG624091 BE544387 BG507008 AW176446  
BF790033 BE088925 BE088854 AA921353 R21800 AA011222 T97525  
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R18769 BE019412 AA045846 AL120913 BE168807 BE168812 R21136 BE168915 H71247 N59055 AA533007 AW938705 BE260952 BE313303  
AA307436 AW951917 AW581926 AW277164 A1439049 AW581905 A1744899 AW804572 BE004443 AA335928 AA486355 AA115468 AA312123  
R77086 AA595186 AW166991 A1952071 AW593311 AW571813 A1749734 A1674761 A1560970 A1480266 AA534470 AA737815 BE300597 AW022818

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|    |        |           |  |  |  |  |
|----|--------|-----------|--|--|--|--|
| 5  | 437866 | 34267_1   | BE300599'AA911621 AI074678 BE300694 AI187018 R98969 AA456572 AI032111 AI830414 AA045874 AA932352 AI871262 T78896 AA714518<br>AW009272 T17250 R76914 AW317029 H71248 AA931900 AA282808 AI032140 AI208512 AI244759 AI420456 AI208085 AI283758 AI369297 R46731<br>H79779 AI349348 AW273644 AI559914 AI201114 AW615802 AA887531 AA810217 AA832227 AI567776 AI918324 AA862566 AA831038 AW246807<br>W78118 R43091 Z41762 AW135694 AW263376 AA115046 T34171 T34077 N53974 W79902 BE514017 BE513761 H79778 AW878598  |  |  |  |
|    |        |           | U52054 AL581000 AA156850 AW293839 BI335865 AA024963 BF149420 BE073977 AW602574 BE164012 BE163992 BE163974 AW402161<br>BM194134 AW966609 W84374 BF916380 AA385173 W84366 AA383743 BF903598 AA043776 W84421 AA778446 AW444904 BF446960 AA837481<br>AV755539 AW468444 AW468002 AA811830 AA581806 AI866686 AI572124 AA687333 D20160 AA812489 AU185248 AU186004 AA156781 AI536733<br>BM144850 AI471883 AA040926 BF507639 AA043777 AW874142 BE832523 BE163972 BI022546 BI021204  |  |  |  |
| 10 | 427751 | 15028_1   | BE875818 AW751975 W39241 BF808798 W22600 BF082190 AA031290 R42801 H98235 H17925 AI631236 AI933786 H42736 AF000152 AU123911<br>AW410526 BM354207 BF800492 BM142340 BE019322 AL597008 AW327818 BI041915 AW504825 AW504941 BF987969 NM_005730 U81556<br>AI422831 AU154008 AA147822 AA873109 AI089244 AI360868 AW168024 AI819848 AA811327 AI355616 AA281629 AI880578 AI274316 AW014622<br>AI268660 AI270283 AA171981 AI349410 AA402469 AI421985 AI004864 AI423497 AI361503 AI363096 AW805345 AL539979 AA553967 AW502264<br>AI290698 N22420 AI281054 AI500699 AW342095 C75122 AW504577 AI130811 AI423567 R79086 AI860451 BE222885 AI697830 AI279575 BF438693<br>AW576277 BE218210 AI952376 AA506609 AI147566 AI391690 AA991622 AI696368 AI784664 AA741555 AI002681 AW474554 AW474508 D25623<br>AI493929 AA179800 W73566 AW411368 AA147971 AA088581 BF804510 AU145809 AU148108 AA223219 AU157840 AW169757 AI537862 N42341<br>AI128667 AW327853 AA713915 W15255 W56743 AA058322 H81878 AA723464 N27523 R37745 AA613566 AL526353 AI905211 BF802713 N40338<br>AA249397 BF752939 BE250441 H64761 BF853011 H81877 H96088 AL576453 W73585 H39990 AW438965 BF899684 AI040299 AL561879 AA293821<br>H27760 BC018922 AL533396 BE513580 BF432649 AI884985 AA404264 AW024396 AW167863 AW027036 AI302177 AI660487 AW026086 BF432564<br>BF091011 AI193156 AA744623 AI859510 BI063081 BI061541 AA777036 BG058488 BI063555 AI349411 BF874521 AW139801 AI268585 AA401267<br>AI905209 R64276 N72043 AF022231 BI256540 AU134437 BG826972 BE298386 AW134499 AW206089 BF846730 AW500331 BF849336 BI041697<br>AI857745 AW192880 AW410527 AI697435 AW006631 AW504124 AL048926 AI085476 AW327855 AA459344 AW207516 AW204875 BM142514<br>BF436650 AA960980 AW242609 BI012363 AW837102 BE703126 BE814612 BE837981 BE703141 BF343101 R47375 AA031413 N40264 BG027363<br>BF526360 BE391263 AA280192 BE294042 BE250630 AU147734 AU146610 AA196787 N59465 AW575791 H16738 H96089 H64762 AW006603<br>BE857292 AI719393 AU155418 BG770385 AA339673 BG337748 H42694 BE834346 AA090896 BE619985 BM006968 R46008 BF304621 AI172280<br>AW957721 BF304885 BF933455 BF809973 BG386280 AW079808 T51091 AL520569 BE694350 T06360 BF347780 BE560703 BE296629<br>AW974124 AA572989 AA569080<br>AA609784 R97304<br>R12357 R34740 Z43995 |  |  |  |
| 20 | 432870 | 1238170_1 | BG105015 R45824 AI659533 AW022952 BM312713 C04108 AU159507 AW290967 AW235078 AW271693 AA999835 AL134290 AW235222 BM312405<br>AI480093 AI469044 AI308242 AI274858 AI824850 AI093881 BE857254 AW235980 AI985474 AI540755 W17232 D56716 BE835412 AA091594<br>BE769194 BE769189 BE765413 BE766491 BF154895 BE765626 BF372247 BE769079 BE769122 BF154873 BF154880 Z26986 BE768478 BF372008<br>T34949 BE768476 BE768462 BF370113 BE835323 BE769217 BE769113 AA093838 BE769188 N88480 AA093969 AA092843<br>BE273069 AA333025<br>BE349913 BC002850 BC016704 NM_005851 AF089814 AK001498 AL537879 BG754157 AI129659 AI261895 BG397540 BF663515 AW517226<br>BG677982 AI435188 AI453123 AI198380 AA524481 BG981512 AW269638 AI348113 AI095743 AA457108 AW044584 AU151602 AI744572 AI078741<br>AI879729 AI089613 AI568618 BF109806 AW440972 AA401965 AI027227 AI127506 AA434027 BF732901 AW264768 AA833667 AL038554 AI568161<br>AI350340 AA402084 BE677778 AA933621 BF653514 BG763563 AL574521 BG177226 BG759860 BE906329 AW161323 AI879350 BF946477<br>BF766208 AA633194 AL537880 AL038553 BG468205 BG761617 BI762655 BG436637 N49458 BI834722 BG397879 BI258799 AW004930 AA902847<br>AI832036 AW167549 AA743167 AA848017 AA365434 AI819503 AA767866 AI582000 N33615 AI950146 AA444029 AA227130 AA041525 AW339842<br>AA865972 AA838006 AW157822 AI850994 BI771150 BI821666 BE279491<br>AW962019 BE389091<br>AW984433 AW984393 AW984439 AW984451 AW984367 AW984371 AW984349 AW984356 AW984444 AW984443 AW984449  |  |  |  |
| 30 | 417739 | 2145372_1 | AL133561 AL117481 AL122069 AW439292 AI968826 AL041090  |  |  |  |
|    |        |           |  |  |  |  |
| 35 | 423959 | 887999_1  |  |  |  |  |
|    |        |           |  |  |  |  |
| 40 | 450935 | 4469_1    |  |  |  |  |
|    |        |           |  |  |  |  |
| 45 | 412558 | 1227364_1 |  |  |  |  |
|    |        |           |  |  |  |  |
| 50 | 412695 | 1243394_1 |  |  |  |  |
|    |        |           |  |  |  |  |
| 55 | 430439 | 6750_2    |  |  |  |  |
|    |        |           |  |  |  |  |
| 60 | 412695 | 1243394_1 |  |  |  |  |
|    |        |           |  |  |  |  |
| 65 | 430439 | 6750_2    |  |  |  |  |
|    |        |           |  |  |  |  |
| 70 | 412695 | 1243394_1 |  |  |  |  |
|    |        |           |  |  |  |  |
| 75 | 430439 | 6750_2    |  |  |  |  |
|    |        |           |  |  |  |  |
| 80 | 412695 | 1243394_1 |  |  |  |  |
|    |        |           |  |  |  |  |

TABLE 55C:  
Pkey: Unique number corresponding to an Eos probe set.  
Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA  
sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.  
Strand: Indicates DNA strand from which exons were predicted.  
NL\_position: Indicates nucleotide positions of predicted exons.

| Pkey   | Ref     | Strand | NL_position                              |
|--------|---------|--------|--|
| 404854 | 7143420 | Plus   | 14260-14537                              |
| 402294 | 2282012 | Minus  | 2575-3000                                |
| 402737 | 9212184 | Minus  | 13358-13552                              |
| 404995 | 6006247 | Minus  | 154015-154123                            |
| 401284 | 9800819 | Minus  | 101307-101421                            |
| 405757 | 3334694 | Minus  | 66825-70466                              |
| 401731 | 9690317 | Plus   | 43830-43963,44787-44935,45698-45810,4741 |
| 401979 | 2628778 | Minus  | 75693-75851,76977-77112                  |
| 401112 | 9966198 | Minus  | 60628-61041                              |
| 402692 | 8468956 | Plus   | 124606-125387                            |
| 404049 | 3688074 | Minus  | 75765-78155                              |
| 404752 | 7109522 | Minus  | 120168-120326                            |
| 403632 | 8572864 | Minus  | 35197-35358                              |
| 403294 | 8096496 | Plus   | 41565-41881                              |
| 403295 | 8096528 | Plus   | 22386-22708                              |
| 401770 | 9958312 | Plus   | 183424-183576                            |
| 401673 | 7689903 | Minus  | 122587-122705,122765-123047              |
| 405121 | 8102330 | Minus  | 35816-36004,36587-36684                  |
| 400442 | 9887672 | Plus   | 59362-59574                              |
| 401029 | 8117523 | Plus   | 41999-42172                              |
| 402742 | 9212200 | Minus  | 23487-23613                              |
| 402559 | 9864273 | Plus   | 33539-33715                              |
| 406213 | 7342019 | Plus   | 25921-26612,34539-35161                  |
| 400847 | 9188605 | Plus   | 44643-44835                              |
| 404642 | 9796810 | Plus   | 102999-103145                            |
| 404030 | 7671252 | Plus   | 149362-151749                            |
| 403470 | 9929739 | Minus  | 8376-8552                                |
| 402230 | 9966312 | Minus  | 29782-29932                              |
| 400559 | 9843598 | Plus   | 75483-75584                              |

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TABLE 56A: ABOUT 277 GENES UPREGULATED IN MELANOMA METASTASES RELATIVE TO BENIGN NEVI

Table 56A lists about 277 genes upregulated in melanoma metastases relative to benign nevi. Genes were selected from 59680 probesets on the Eos/Affymetrix Hu03 Genechip array. Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

5 Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigeneID: Unigene number  
 Unigene Title: Unigene gene title  
 R1: 70th percentile of melanoma metastasis AIs divided by the maximum of benign nevi AIs  
 10 R2: 70th percentile of melanoma metastasis AIs divided by the maximum of benign nevi AIs, where the 15th percentile of normal tissue AIs was subtracted from both the numerator and denominator

| Pkey   | ExAccn    | UnigeneID | Unigene Title                            | R1    | R2    |
|--------|-----------|-----------|--|-------|-------|
| 422424 | AI186431  | Hs.296538 | prostate differentiation factor          | 13.73 | 17.18 |
| 446619 | AU076643  | Hs.313    | secreted phosphoprotein 1 (osteopontin,  | 11.57 | 13.25 |
| 407846 | AA426202  | Hs.40403  | Chp/p300-interacting transactivator, wit | 9.35  | 8.75  |
| 444381 | BE387335  | Hs.283713 | ESTs, Weakly similar to S64054 hypotheti | 8.63  | 6.22  |
| 417880 | BE241595  | Hs.82848  | selectin L (lymphocyte adhesion molecule | 8.21  | 8.65  |
| 424321 | W74048    | Hs.1765   | lymphocyte-specific protein tyrosine kin | 7.13  | 5.04  |
| 447210 | AF035269  | Hs.17752  | phosphatidylserine-specific phospholipas | 6.79  | 7.12  |
| 417693 | AW959741  | Hs.40368  | adaptor-related protein complex 1, sigma | 6.55  | 5.94  |
| 429500 | X78565    | Hs.289114 | hexabrachion (tenascin C, cytolaectin)   | 6.43  | 3.46  |
| 414812 | X72755    | Hs.77367  | monokine induced by gamma interferon     | 6.43  | 5.44  |
| 451736 | AW080356  | Hs.23889  | ESTs, Weakly similar to ALU7_HUMAN ALU S | 6.31  | 6.08  |
| 418870 | AF147204  | Hs.89414  | chemokine (C-X-C motif), receptor 4 (fus | 6.20  | 6.04  |
| 428291 | AA534009  | Hs.183487 | interferon stimulated gene (20kD)        | 6.03  | 4.72  |
| 417308 | H60720    | Hs.81892  | KIAA0101 gene product                    | 6.01  | 7.07  |
| 448569 | BE382657  | Hs.21486  | signal transducer and activator of trans | 5.99  | 8.88  |
| 439310 | AF086120  | Hs.102793 | ESTs                                     | 5.95  | 6.63  |
| 452838 | U65011    | Hs.30743  | preferentially expressed antigen in meta | 5.95  | 3.77  |
| 422241 | Y00062    | Hs.170121 | protein tyrosine phosphatase, receptor t | 5.76  | 6.37  |
| 442379 | NM_004613 | Hs.8265   | transglutaminase 2 (C polypeptide, prote | 5.76  | 3.14  |
| 409274 | NM_003930 | Hs.52644  | SKAP55 homologue                         | 5.65  | 5.01  |
| 442739 | NM_007274 | Hs.8679   | cytosolic acyl coenzyme A thioester hydr | 5.58  | 3.50  |
| 442711 | AF151073  | Hs.8645   | hypothetical protein                     | 5.45  | 5.84  |
| 425118 | AU076611  | Hs.154672 | methylene tetrahydrofolate dehydrogenase | 5.42  | 5.75  |
| 412918 | BE563957  |           | activated RNA polymerase II transcriptio | 5.35  | 4.94  |
| 428125 | AA393071  | Hs.182579 | leucine aminopeptidase                   | 5.33  | 5.34  |
| 446921 | AB012113  | Hs.16530  | small inducible cytokine subfamily A (Cy | 5.33  | 4.98  |
| 431183 | NM_006855 | Hs.250696 | KDEL (Lys-Asp-Glu-Leu) endoplasmic retic | 5.30  | 6.25  |
| 414219 | W20010    | Hs.75823  | ALL1-fused gene from chromosome 1q       | 5.16  | 5.33  |
| 426600 | NM_003378 | Hs.171014 | VGF nerve growth factor inducible        | 5.05  | 8.77  |
| 415444 | BE247295  | Hs.78452  | solute carrier family 20 (phosphate tran | 5.03  | 5.17  |
| 436701 | AW959032  |           | ESTs, Moderately similar to I78885 serin | 5.03  | 4.17  |
| 406648 | AA563730  | Hs.277477 | major histocompatibility complex, class  | 4.99  | 5.08  |
| 410850 | AW362867  | Hs.302738 | Homo sapiens cDNA: FLJ21425 fis, clone C | 4.98  | 4.71  |
| 418299 | AA279530  | Hs.83968  | integrin, beta 2 (antigen CD18 (p95), ly | 4.98  | 4.08  |
| 432469 | AL080084  |           | CGI-100 protein                          | 4.97  | 4.70  |
| 404854 |           |           | Target Exon                              | 4.85  | 4.07  |
| 415701 | NM_003878 | Hs.78619  | gamma-glutamyl hydrolase (conjugase, fol | 4.82  | 4.90  |
| 425397 | J04088    | Hs.156346 | topoisomerase (DNA) II alpha (170kD)     | 4.81  | 3.45  |
| 408958 | T99607    | Hs.49346  | signal recognition particle 54kD         | 4.78  | 2.34  |
| 453949 | AU077146  | Hs.36927  | heat shock 105kD                         | 4.78  | 6.32  |
| 458079 | AI796870  | Hs.54277  | DNA segment on chromosome X (unique) 992 | 4.77  | 6.57  |
| 440245 | AK001913  | Hs.7100   | hypothetical protein                     | 4.74  | 3.83  |
| 412228 | AW503785  | Hs.73792  | complement component (3d/Epstein Barr vi | 4.74  | 5.53  |
| 417834 | BE172058  | Hs.82689  | tumor rejection antigen (gp96) 1         | 4.73  | 4.35  |
| 451003 | AF058696  | Hs.25812  | Nijmegen breakage syndrome 1 (nibrin)    | 4.67  | 4.60  |
| 424571 | BE379766  |           | polymerase (RNA) II (DNA directed) polyp | 4.62  | 3.50  |
| 434203 | BE262677  | Hs.283558 | hypothetical protein PRO1855             | 4.61  | 5.67  |
| 452268 | NM_003512 | Hs.28777  | H2A histone family, member L             | 4.60  | 3.79  |
| 421311 | N71848    | Hs.283609 | hypothetical protein PRO2032             | 4.60  | 3.58  |
| 410491 | AA465131  | Hs.64001  | Homo sapiens clone 25218 mRNA sequence   | 4.60  | 4.68  |
| 425706 | AW406678  | Hs.122559 | hypothetical protein FLJ22570            | 4.59  | 3.83  |
| 450293 | N36754    | Hs.171118 | hypothetical protein FLJ00026            | 4.57  | 5.40  |
| 406836 | AW514501  | Hs.156110 | immunoglobulin kappa constant            | 4.57  | 6.33  |
| 413441 | AI929374  | Hs.75367  | Src-like-adaptor                         | 4.53  | 4.77  |
| 431129 | AL137751  | Hs.263671 | Homo sapiens mRNA; cDNA DKFZp434i0812 (f | 4.48  | 4.89  |
| 418506 | AA084248  | Hs.85339  | G protein-coupled receptor 39            | 4.47  | 4.17  |
| 411060 | NM_006074 | Hs.318501 | Homo sapiens mRNA full length insert cDN | 4.47  | 4.33  |
| 417501 | AL041219  | Hs.82222  | sema domain, immunoglobulin domain (Ig), | 4.45  | 3.32  |
| 437763 | AA469369  | Hs.5831   | tissue inhibitor of metalloproteinase 1  | 4.43  | 4.43  |
| 448883 | BE614989  | Hs.7503   | hypothetical protein FLJ14153            | 4.42  | 3.91  |
| 417274 | N92036    | Hs.81848  | RAD21 (S. pombe) homolog                 | 4.41  | 4.09  |
| 419285 | D31887    | Hs.89868  | KIAA0062 protein                         | 4.40  | 3.56  |
| 418321 | D63477    | Hs.84087  | KIAA0143 protein                         | 4.38  | 3.00  |
| 430154 | AW583058  | Hs.234726 | serine (or cysteine) proteinase inhibito | 4.37  | 4.26  |
| 428450 | NM_014791 | Hs.184339 | KIAA0175 gene product                    | 4.36  | 4.90  |
| 428297 | AA236291  | Hs.183583 | serine (or cysteine) proteinase inhibito | 4.36  | 3.57  |
| 447232 | AW499834  | Hs.327    | interleukin 10 receptor, alpha           | 4.36  | 4.07  |
| 409598 | NM_014018 | Hs.55097  | mitochondrial ribosomal protein S28      | 4.35  | 3.29  |
| 442432 | BE093589  | Hs.38178  | hypothetical protein FLJ23468            | 4.34  | 5.80  |
| 407047 | X65965    |           | gb:H.sapiens SOD-2 gene for manganese su | 4.33  | 3.51  |

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|    |        |           |           |  |      |       |
|----|--------|-----------|-----------|--|------|-------|
| 5  | 443991 | NM_002250 | Hs.10082  | potassium intermediate/small conductance | 4.33 | 4.23  |
|    | 452322 | BE566343  | Hs.28988  | glutaredoxin (thioltransferase)          | 4.32 | 2.68  |
|    | 420991 | AW504814  | Hs.287379 | Homo sapiens mRNA for FLJ00111 protein,  | 4.32 | 4.54  |
|    | 449722 | BE280074  | Hs.23960  | cyclin B1                                | 4.31 | 3.73  |
|    | 408380 | AF123050  | Hs.44532  | diubiquitin                              | 4.30 | 5.74  |
| 10 | 427127 | AW802282  | Hs.22265  | pyruvate dehydrogenase phosphatase       | 4.28 | 4.80  |
|    | 417933 | X02308    | Hs.82962  | thymidylate synthetase                   | 4.28 | 3.59  |
|    | 432828 | AB042326  | Hs.287402 | chondroitin 4-sulfotransferase           | 4.25 | 4.15  |
|    | 450306 | AL080080  | Hs.24766  | thioredoxin domain-containing            | 4.24 | 3.15  |
|    | 440266 | AA088809  | Hs.19525  | hypothetical protein FLJ22794            | 4.23 | 4.12  |
| 15 | 407951 | W77762    | Hs.79015  | antigen identified by monoclonal antibod | 4.22 | 4.54  |
|    | 427337 | Z46223    | Hs.176663 | Fc fragment of IgG, low affinity IIIB, r | 4.20 | 4.62  |
|    | 408989 | AW361666  | Hs.49500  | KIAA0746 protein                         | 4.20 | 4.92  |
|    | 449626 | AA774247  | Hs.301637 | zinc finger protein 258                  | 4.19 | 3.17  |
|    | 422846 | BE513934  | Hs.1583   | neutrophil cytosolic factor 1 (47kD, chr | 4.18 | 8.91  |
| 20 | 415726 | T89844    | Hs.78712  | aminolevulinatase, delta-, synthase 1    | 4.16 | 4.21  |
|    | 444207 | AI565004  |           | cathepsin D (lysosomal aspartyl protease | 4.16 | 1.89  |
|    | 416980 | AA381133  | Hs.80684  | high-mobility group (nonhistone chromoso | 4.14 | 3.30  |
|    | 438718 | AL040058  | Hs.6375   | uncharacterized hypothalamus protein HT0 | 4.14 | 3.04  |
|    | 437802 | AI475995  | Hs.122910 | ESTs                                     | 4.12 | 5.13  |
| 25 | 446392 | AF142419  | Hs.15020  | homolog of mouse quaking QKI (KH domain  | 4.12 | 3.87  |
|    | 409461 | AA382169  | Hs.54483  | N-myc (and STAT) interactor              | 4.11 | 4.96  |
|    | 427247 | AW504221  | Hs.174103 | integrin, alpha L (antigen CD11A (p180), | 4.11 | 6.37  |
|    | 414359 | M62194    | Hs.75929  | cadherin 11, type 2, OB-cadherin (osteob | 4.10 | 4.16  |
|    | 450071 | AA018283  | Hs.24359  | Homo sapiens cDNA FLJ11174 fis, clone PL | 4.10 | 2.35  |
| 30 | 452882 | AW972990  | Hs.196270 | folate transporter/carrier               | 4.10 | 4.50  |
|    | 414522 | AW518944  | Hs.76325  | immunoglobulin J chain                   | 4.09 | 6.07  |
|    | 407756 | AA116021  | Hs.38260  | ubiquitin specific protease 18           | 4.09 | 5.03  |
|    | 405506 |           |           | Target Exon                              | 4.08 | 3.71  |
|    | 417497 | AW402482  | Hs.82212  | CD53 antigen                             | 4.07 | 8.61  |
| 35 | 413715 | AW851121  | Hs.75497  | Homo sapiens cDNA: FLJ22139 fis, clone H | 4.06 | 4.05  |
|    | 421508 | NM_004833 | Hs.105115 | absent in melanoma 2                     | 4.05 | 4.61  |
|    | 445701 | AF055581  | Hs.13131  | lymphocyte adaptor protein               | 4.02 | 4.56  |
|    | 443071 | AL080021  | Hs.8986   | complement component 1, q subcomponent,  | 4.00 | 8.91  |
|    | 417615 | BE548641  | Hs.82314  | hypoxanthine phosphoribosyltransferase 1 | 3.99 | 4.15  |
| 40 | 444371 | BE540274  | Hs.239    | forkhead box M1                          | 3.86 | 4.58  |
|    | 450515 | AW304226  |           | biphenyl hydrolase-like (serine hydrolas | 3.85 | 4.26  |
|    | 446506 | AI123118  | Hs.15159  | chemokine-like factor, alternatively spl | 3.81 | 4.06  |
|    | 410668 | BE379794  | Hs.159651 | hypothetical protein                     | 3.80 | 6.84  |
|    | 443710 | AI928136  | Hs.9691   | Homo sapiens cDNA: FLJ23249 fis, clone C | 3.77 | 4.46  |
| 45 | 406837 | R70292    | Hs.156110 | immunoglobulin kappa constant            | 3.77 | 6.44  |
|    | 419381 | AB023420  | Hs.90093  | heat shock 70kD protein 4                | 3.76 | 4.00  |
|    | 402474 |           |           | NM_004079:Homo sapiens cathepsin S (CTSS | 3.76 | 4.67  |
|    | 454080 | AI199711  | Hs.576    | fucosidase, alpha-L-1, tissue            | 3.74 | 6.22  |
|    | 409264 | NM_014937 | Hs.52463  | KIAA0966 protein                         | 3.69 | 4.36  |
| 50 | 428398 | AI249368  | Hs.98558  | ESTs                                     | 3.68 | 5.18  |
|    | 423494 | AW504365  | Hs.24143  | Wiskott-Aldrich syndrome protein interac | 3.67 | 4.12  |
|    | 414829 | AA321568  | Hs.77436  | pleckstrin                               | 3.65 | 4.45  |
|    | 437239 | AW503395  | Hs.5541   | ATPase, Ca transporting, ubiquitous      | 3.63 | 4.84  |
|    | 433867 | AK000596  | Hs.3618   | hippocalcin-like 1                       | 3.59 | 4.49  |
| 55 | 432485 | N90866    | Hs.276770 | CDW52 antigen (CAMPATH-1 antigen)        | 3.54 | 5.31  |
|    | 418310 | AA814100  | Hs.86693  | ESTs                                     | 3.49 | 4.57  |
|    | 406868 | AA505445  | Hs.300697 | immunoglobulin heavy constant gamma 3 (C | 3.48 | 4.33  |
|    | 438746 | AI885815  | Hs.184727 | Human melanoma-associated antigen p97 (m | 3.47 | 6.87  |
|    | 427527 | AI809057  | Hs.153261 | immunoglobulin heavy constant mu         | 3.44 | 10.42 |
| 60 | 442485 | BE092285  | Hs.29724  | hypothetical protein FLJ13187            | 3.41 | 4.60  |
|    | 432606 | NM_002104 | Hs.3066   | granzyme K (serine protease, granzyme 3; | 3.40 | 4.50  |
|    | 435080 | AI831760  | Hs.155111 | hypothetical protein FLJ14428            | 3.40 | 4.22  |
|    | 436810 | AA353044  | Hs.5321   | ARP3 (actin-related protein 3, yeast) ho | 3.40 | 5.03  |
|    | 422545 | X02761    | Hs.287820 | fibronectin 1                            | 3.39 | 7.32  |
| 65 | 409142 | AI136877  | Hs.50758  | SMC4 (structural maintenance of chromoso | 3.36 | 4.47  |
|    | 434826 | AF155661  | Hs.22265  | pyruvate dehydrogenase phosphatase       | 3.34 | 5.02  |
|    | 416975 | NM_004131 | Hs.1051   | granzyme B (granzyme 2, cytotoxic T-lymp | 3.34 | 4.24  |
|    | 448410 | AK000227  | Hs.21126  | hypothetical protein FLJ20220            | 3.33 | 4.29  |
|    | 432642 | BE297635  | Hs.3069   | heat shock 70kD protein 9B (mortalin-2)  | 3.32 | 4.48  |
| 70 | 425234 | AW152225  | Hs.165909 | ESTs, Weakly similar to I38022 hypothei  | 3.24 | 4.64  |
|    | 443623 | AA345519  | Hs.9641   | complement component 1, q subcomponent,  | 3.23 | 13.58 |
|    | 426490 | NM_001621 | Hs.170087 | aryl hydrocarbon receptor                | 3.23 | 4.20  |
|    | 443958 | BE241880  | Hs.10029  | cathepsin C                              | 3.16 | 5.05  |
|    | 407862 | BE548267  | Hs.337986 | Homo sapiens cDNA FLJ10934 fis, clone OV | 3.15 | 4.04  |
| 75 | 412577 | Z22968    | Hs.74076  | CD163 antigen                            | 3.14 | 5.32  |
|    | 414050 | NM_004766 | Hs.75724  | coatomer protein complex, subunit beta 2 | 3.13 | 4.65  |
|    | 442904 | AW575008  | Hs.11355  | thymopoietin                             | 3.13 | 4.34  |
|    | 421633 | AF121860  | Hs.106260 | sorting nexin 10                         | 3.12 | 4.99  |
|    | 413936 | AF113676  | Hs.297681 | serine (or cysteine) proteinase inhibito | 3.11 | 5.47  |
| 80 | 428797 | AA496205  | Hs.193700 | Homo sapiens mRNA: cDNA DKFZp586i0324 (f | 3.10 | 4.30  |
|    | 408515 | AI289507  | Hs.299883 | hypothetical protein FLJ23399            | 3.10 | 4.03  |
|    | 409442 | AA310162  | Hs.169248 | cytochrome c                             | 3.07 | 4.00  |
|    | 456373 | BE247706  | Hs.89751  | membrane-spanning 4-domains, subfamily A | 3.04 | 4.38  |
|    | 430413 | AW842182  | Hs.241392 | small inducible cytokine A5 (RANTES)     | 3.04 | 5.53  |
|    | 418526 | BE019020  | Hs.85838  | solute carrier family 16 (monocarboxylic | 3.03 | 4.97  |
|    | 452139 | AA099969  | Hs.16331  | Homo sapiens cDNA: FLJ21482 fis, clone C | 3.01 | 4.87  |
|    | 430478 | NM_014349 | Hs.241535 | apolipoprotein L 3                       | 2.98 | 4.44  |

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|    |        |           |           |  |      |       |
|----|--------|-----------|-----------|--|------|-------|
|    | 439237 | AW408158  | Hs.318893 | ESTs, Weakly similar to A47582 B-cell gr | 2.95 | 7.45  |
|    | 406782 | AA430373  |           | gb:zw20111.s1 Soares ovary tumor NbHOT H | 2.93 | 8.49  |
|    | 450455 | AL117424  | Hs.25035  | chloride intracellular channel 4         | 2.90 | 5.08  |
|    | 422530 | AW972300  | Hs.118110 | bone marrow stromal cell antigen 2       | 2.87 | 7.07  |
| 5  | 429490 | AI971131  | Hs.23889  | ESTs, Weakly similar to ALU7_HUMAN ALU S | 2.87 | 4.29  |
|    | 410231 | AA314163  | Hs.61153  | proteasome (prosome, macropain) 26S subu | 2.82 | 5.53  |
|    | 419956 | AL137939  | Hs.40096  | cadherin 19, type 2                      | 2.80 | 4.26  |
|    | 416511 | NM_006762 | Hs.79356  | Lysosomal-associated multispanning membr | 2.79 | 5.55  |
| 10 | 421712 | AK000140  | Hs.107139 | hypothetical protein                     | 2.79 | 6.29  |
|    | 429732 | U20158    | Hs.2488   | lymphocyte cytosolic protein 2 (SH2 doma | 2.78 | 4.74  |
|    | 448517 | AA082750  | Hs.42194  | hypothetical protein FLJ22649 similar to | 2.78 | 4.69  |
|    | 427792 | M63928    | Hs.180841 | tumor necrosis factor receptor superfami | 2.77 | 5.18  |
|    | 446272 | BE268912  | Hs.14601  | hematopoietic cell-specific Lyn substrat | 2.75 | 4.90  |
| 15 | 422173 | BE385828  | Hs.250619 | phorbol-in-like protein MDS019 (CEM15)   | 2.75 | 4.33  |
|    | 446566 | H95741    | Hs.17914  | membrane-spanning 4-domains, subfamily A | 2.72 | 4.19  |
|    | 429402 | AF116571  | Hs.201671 | SRY (sex determining region Y)-box 13    | 2.72 | 5.15  |
|    | 421360 | AA297012  | Hs.103839 | erythrocyte membrane protein band 4.1-li | 2.71 | 4.82  |
|    | 425762 | BE244076  | Hs.159578 | AT-hook transcription factor AKNA        | 2.71 | 4.61  |
| 20 | 429412 | NM_006235 | Hs.2407   | POU domain, class 2, associating factor  | 2.69 | 4.45  |
|    | 409202 | AA236881  | Hs.51043  | hexosaminidase B (beta polypeptide)      | 2.68 | 4.89  |
|    | 426124 | AI268389  | Hs.250697 | phosphatidylinositol glycan, class F     | 2.68 | 4.25  |
|    | 422672 | X12784    | Hs.119129 | collagen, type IV, alpha 1               | 2.67 | 5.00  |
|    | 417389 | BE260964  | Hs.82045  | midkine (neurite growth-promoting factor | 2.65 | 9.54  |
| 25 | 445784 | AI253155  | Hs.146065 | ESTs                                     | 2.65 | 4.11  |
|    | 410341 | AW499985  | Hs.42915  | ARP2 (actin-related protein 2, yeast) ho | 2.64 | 4.50  |
|    | 422603 | BE242587  | Hs.118651 | hematopoietically expressed homeobox     | 2.63 | 4.17  |
|    | 424687 | J05070    | Hs.151738 | matrix metalloproteinase 9 (gelatinase B | 2.62 | 5.80  |
|    | 410016 | AA297977  | Hs.57907  | small inducible cytokine subfamily A (Cy | 2.61 | 5.57  |
| 30 | 424779 | AL046851  | Hs.153053 | CD37 antigen                             | 2.60 | 5.72  |
|    | 420224 | M84371    | Hs.96023  | CD19 antigen                             | 2.60 | 4.02  |
|    | 421924 | BE514514  | Hs.109606 | coronin, actin-binding protein, 1A       | 2.57 | 4.83  |
|    | 426143 | BE379836  |           | proteasome (prosome, macropain) subunit, | 2.56 | 4.50  |
| 35 | 421563 | NM_006433 | Hs.105806 | granulysin                               | 2.56 | 5.35  |
|    | 425593 | AA278921  | Hs.1908   | proteoglycan 1, secretory granule        | 2.55 | 4.32  |
|    | 428169 | AI928984  | Hs.182793 | golgi phosphoprotein 2                   | 2.54 | 5.78  |
|    | 417022 | NM_014737 | Hs.80905  | Ras association (RafGDS/AF-6) domain fam | 2.54 | 4.09  |
|    | 414646 | AA353776  | Hs.901    | CD48 antigen (B-cell membrane protein)   | 2.53 | 4.41  |
|    | 429800 | AA333375  | Hs.223014 | antizyme inhibitor                       | 2.50 | 5.68  |
| 40 | 407241 | M34516    |           | gb:Human omega light chain protein 14.1  | 2.50 | 4.69  |
|    | 421739 | AB004550  | Hs.107526 | UDP-Gal:betaGlcNAc beta 1,4- galactosylt | 2.45 | 4.35  |
|    | 412819 | T25829    | Hs.24048  | FK506 binding protein precursor          | 2.45 | 4.66  |
|    | 435523 | T62849    | Hs.11090  | membrane-spanning 4-domains, subfamily A | 2.44 | 4.91  |
|    | 434883 | AW381538  | Hs.19807  | hypothetical protein MGC12959            | 2.41 | 4.80  |
| 45 | 420340 | NM_000734 | Hs.97087  | CD3Z antigen, zeta polypeptide (TIT3 com | 2.41 | 4.00  |
|    | 449296 | AL137257  | Hs.23458  | Homo sapiens cDNA: FLJ23015 fis, clone L | 2.41 | 4.77  |
|    | 417370 | T28651    | Hs.82030  | tryptophanyl-tRNA synthetase             | 2.41 | 4.04  |
|    | 400223 |           |           | Eos Control                              | 2.39 | 5.47  |
|    | 431629 | AU077025  | Hs.265827 | interferon, alpha-inducible protein (clo | 2.38 | 7.67  |
| 50 | 414622 | AI752666  | Hs.76669  | nicotinamide N-methyltransferase         | 2.38 | 5.32  |
|    | 415149 | X12451    | Hs.78056  | cathepsin L                              | 2.37 | 8.07  |
|    | 435099 | AC004770  | Hs.4756   | flap structure-specific endonuclease 1   | 2.37 | 5.23  |
|    | 454390 | AB020713  | Hs.56966  | KIAA0906 protein                         | 2.35 | 4.57  |
|    | 427407 | BE268649  | Hs.177766 | ADP-ribosyltransferase (NAD; poly (ADP-r | 2.31 | 5.48  |
| 55 | 449029 | N28989    | Hs.22891  | solute carrier family 7 (cationic amino  | 2.24 | 4.08  |
|    | 438956 | W00847    | Hs.135056 | Human DNA sequence from clone RP5-850E9  | 2.23 | 4.02  |
|    | 423397 | NM_001838 | Hs.1652   | chemokine (C-C motif) receptor 7         | 2.23 | 4.90  |
|    | 416232 | AW502678  | Hs.79090  | exportin 1 (CRM1, yeast, homolog)        | 2.18 | 4.97  |
|    | 436692 | AW243158  | Hs.5297   | DKFZP564A2416 protein                    | 2.17 | 4.13  |
| 60 | 420842 | AI083668  | Hs.50601  | hypothetical protein MGC10986            | 2.14 | 5.14  |
|    | 428227 | AA321649  | Hs.2248   | small inducible cytokine subfamily B (Cy | 2.13 | 4.43  |
|    | 429542 | X68264    | Hs.211579 | melanoma cell adhesion molecule (MCAM) ( | 2.11 | 5.42  |
|    | 416448 | L13210    | Hs.79339  | lectin, galactoside-binding, soluble, 3  | 2.10 | 6.36  |
|    | 416714 | AF283770  | Hs.79630  | CD79A antigen (immunoglobulin-associated | 2.10 | 4.06  |
| 65 | 409220 | BE243323  | Hs.51233  | tumor necrosis factor receptor superfami | 2.09 | 4.67  |
|    | 414045 | NM_002951 | Hs.75722  | ribophorin II                            | 2.07 | 4.32  |
|    | 422451 | AA310753  | Hs.42491  | ESTs, Weakly similar to S65657 alpha-1C- | 2.07 | 4.24  |
|    | 441211 | AW946155  | Hs.7750   | hypothetical protein AL133206            | 2.06 | 4.64  |
|    | 434692 | H06586    | Hs.94     | DnaJ (Hsp40) homolog, subfamily A, membe | 2.05 | 4.33  |
| 70 | 452363 | AI582743  | Hs.94953  | Homo sapiens, Similar to complement comp | 2.04 | 13.36 |
|    | 438393 | AA351815  | Hs.50740  | Homo sapiens cDNA: FLJ22272 fis, clone H | 2.03 | 4.52  |
|    | 413313 | NM_002047 | Hs.283108 | glycyl-tRNA synthetase                   | 2.02 | 4.11  |
|    | 452700 | AI859390  | Hs.288940 | five-span transmembrane protein M83      | 2.00 | 4.04  |
|    | 406621 | X57809    | Hs.8997   | immunoglobulin lambda locus              | 1.99 | 4.35  |
| 75 | 424415 | NM_001975 | Hs.146580 | enolase 2, (gamma, neuronal)             | 1.98 | 4.52  |
|    | 429451 | BE409861  | Hs.202833 | heme oxygenase (decycling) 1             | 1.95 | 5.60  |
|    | 416967 | BE616731  | Hs.80645  | interferon regulatory factor 1           | 1.95 | 5.38  |
|    | 414945 | BE076358  | Hs.77667  | lymphocyte antigen 6 complex, locus E    | 1.93 | 4.69  |
|    | 418917 | X02994    | Hs.1217   | adenosine deaminase                      | 1.91 | 4.32  |
| 80 | 445411 | AL137255  | Hs.12646  | hypothetical protein FLJ22693            | 1.91 | 4.48  |
|    | 413945 | NM_000591 | Hs.75627  | CD14 antigen                             | 1.90 | 6.03  |
|    | 429119 | AV660012  | Hs.196437 | hypothetical protein FLJ10788            | 1.90 | 4.08  |
|    | 413317 | U53225    | Hs.75283  | sorting nexin 1                          | 1.89 | 4.06  |
|    | 427239 | BE270447  |           | ubiquitin carrier protein                | 1.87 | 5.98  |

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|    |        |           |           |  |      |      |
|----|--------|-----------|-----------|--|------|------|
| 5  | 450440 | AB024334  | Hs.25001  | tyrosine 3-monooxygenase/tryptophan 5-mo | 1.87 | 6.33 |
|    | 413142 | M81740    | Hs.75212  | omithine decarboxylase 1                 | 1.85 | 4.21 |
|    | 447131 | NM_004585 | Hs.17466  | retinoic acid receptor responder (tazaro | 1.84 | 5.07 |
|    | 430040 | AW503115  | Hs.227823 | pM5 protein                              | 1.83 | 5.57 |
|    | 416819 | U77735    | Hs.80205  | pim-2 oncogene                           | 1.83 | 4.12 |
|    | 425356 | BE244879  | Hs.155939 | inositol polyphosphate-5-phosphatase, 14 | 1.82 | 5.71 |
|    | 414570 | Y00285    | Hs.76473  | insulin-like growth factor 2 receptor    | 1.81 | 4.73 |
|    | 443639 | BE269042  | Hs.9661   | proteasome (prosome, macropain) subunit, | 1.80 | 4.71 |
|    | 418707 | U97502    | Hs.87497  | butyrophilin, subfamily 3, member A2     | 1.78 | 5.16 |
| 10 | 425367 | BE271188  | Hs.155975 | protein tyrosine phosphatase, receptor t | 1.78 | 7.00 |
|    | 409154 | U72882    | Hs.50842  | interferon-induced protein 35            | 1.74 | 5.10 |
|    | 444954 | AW247076  | Hs.12163  | eukaryotic translation initiation factor | 1.71 | 5.15 |
|    | 424825 | AF207069  | Hs.153357 | procollagen-lysine, 2-oxoglutarate 5-dio | 1.70 | 4.43 |
|    | 428385 | AF112213  | Hs.184062 | putative Rab5-interacting protein        | 1.69 | 4.06 |
| 15 | 427378 | BE515037  | Hs.177556 | melanoma antigen, family D, 1            | 1.67 | 5.68 |
|    | 413322 | AA380158  | Hs.75290  | ADP-ribosylation factor 4                | 1.67 | 4.56 |
|    | 442414 | BE408758  | Hs.8297   | ribonuclease 6 precursor                 | 1.65 | 4.40 |
|    | 410129 | BE244074  | Hs.58831  | regulator of Fas-induced apoptosis       | 1.64 | 4.02 |
|    | 452472 | AW957300  | Hs.294142 | ESTs, Weakly similar to C55663 oligodend | 1.63 | 4.49 |
| 20 | 446143 | BE245342  | Hs.306079 | sec61 homolog                            | 1.62 | 4.73 |
|    | 413511 | AI627178  | Hs.75412  | arginine-rich, mutated in early stage tu | 1.60 | 4.19 |
|    | 415017 | F06434    | Hs.77805  | ATPase, H transporting, lysosomal (vacuo | 1.60 | 4.61 |
|    | 410361 | BE391804  | Hs.62661  | guanylate binding protein 1, interferon- | 1.59 | 4.26 |
| 25 | 410068 | AI633888  | Hs.58435  | FYN-binding protein (FYN-120/130)        | 1.56 | 4.10 |
|    | 419489 | AW411280  | Hs.90693  | replication initiation region protein (6 | 1.55 | 4.30 |
|    | 439627 | BE621702  | Hs.29076  | hypothetical protein FLJ21841            | 1.55 | 6.54 |
|    | 414427 | L19711    | Hs.76111  | dystroglycan 1 (dystrophin-associated gl | 1.53 | 4.00 |
|    | 416971 | R34657    | Hs.80658  | uncoupling protein 2 (mitochondrial, pro | 1.53 | 4.79 |
|    | 426059 | BE292842  | Hs.166120 | interferon regulatory factor 7           | 1.51 | 4.12 |
| 30 | 418879 | AW162087  | Hs.5437   | Tax1 (human T-cell leukemia virus type 1 | 1.50 | 4.93 |
|    | 433271 | BE621697  | Hs.14317  | nucleolar protein family A, member 3 (H) | 1.45 | 4.15 |
|    | 422481 | AL050163  | Hs.117339 | DNAX-activation protein 10               | 1.45 | 4.03 |
|    | 432805 | X94630    | Hs.3107   | CD97 antigen                             | 1.43 | 4.11 |
|    | 447150 | AI439011  | Hs.86386  | myeloid cell leukemia sequence 1 (BCL2-r | 1.43 | 4.08 |
| 35 | 421975 | AW961017  | Hs.6459   | hypothetical protein FLJ11856            | 1.41 | 4.36 |
|    | 427458 | BE208364  | Hs.29283  | ESTs, Weakly similar to LKHU proteoglyca | 1.41 | 4.10 |
|    | 412968 | AW500508  | Hs.75102  | alanyl-tRNA synthetase                   | 1.40 | 4.25 |
|    | 428511 | AA019912  | Hs.184693 | transcription elongation factor B (SIII) | 1.38 | 4.91 |
| 40 | 413825 | BE299181  | Hs.75564  | CD151 antigen                            | 1.37 | 4.46 |
|    | 427496 | D21260    | Hs.178710 | clathrin, heavy polypeptide (Hc)         | 1.30 | 4.04 |
|    | 407143 | C14076    | Hs.332329 | EST                                      | 1.29 | 4.37 |

TABLE 56B:

Pkey: Unique Eos probeset identifier number  
CAT number: Gene cluster number  
Accession: Genbank accession numbers

|    |        |            |  |
|----|--------|------------|--|
| 45 | Pkey   | CAT Number | Accession  |
|    | AI2918 | 2764_3     | BE784583 AL519009 AV755430 AV756363 AV711927 BI523434 AI521453 AA846815 AW024829 AW949702 BG218926 AA626658 AI445621 AI452815 AA946555 AA723580 AA612925 BG105326 BG532618 AW513994 AW602165 AI373448 AA907901 AW135104 BG186662 W69205 BG219754 BE774875 BG190378 AA483698 BE066066 BE066067 BE066062 AW304207 BE939361 AW795569 BG210592 AW795644 BE939358 AW102886 BE065977 BG182971 H97042 D58090 BI046351 H81248 AI750112 AW372079 C05492 D58287 D57835 AA935095 BF700910 BG215802 BG195459 AW368467 BG495535 BC533177 BI087962 BE541579 BF130753 Z69892 AA210833 BM353155 AI473754 AI147901 AI803109 AA843296 AA418925 AI478552 AI400067 AI360304 AA418828 AW301673 BE218952 AI632804 BF433234 AA394157 BF378047 BE467036 AA319724 AW290940 AI222671 AI347724 AW001711 AI028652 AA398130 AI470582 AI915936 AA908929 C75102 N36920 H50440 AI919034 AI004399 AI383862 AI123506 AA648518 AA516258 AI855321 N22865 AA848101 AI589792 AA758196 AA214630 AI373911 AW194733 AI213447 AI290291 BF437165 AA757592 BF086904 AW959032 AW392466 BF446888 AI936337 BE938849 AW149064 AI701629 N90021  |
| 50 | 436701 | 28142_1    | BC016556 BC016365 NM_015040 AF151858 BI561037 AW966873 AW967497 BE219482 BE018650 AW770511 AW469095 AW470133 BM150181 BM193977 AI824135 AI632346 AI129383 BM147664 AI292112 BE244667 AA251084 AW503659 BM193866 BM194481 BF446862 AL597435 BF000262 AI824386 AI990100 AW087624 AA668793 AL080084 BI335866 BI820940 BG779242 BM069854 AA282620 AA256771 AW964511 AA451623 H00335 AW370399 AW954201 BM145846 BG111760 AI750065 BG655794 AA564086 BG494071 BM069606 AI675331 BE302224 AI476466 AI625980 BM144854 AI184602 AI343932 AW136586 AW029464 AI708651 AA824243 BM145917 AA662210 AA825708 AI335858 AI273704 AA662171 N48971 AA976614 AI344537 AA609603 AI873901 AI859995 AA833589 AA765811 AI150322 AI926816 BM148634 N98862 AA019347 AA897062 AA831100 N69889 BE243185 AA282179 AA831098 AA112676 AI702407 BG621752 BE006492 AA353202 BG674256 N46921 BI048774 AW300233 BF739890 AW966879 AA393405 BF115146 AA910851 AA013099 N28878 AA287713 BE348728 BG616446 AL599953 AL599952 BF381073 AW505056 AA094735 H03613 AA287714 H27168 R54718 BF792697 AV693603 AV685883 BG619956 BF541504 BF216789 AA319751 BM452652 BF335838 AA280397 BG171509 BF571997 AA490239 AW388161 BE842126 BG165309 N71903 AI955397 AI536898 BE242040 F09718 AA772421 AA450218 M78543 BE241414 AA013098 H00297 AW576477 AW150918 AW591371 AI382711 N71926 H72497 AI285602 AA745055 AI281647 BF377670 T65207 BG532880 BG721680 AA285143 H27167 AW500235 BG494497 BF668899  |
| 55 | 432469 | 58644_1    | BE379766 AW152643 AI803450 AI564343 AI092711 AI140525 AW152156 AI620740 AI554689 AI161209 AI290242 AI339745 AI374611 AI347388 AI858296 AI140529 AI366124 AA493912 AA406235 AA493889 AI057160 AW022264 AI097277 AI144126 AI080051 AA983529 AA860507 N53469 AA843767 N81163 N70628 AA424577 AA983537 BF003004 AA626688 AA235977 AI057152 AI095366 AI095356 AA458646 AW194479 AA150439 AI375272 AW571777 AI359198 AA993793 BE614394 BE738239 AA127883 AI034344 T59504 D81608 AA908704 AW051665 AA382785 AA307208 N24635 AI370715 BE244980 AA548596 AW449675 AI191008 BF223749 N70752 N22266 AI91012 AA028001 AI419106 BF215661 BF591548 BG942356 AI474968 BE858217 BF793358 AV756758 BG483603 AI093724 BF693395 BG545345 AI744294 T59549 AA811773 BG499757 BE739425 AA514221 AA865491 AI828293 AA470456 AI276739 AA169357 BE932464 AA514889 AW819039 AW819083 BE843048 AI432496 AI470335 AI247243 BG533994 AA513783 AI887309 AA528036 AW972006 AW873028 AI924914 AI818810 AW152378 AW084946 AI521413 AI669583 BE932521 AI581370 BE180238 AW089750 AW771461 AW089714 AI590949 AI819148 AA731056 BF815234 BF911506 AA235803 AA485373 AI735658 AW393133 AW073080 AI707637 BF353320 BE843111 AW819036 AW393135 BG697291 AV648670 AV654332 AV687530 BG566964 AI807430 AI676072 AA837010 AI452482 AI625817 AW241750 BE048616 AI290928 AI680714 AA485530 BE175687 AV648513 AW130312 AI000555 AA632893 BE674169 BF001208 AA948166 BE175650 AA524664 AA490345 AI244948 AA602956 AA483492 AA918178 AW802049 BG675859 AV658871 BG678060 AI565004 AW819026 BE843092 AV686437 AV723049 BG616948 AI911647 AI743490 AI091096 BE857251 AI962074 AA040027 AW769317 |
| 60 | 424571 | 9758_1     |  |
| 65 | 444207 | 9172_3     |  |
| 70 |        |            |  |
| 75 |        |            |  |
| 80 |        |            |  |

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|    |        |         |   |  |
|----|--------|---------|---|--|
| 5  | 450515 | 13638_2 | AA343477 AA640112 BF876213 R82948 H26425 H82876 BE843095 BE843140 BG536641 BG617830 AA235802 BE774985 BE006682 BF342375<br>AA903144 BF338083 BF984258 AV657996 A1749532 BE768614 BE857252 BE932516 BE768573 AV657993 AV657777 AV752631 BE774974 T55847<br>BF095761 BF911511 BE710793 BE180119 BG617338 H45942 T55897 AV657718 BG563497<br>BE299605 AI589870 AA847598 A470122 BF939896 AI304356 BE223045 BF435800 AI394207 AI708171 AW025415 AI079409 AW008420 AW304225<br>N34543 AW603578 AA526961 AA983631 N99134 AA626645 R45023 AA902417 AW672925 AA449985 AA953982 AW675471 AA010062 N80194<br>H14620 H28475 H26247 BF333581 AW842369 H06848 H05608 H81745 H15016 R51905 AA860423 AI860904 AA875023<br>AA430373 AA968771<br>BC005265 BG176720 AW006027 BM352064 AW026316 AI635822 AI880584 AI693769 AI092211 BI492387 AI400449 AW166297 BF939910 AA232282<br>AW021432 AI333893 AA494308 AA854899 AI436795 AW069256 AA682373 AI092748 AA993184 AI126077 AI081758 AI240686 AI261863 AI378423<br>AA465237 AI376096 AA035579 AI087306 AA448162 AA129977 AI090903 AI080586 AI288939 N33004 AI801240 AW021546 AI370773 AI086064<br>AA669528 AI250053 AI870113 AA853181 AA858014 BG055562 BG939559 AW080765 AA032283 AW467587 H40506 D00762 NM_002788 AA641134<br>AI582295 AI417525 AI563975 AI093566 AI707743 AI290741 AW073417 BE875418 BM264076 BG876884 AI680535 AW854219 BE774635 AW854212<br>BG952443 AW854221 AW854208 BE156348 BE843056 AW858991 BE937569 BG878291 BG876450 AW819099 AI908570 AA449871 AU135228<br>BM478404 BF126296 AA375499 AA248473<br>NM_005648 BC013809 L34587 BF103775 BG702618 BG716553 BI667090 BG505863 BF983483 BG718195 BI857891 BG501016 BM043599<br>AL521812 BG705730 BI495545 BI495546 BF112248 BM023182 BM023123 AI075173 AW051799 BF058224 BI324885 BF436008 AA398446 BG822375<br>BM019558 BM023382 BG164174 N56909 BI467064 BM023464 AI207475 BM311415 BG758430 BG758807 AI934826 N90351 BG422026 BE910312<br>AI027778 AI081950 AI360890 BM009115 AI191829 BG759697 AI138728 AA399403 AI355589 AI336427 AA868702 AA393660 AA025127 BG027630<br>AA962774 AA631224 BG940967 BE791087 AA573315 W81685 AA393525 BG944103 AI339125 AI149864 AA977555 N90314 BE612839 BG491847<br>AI129091 AA461234 AA781198 AA759256 AA888954 AA975844 AI184099 AI018025 AA398363 AI003331 AI193380 AA626020 AI244476 AI601114<br>AW135664 AI206607 AW263599 AA813219 AI684453 AA878626 AA772222 AI085496 AI630226 BG940966 AI022010 AA770649 AA887624 AA491739<br>AA974295 BG530040 AW037091 AA019912 BI160457 H64512 BG503896<br>AL532360 BE794750 AA582906 AI015067 AW271034 BG271636 AW075177 AW071374 AI345565 AI307208 BE138953 BE049086 AI334881<br>AW075006 AW075181 AA464019 AW302733 AW075100 AW073433 AI802854 AI334909 AI802853 AI345036 AI348921 AI340734 AI307478 AI251289<br>AW302327 AW072520 AI312145 AW073656 AW072513 AW071289 AI307559 AA876186 T29587 AI307493 AI255068 AI252868 AI252839 AW074809<br>AI252926 AI252160 AI251662 AI251262 AI610913 AI270787 AI270156 AI252075 AW073469 AW072901 AW072496 AW071420 AI305762 AI254764<br>AI802837 AI251264 AW073049 AW071311 AI340643 BE138965 BE138502 AW073456 AI334733 AI054335 BE139260 AI054302 AI054060 AI054057<br>AI053722 AI289711 BE139228 AW470478 AW271039 AW302085 BE041872 AI254494 AI271496 AI252427 BF718773 BF718645 AW074866 BE857822 |  |
|    | 406782 | 0_0     |   |  |
| 10 | 426143 | 3806_1  |   |  |
|    | 400223 | 2368_1  |   |  |
| 20 | 427239 | 20459_2 |   |  |
|    |        |         |   |  |
| 30 |        |         |   |  |
|    |        |         |   |  |
| 35 |        |         |   |  |
|    |        |         |   |  |
| 40 |        |         |   |  |
|    |        |         |   |  |

TABLE 56C:

Pkey: Unique number corresponding to an Eos probeset  
 Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) Nature 402:489-495.  
 Strand: Indicates DNA strand from which exons were predicted.  
 Nt\_position: Indicates nucleotide positions of predicted exons.

| Pkey   | Ref     | Strand | Nt_position                         |
|--------|---------|--------|-------------------------------------|
| 404854 | 7143420 | Plus   | 14260-14537                         |
| 405506 | 6466489 | Plus   | 80014-80401.80593-81125             |
| 402474 | 7547175 | Minus  | 53526-53628,55755-55920,57530-57757 |

TABLE 57A: ABOUT 304 GENES UPREGULATED IN MELANOMA METASTASES RELATIVE TO NORMAL SKIN

Table 57A lists about 304 genes upregulated in melanoma metastases relative to normal skin. Genes were selected from 59680 probesets on the Eos/Affymetrix Hu03 Genechip array. Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 R1: 90th percentile of melanoma metastasis AIs divided by the 90th percentile of normal skin AIs  
 R2: 90th percentile of melanoma metastasis AIs divided by the 90th percentile of normal skin AIs, where the 15th percentile of normal tissue AIs was subtracted from both the numerator and denominator

|     |        |           |           |   |       |       |
|-----|--------|-----------|-----------|---|-------|-------|
| 55  | Pkey   | ExAccn    | UnigenelD | Unigene Title                             | R1    | R2    |
|     | 422424 | AI186431  | Hs.296638 | prostate differentiation factor           | 18.94 | 25.00 |
| 60  | 438549 | BE386801  | Hs.21858  | trinucleotide repeat containing 3         | 17.45 | 18.47 |
|     | 417880 | BE241595  | Hs.82848  | selectin L (lymphocyte adhesion molecule  | 14.05 | 11.15 |
| 65  | 452838 | U65011    | Hs.30743  | preferentially expressed antigen in mela  | 13.91 | 15.41 |
|     | 446619 | AU076643  | Hs.313    | secreted phosphoprotein 1 (osteopontin,   | 13.41 | 9.73  |
| 70  | 426555 | NM_000372 | Hs.2053   | tyrosinase (oculocutaneous albinism IA)   | 12.24 | 7.33  |
|     | 439310 | AF086120  | Hs.102793 | ESTs                                      | 10.12 | 10.80 |
| 75  | 414020 | NM_002984 | Hs.75703  | small inducible cytokine A4 (homologous   | 9.74  | 10.16 |
|     | 447210 | AF035269  | Hs.17752  | phosphatidylserine-specific phospholipas  | 9.43  | 11.69 |
| 80  | 414812 | X72755    | Hs.77367  | monokine induced by gamma interferon      | 9.28  | 10.97 |
|     | 430377 | NM_001922 | Hs.301865 | dopachrome tautomerase (dopachrome delta  | 9.07  | 7.96  |
| 85  | 426600 | NM_003378 | Hs.171014 | VEGF nerve growth factor inducible        | 9.06  | 19.93 |
|     | 453857 | AL080235  | Hs.35861  | DKFZP586E1621 protein                     | 8.66  | 5.87  |
| 90  | 418310 | AA814100  | Hs.86693  | ESTs                                      | 8.65  | 6.62  |
|     | 433447 | U29195    | Hs.3281   | neuronal pentraxin II                     | 8.27  | 4.68  |
| 95  | 430280 | AA361258  | Hs.237868 | interleukin 7 receptor                    | 8.01  | 6.37  |
|     | 430822 | AJ005371  | Hs.248017 | glyceraldehyde-3-phosphate dehydrogenase  | 7.80  | 6.10  |
| 100 | 456373 | BE247706  | Hs.89751  | membrane-spanning 4-domains, subfamily A  | 7.78  | 7.60  |
|     | 415752 | BE314524  | Hs.78776  | putative transmembrane protein            | 7.68  | 5.41  |
| 105 | 419628 | H67546    | Hs.49768  | ESTs                                      | 7.66  | 8.96  |
|     | 417355 | D13168    | Hs.82002  | endothelin receptor type B                | 7.56  | 4.59  |
| 110 | 424321 | W74048    | Hs.1765   | lymphocyte-specific protein tyrosine kin  | 7.48  | 5.77  |
|     | 412228 | AW503785  | Hs.73792  | complement component (3d/Epstein Barr vi  | 7.43  | 4.93  |
| 115 | 436485 | X59135    | Hs.156110 | immunoglobulin kappa constant             | 7.35  | 7.98  |
|     | 414646 | AA353776  | Hs.901    | CD48 antigen (B-cell membrane protein)    | 6.97  | 5.06  |
| 120 | 422241 | Y00062    | Hs.170121 | protein tyrosine phosphatase, receptor t  | 6.83  | 5.20  |
|     | 429170 | NM_001394 | Hs.2359   | dual specificity phosphatase 4            | 6.67  | 3.77  |
| 125 | 417542 | J04129    | Hs.82269  | progesterone-associated endometrial prote | 6.67  | 15.22 |
|     |        |           |           |   |       |       |

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|    |        |           |           |  |      |      |
|----|--------|-----------|-----------|--|------|------|
| 5  | 428398 | AI249368  | Hs.98558  | ESTs                                     | 6.57 | 3.60 |
|    | 408989 | AW361666  | Hs.49500  | KIAA0746 protein                         | 6.48 | 4.93 |
|    | 417022 | NM_014737 | Hs.80905  | Ras association (RalGDS/AF-6) domain fam | 6.38 | 3.65 |
|    | 449644 | AW960707  | Hs.148324 | ESTs                                     | 6.35 | 5.84 |
|    | 412326 | R07566    | Hs.73817  | small inducible cytokine A3 (homologous  | 6.30 | 7.18 |
| 10 | 457211 | AW972565  | Hs.32399  | ESTs, Weakly similar to S51797 vasodilat | 6.25 | 7.21 |
|    | 420991 | AW504814  | Hs.287379 | Homo sapiens mRNA for FLJ00111 protein,  | 6.25 | 5.36 |
|    | 428227 | AA321649  | Hs.2248   | small inducible cytokine subfamily B (Cy | 6.18 | 6.01 |
|    | 432828 | AB042326  | Hs.287402 | chondroitin 4-sulfotransferase           | 6.12 | 6.51 |
|    | 449078 | AK001256  | Hs.22975  | KIAA1576 protein                         | 6.05 | 8.55 |
| 15 | 436856 | AI469355  | Hs.127310 | ESTs                                     | 6.00 | 5.54 |
|    | 433658 | L03678    | Hs.156110 | immunoglobulin kappa constant            | 5.92 | 7.18 |
|    | 424247 | X14008    | Hs.234734 | lysosome (renal amyloidosis)             | 5.89 | 4.07 |
|    | 409417 | AA156247  | Hs.104879 | serine (or cysteine) proteinase inhibito | 5.86 | 6.07 |
|    | 431574 | AW572659  | Hs.261373 | hypothetical protein dJ434O14.3          | 5.74 | 6.03 |
| 20 | 458079 | AI796870  | Hs.54277  | DNA segment on chromosome X (unique) 992 | 5.72 | 5.92 |
|    | 440274 | R24595    | Hs.7122   | scrapie responsive protein 1             | 5.69 | 3.22 |
|    | 429412 | NM_006235 | Hs.2407   | POU domain, class 2, associating factor  | 5.69 | 5.17 |
|    | 432606 | NM_002104 | Hs.3066   | granzyme K (serine protease, granzyme 3; | 5.68 | 3.35 |
|    | 436315 | BE390513  | Hs.27935  | hypothetical protein MGC4837             | 5.67 | 4.56 |
| 25 | 452973 | H88409    | Hs.40527  | ESTs                                     | 5.63 | 5.50 |
|    | 426559 | AB001914  | Hs.170414 | paired basic amino acid cleaving system  | 5.62 | 3.09 |
|    | 406663 | U24683    |           | immunoglobulin heavy constant mu         | 5.54 | 9.68 |
|    | 416975 | NM_004131 | Hs.1051   | granzyme B (granzyme 2, cytotoxic T-lymp | 5.52 | 6.42 |
|    | 408380 | AF123050  | Hs.44532  | diubiquitin                              | 5.51 | 4.49 |
| 30 | 418299 | AA279530  | Hs.83968  | integrin, beta 2 (antigen CD18 (p95), ly | 5.43 | 4.50 |
|    | 429500 | X78565    | Hs.289114 | hexabrachion (tenascin C, cytotoxic)     | 5.42 | 3.54 |
|    | 446341 | AL040763  | Hs.310735 | ESTs, Moderately similar to ALU7_HUMAN A | 5.41 | 5.29 |
|    | 425234 | AW152225  | Hs.165909 | ESTs, Weakly similar to I38022 hypothi   | 5.40 | 4.35 |
|    | 434203 | BE262677  | Hs.283558 | hypothetical protein PRO1855             | 5.38 | 4.16 |
| 35 | 420338 | AA825595  | Hs.88269  | Homo sapiens, clone MGC:17339, mRNA, com | 5.37 | 5.77 |
|    | 430580 | AA806105  | Hs.300697 | immunoglobulin heavy constant gamma 3 (G | 5.31 | 5.32 |
|    | 428804 | AK000713  | Hs.193736 | hypothetical protein FLJ20706            | 5.29 | 4.80 |
|    | 447735 | AA775268  | Hs.6127   | Homo sapiens cDNA: FLJ23020 fis, clone L | 5.29 | 3.61 |
|    | 410491 | AA465131  | Hs.64001  | Homo sapiens clone 25218 mRNA sequence   | 5.27 | 5.35 |
| 40 | 410361 | BE391804  | Hs.62661  | guanylate binding protein 1, interferon- | 5.26 | 6.00 |
|    | 412561 | NM_002286 | Hs.74011  | lymphocyte-activation gene 3             | 5.26 | 5.04 |
|    | 450293 | N36754    | Hs.171118 | hypothetical protein FLJ00026            | 5.23 | 3.60 |
|    | 400750 |           |           | Target Exon                              | 5.18 | 3.62 |
|    | 417933 | X02308    | Hs.82952  | thymidylate synthetase                   | 5.14 | 3.33 |
| 45 | 413385 | M34455    | Hs.840    | indoleamine-pyrrole 2,3 dioxygenase      | 5.12 | 5.36 |
|    | 445784 | AI253155  | Hs.146065 | ESTs                                     | 5.12 | 4.06 |
|    | 420602 | AF060877  | Hs.99236  | regulator of G-protein signalling 20     | 5.06 | 7.68 |
|    | 421508 | NM_004833 | Hs.105115 | absent in melanoma 2                     | 5.03 | 5.59 |
|    | 434826 | AF155661  | Hs.22265  | pyruvate dehydrogenase phosphatase       | 4.96 | 6.25 |
| 50 | 402474 |           |           | NM_004079:Homo sapiens cathepsin S (CTSS | 4.95 | 5.13 |
|    | 400417 | X72475    |           | Target                                   | 4.90 | 3.93 |
|    | 420137 | AA306478  | Hs.95327  | CD3D antigen, delta polypeptide (T1T3 co | 4.88 | 6.81 |
|    | 409264 | NM_014937 | Hs.52463  | KIAA0966 protein                         | 4.88 | 3.18 |
|    | 418460 | M26315    | Hs.85258  | CD8 antigen, alpha polypeptide (p32)     | 4.87 | 4.20 |
| 55 | 418506 | AA084248  | Hs.85339  | G protein-coupled receptor 39            | 4.85 | 5.86 |
|    | 409142 | AL136877  | Hs.50758  | SMC4 (structural maintenance of chromoso | 4.83 | 5.94 |
|    | 425088 | AA663372  | Hs.169395 | hypothetical protein FLJ12015            | 4.82 | 5.19 |
|    | 405506 |           |           | Target Exon                              | 4.74 | 4.09 |
|    | 409512 | AW979187  | Hs.293591 | melanoma differentiation associated prot | 4.74 | 3.72 |
| 60 | 430838 | N46664    | Hs.169395 | hypothetical protein FLJ12015            | 4.73 | 3.50 |
|    | 439963 | AW247529  | Hs.6793   | platelet-activating factor acetylhydrola | 4.72 | 3.66 |
|    | 421379 | Y15221    | Hs.103982 | small inducible cytokine subfamily B (Cy | 4.71 | 5.16 |
|    | 447217 | BE465754  | Hs.17778  | neuropilin 2                             | 4.70 | 4.52 |
|    | 422309 | U79745    | Hs.114924 | solute carrier family 16 (monocarboxylic | 4.69 | 3.51 |
| 65 | 413670 | AB000115  | Hs.75470  | hypothetical protein, expressed in osteo | 4.68 | 3.69 |
|    | 419956 | AL137939  | Hs.40096  | cadherin 19, type 2                      | 4.68 | 5.83 |
|    | 429903 | AL134197  | Hs.93597  | cyclin-dependent kinase 5, regulatory su | 4.68 | 5.29 |
|    | 449217 | AA278536  | Hs.23262  | ribonuclease, RNase A family, k6         | 4.66 | 3.84 |
|    | 449722 | BE280074  | Hs.23960  | cyclin B1                                | 4.64 | 4.29 |
| 70 | 424006 | AF054815  | Hs.137548 | CD84 antigen (leukocyte antigen)         | 4.62 | 4.54 |
|    | 407846 | AA426202  | Hs.40403  | Cbp/p300-interacting transactivator, wit | 4.62 | 6.78 |
|    | 414821 | M63835    | Hs.77424  | Fc fragment of IgG, high affinity Ia, re | 4.59 | 5.81 |
|    | 406673 | M34996    | Hs.198253 | major histocompatibility complex, class  | 4.57 | 5.60 |
|    | 431620 | AA126109  | Hs.264981 | Z-5'-oligoadenylate synthetase 2 (69-71  | 4.56 | 4.44 |
| 75 | 441224 | AU076964  | Hs.7753   | calumenin                                | 4.56 | 3.75 |
|    | 442739 | NM_007274 | Hs.8679   | cytosolic acyl coenzyme A thioester hydr | 4.56 | 3.22 |
|    | 444371 | BE540274  | Hs.239    | forkhead box M1                          | 4.53 | 5.28 |
|    | 448719 | AA033627  | Hs.21858  | trinucleotide repeat containing 3        | 4.48 | 9.08 |
|    | 420301 | AA767526  | Hs.22030  | paired box gene 5 (B-cell lineage specif | 4.47 | 5.61 |
| 80 | 430294 | AI538226  | Hs.32976  | guanine nucleotide binding protein 4     | 4.43 | 4.11 |
|    | 428513 | BE220806  | Hs.184697 | Homo sapiens clone 23785 mRNA sequence   | 4.41 | 4.43 |
|    | 446006 | NM_004403 | Hs.13530  | deafness, autosomal dominant 5           | 4.39 | 3.99 |
|    | 432485 | N90866    | Hs.276770 | CDW52 antigen (CAMPATH-1 antigen)        | 4.38 | 5.50 |
|    | 428242 | H55709    | Hs.2250   | leukemia inhibitory factor (cholinergic  | 4.37 | 3.25 |
|    | 421633 | AF121860  | Hs.106260 | sorting nexin 10                         | 4.36 | 6.23 |
|    | 414829 | AA321568  | Hs.77436  | pleckstrin                               | 4.35 | 2.91 |
|    | 417166 | AA431323  | Hs.42146  | ESTs                                     | 4.35 | 4.08 |



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|    |        |           |           |  |      |       |
|----|--------|-----------|-----------|--|------|-------|
|    | 448410 | AK000227  | Hs.21125  | hypothetical protein FLJ20220            | 4.34 | 5.35  |
|    | 419381 | AB023420  | Hs.90093  | heat shock 70kD protein 4                | 4.34 | 3.72  |
|    | 411305 | BE241596  | Hs.69547  | myelin basic protein                     | 4.32 | 4.18  |
| 5  | 425289 | AW139342  | Hs.155530 | interferon, gamma-inducible protein 16   | 4.28 | 2.44  |
|    | 451099 | RS2795    | Hs.25954  | interleukin 13 receptor, alpha 2         | 4.27 | 4.48  |
|    | 432642 | BE297635  | Hs.3069   | heat shock 70kD protein 9B (mortalin-2)  | 4.25 | 2.69  |
|    | 422282 | AF019225  | Hs.114309 | apolipoprotein L                         | 4.25 | 3.75  |
|    | 433867 | AK000596  | Hs.3618   | hippocampin-like 1                       | 4.23 | 5.13  |
| 10 | 415817 | U88967    | Hs.78867  | protein tyrosine phosphatase, receptor-I | 4.20 | 2.15  |
|    | 438619 | AB032773  |           | TU12B1-TY protein                        | 4.19 | 3.32  |
|    | 426317 | AA312350  | Hs.169294 | transcription factor 7 (T-cell specific, | 4.16 | 5.14  |
|    | 420208 | BE276055  | Hs.95972  | silver (mouse homolog) like              | 4.16 | 5.08  |
|    | 416602 | NM_006159 | Hs.79389  | Protein kinase C-binding protein NELL2   | 4.16 | 2.38  |
| 15 | 430770 | AA765694  | Hs.123296 | ESTs                                     | 4.15 | 3.67  |
|    | 424541 | AW392551  | Hs.180559 | ESTs, Weakly similar to A56194 thromboxa | 4.15 | 3.98  |
|    | 427337 | Z46223    | Hs.176663 | Fc fragment of IgG, low affinity IIb, r  | 4.14 | 3.51  |
|    | 456760 | AW961251  | Hs.127828 | guanine nucleotide binding protein (G pr | 4.14 | 4.42  |
|    | 405868 | AA505445  | Hs.300697 | immunoglobulin heavy constant gamma 3 (G | 4.13 | 5.07  |
| 20 | 420931 | AF044197  | Hs.100431 | small inducible cytokine B subfamily (Cy | 4.12 | 6.43  |
|    | 410016 | AA297977  | Hs.57907  | small inducible cytokine subfamily A (Cy | 4.11 | 8.73  |
|    | 452598 | NM_001295 | Hs.301921 | chemokine (C-C motif) receptor 1         | 4.11 | 4.48  |
|    | 444863 | AW384082  | Hs.104879 | serine (or cysteine) proteinase inhibito | 4.10 | 4.78  |
|    | 435080 | AI831760  | Hs.155111 | hypothetical protein FLJ14428            | 4.07 | 2.75  |
| 25 | 442711 | AF151073  | Hs.8645   | hypothetical protein                     | 4.06 | 3.49  |
|    | 423605 | AF047826  | Hs.129887 | cadherin 19, type 2                      | 4.06 | 2.42  |
|    | 409038 | T97490    | Hs.50002  | small inducible cytokine subfamily A (Cy | 4.05 | 3.26  |
|    | 421712 | AK000140  | Hs.107139 | hypothetical protein                     | 4.02 | 7.60  |
|    | 422283 | AW411307  | Hs.114311 | CDC45 (cell division cycle 45, S.cerevis | 4.00 | 3.87  |
| 30 | 409415 | AA579258  | Hs.6083   | Homo sapiens cDNA: FLJ21028 fls, clone C | 4.00 | 5.87  |
|    | 412719 | AW016610  | Hs.816    | ESTs                                     | 3.99 | 5.45  |
|    | 437179 | AA393508  |           | serologically defined colon cancer antig | 3.96 | 4.51  |
|    | 420319 | AW406289  | Hs.96593  | hypothetical protein                     | 3.95 | 5.47  |
|    | 438380 | T06430    | Hs.6194   | chondroitin sulfate proteoglycan BEHAB/b | 3.91 | 4.58  |
| 35 | 418064 | BE387287  | Hs.83384  | S100 calcium-binding protein, beta (neur | 3.84 | 4.42  |
|    | 420286 | AI796395  | Hs.111377 | ESTs                                     | 3.83 | 4.56  |
|    | 410600 | AW575742  |           | ESTs, Moderately similar to S65657 alpha | 3.80 | 5.70  |
|    | 410326 | AI368909  | Hs.47650  | ESTs                                     | 3.76 | 4.86  |
|    | 424779 | AL046851  | Hs.153053 | CD37 antigen                             | 3.70 | 8.72  |
| 40 | 452194 | AI694413  |           | Ubiquitin-like protein FAT107?? - diubiq | 3.69 | 6.38  |
|    | 411027 | AF072099  | Hs.67846  | leukocyte immunoglobulin-like receptor,  | 3.65 | 5.40  |
|    | 412140 | AA219691  | Hs.73625  | RAB6 interacting, kinesin-like (rabkines | 3.65 | 4.48  |
|    | 424153 | AA451737  | Hs.141496 | MAGE-like 2                              | 3.64 | 5.82  |
|    | 421666 | AL035250  | Hs.1408   | endothelin 3                             | 3.64 | 5.52  |
| 45 | 429732 | U20158    | Hs.2488   | lymphocyte cytosolic protein 2 (SH2 doma | 3.60 | 5.56  |
|    | 422173 | BE385828  | Hs.250619 | phorbol-like protein MDS019 (CEM15)      | 3.59 | 4.35  |
|    | 421563 | NM_006433 | Hs.105806 | granulysin                               | 3.49 | 7.38  |
|    | 453837 | AL138387  | Hs.256126 | baculoviral IAP repeat-containing 7 (liv | 3.49 | 6.13  |
|    | 424326 | NM_014479 | Hs.145296 | ADAM-like disintegrin protease, decysin  | 3.48 | 4.23  |
|    | 427247 | AW504221  | Hs.174103 | integrin, alpha L (antigen CD11A (p180), | 3.47 | 5.38  |
| 50 | 408838 | AI669535  | Hs.40369  | ESTs                                     | 3.45 | 4.59  |
|    | 402829 |           |           | C1002500:gi16754254 ref NP_034610.1  hea | 3.42 | 5.01  |
|    | 418918 | X07871    | Hs.89476  | CD2 antigen (p50), sheep red blood cell  | 3.42 | 8.14  |
|    | 430594 | AK000790  | Hs.246885 | hypothetical protein FLJ20783            | 3.40 | 4.35  |
| 55 | 429714 | BE561801  | Hs.2484   | T-cell leukemia/lymphoma 1A              | 3.36 | 4.84  |
|    | 414324 | Y14768    | Hs.890    | lymphotoxin beta (TNF superfamily, membe | 3.35 | 4.45  |
|    | 421958 | AA357185  | Hs.109918 | ras homolog gene family, member H        | 3.35 | 4.28  |
|    | 428291 | AA534009  | Hs.183487 | interferon stimulated gene (20kD)        | 3.34 | 5.18  |
|    | 424687 | J05070    | Hs.151738 | matrix metalloproteinase 9 (gelatinase B | 3.31 | 8.00  |
|    | 451736 | AW080356  | Hs.23889  | ESTs, Weakly similar to ALU7_HUMAN ALU S | 3.29 | 4.50  |
| 60 | 412790 | NM_014767 | Hs.74583  | KIAA0275 gene product                    | 3.28 | 5.42  |
|    | 404854 |           |           | Target Exon                              | 3.28 | 4.28  |
|    | 400860 |           |           | Target Exon                              | 3.26 | 4.41  |
|    | 430413 | AW842182  | Hs.241392 | small inducible cytokine A5 (RANTES)     | 3.24 | 5.65  |
| 65 | 438209 | AL120659  | Hs.6111   | aryl-hydrocarbon receptor nuclear transl | 3.24 | 4.35  |
|    | 422846 | BE513934  | Hs.1583   | neutrophil cytosolic factor 1 (47kD, chr | 3.24 | 4.90  |
|    | 440065 | W03476    | Hs.266331 | hypothetical protein MGC4595             | 3.20 | 6.21  |
|    | 440704 | M69241    | Hs.162    | insulin-like growth factor binding prote | 3.20 | 4.72  |
|    | 411088 | BE247593  | Hs.145053 | ESTs                                     | 3.18 | 4.20  |
|    | 447513 | AW955776  | Hs.313500 | ESTs, Moderately similar to ALU7_HUMAN A | 3.18 | 4.68  |
| 70 | 413190 | AA151802  | Hs.40368  | adaptor-related protein complex 1, sigma | 3.15 | 4.27  |
|    | 430017 | AA263172  | Hs.35     | protein tyrosine phosphatase, non-recept | 3.15 | 4.28  |
|    | 405837 | R70292    | Hs.156110 | immunoglobulin kappa constant            | 3.12 | 4.09  |
|    | 409103 | AF251237  | Hs.112208 | XAGE-1 protein                           | 3.04 | 4.04  |
|    | 425706 | AW406678  | Hs.122559 | hypothetical protein FLJ22570            | 3.04 | 4.28  |
| 75 | 447656 | NM_003726 | Hs.19126  | src kinase-associated phosphoprotein of  | 3.03 | 4.30  |
|    | 427792 | M63928    | Hs.180841 | tumor necrosis factor receptor superfam  | 3.01 | 4.82  |
|    | 402994 |           |           | NM_002463::Homo sapiens myxovirus (infl  | 2.99 | 5.74  |
|    | 434276 | AF123659  | Hs.93605  | leucine zipper, putative tumor suppresso | 2.97 | 5.07  |
|    | 449523 | NM_000579 | Hs.54443  | chemokine (C-C motif) receptor 5         | 2.96 | 4.15  |
| 80 | 439237 | AW408158  | Hs.318893 | ESTs, Weakly similar to A47582 B-cell gr | 2.96 | 5.81  |
|    | 406521 | X57809    | Hs.8997   | immunoglobulin lambda locus              | 2.93 | 7.88  |
|    | 447131 | NM_004585 | Hs.17466  | retinoic acid receptor responder (tazaro | 2.91 | 13.22 |
|    | 426322 | J05068    | Hs.2012   | transcobalamin I (vitamin B12 binding pr | 2.90 | 8.37  |

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|    |        |           |           |   |      |       |
|----|--------|-----------|-----------|---|------|-------|
|    | 448275 | BE514434  | Hs.20830  | kinesin-like 2                            | 2.87 | 4.15  |
|    | 423397 | NM_001838 | Hs.1652   | chemokine (C-C motif) receptor 7          | 2.86 | 5.53  |
|    | 406782 | AA430373  |           | gb:zw2011.1.s1 Soares ovary tumor NbHOT H | 2.81 | 4.60  |
| 5  | 414915 | NM_002462 | Hs.76391  | myxovirus (influenza) resistance 1, homo  | 2.80 | 5.89  |
|    | 412819 | T25829    | Hs.24048  | FK506 binding protein precursor           | 2.78 | 4.90  |
|    | 432886 | BE159028  | Hs.279704 | chromatin accessibility complex 1         | 2.76 | 4.21  |
|    | 428380 | NM_004271 | Hs.184018 | MD-1, RP105-associated                    | 2.76 | 5.15  |
|    | 408209 | NM_004454 | Hs.43697  | ets variant gene 5 (ets-related molecule  | 2.76 | 4.30  |
| 10 | 416511 | NM_006762 | Hs.79356  | Lysosomal-associated multispanning membr  | 2.75 | 4.13  |
|    | 422530 | AW972300  | Hs.118110 | bone marrow stromal cell antigen 2        | 2.74 | 5.05  |
|    | 428746 | AW503820  | Hs.192861 | Spi-B transcription factor (Spi-1/PU.1 r  | 2.73 | 9.20  |
|    | 453953 | AW408337  | Hs.36972  | CD7 antigen (p41)                         | 2.72 | 4.38  |
|    | 407241 | M34516    |           | gb:Human omega light chain protein 14.1   | 2.68 | 4.07  |
| 15 | 437669 | AI358105  | Hs.123164 | ESTs, Weakly similar to match to ESTs AA  | 2.66 | 4.71  |
|    | 453779 | N35187    | Hs.43388  | 28kD interferon responsive protein        | 2.65 | 4.31  |
|    | 432874 | W94322    | Hs.279651 | melanoma inhibitory activity              | 2.64 | 4.15  |
|    | 410129 | BE244074  | Hs.58831  | regulator of Fas-induced apoptosis        | 2.62 | 7.36  |
|    | 412926 | AI879076  | Hs.75061  | macrophage myristoylated alanine-rich C   | 2.62 | 4.43  |
| 20 | 418739 | AA310964  | Hs.88012  | SHP2 interacting transmembrane adaptor    | 2.61 | 5.42  |
|    | 424825 | AF207069  | Hs.153357 | procollagen-lysine, 2-oxoglutarate 5-dio  | 2.60 | 9.69  |
|    | 417370 | T28651    | Hs.82030  | tryptophanyl-tRNA synthetase              | 2.60 | 5.17  |
|    | 411358 | R47479    | Hs.94761  | KIAA1691 protein                          | 2.59 | 4.01  |
|    | 425367 | BE271188  | Hs.155975 | protein tyrosine phosphatase, receptor t  | 2.58 | 13.24 |
| 25 | 426470 | AA528794  | Hs.128644 | ESTs                                      | 2.54 | 4.52  |
|    | 425535 | AB007937  | Hs.158287 | KIAA0468 gene product                     | 2.52 | 11.31 |
|    | 431629 | AU077025  | Hs.265827 | interferon, alpha-inducible protein (clo  | 2.50 | 7.80  |
|    | 425722 | AI659076  | Hs.97031  | hypothetical protein MGC13047             | 2.49 | 4.25  |
|    | 438291 | BE514605  | Hs.289092 | Homo sapiens cDNA: FLJ22380 fis. clone H  | 2.49 | 4.04  |
| 30 | 416426 | AA180256  | Hs.210473 | Homo sapiens cDNA: FLJ14872 fis. clone PL | 2.48 | 4.08  |
|    | 441859 | AW194364  | Hs.94814  | ESTs, Weakly similar to FIG1 MOUSE FIG-1  | 2.48 | 5.25  |
|    | 416714 | AF283770  | Hs.79630  | CD79A antigen (immunoglobulin-associated  | 2.48 | 4.88  |
|    | 431186 | NM_012249 | Hs.250697 | ras-like protein                          | 2.46 | 6.04  |
|    | 417389 | BE260964  | Hs.82045  | midkine (neurite growth-promoting factor  | 2.45 | 5.34  |
| 35 | 424481 | R19453    | Hs.1787   | proteolipid protein 1 (Pelizaeus-Merzbac  | 2.43 | 6.57  |
|    | 428437 | AV656017  | Hs.184325 | CGI-76 protein                            | 2.42 | 4.96  |
|    | 427634 | AI399745  | Hs.18449  | hypothetical protein MGC10820             | 2.39 | 8.46  |
|    | 420842 | AI083668  | Hs.50601  | hypothetical protein MGC10986             | 2.38 | 5.90  |
|    | 428289 | M26301    | Hs.2253   | complement component 2                    | 2.38 | 5.32  |
| 40 | 417929 | R27219    | Hs.74647  | Human T-cell receptor active alpha-chain  | 2.37 | 6.99  |
|    | 413278 | BE563085  | Hs.833    | interferon-stimulated protein, 15 kDa     | 2.34 | 9.69  |
|    | 433671 | AW138797  | Hs.132906 | 19A24 protein                             | 2.34 | 4.81  |
|    | 432403 | AA550815  | Hs.124840 | ESTs                                      | 2.34 | 4.99  |
|    | 427759 | BE245578  | Hs.2200   | perforin 1 (pore forming protein)         | 2.32 | 4.56  |
| 45 | 419870 | AW403911  | Hs.266175 | phosphoprotein associated with GEMs       | 2.30 | 4.22  |
|    | 421445 | AA913059  | Hs.104433 | Homo sapiens, clone IMAGE:4054858, mRNA   | 2.30 | 6.18  |
|    | 401591 |           |           | Target Exon                               | 2.29 | 7.01  |
|    | 451708 | AI306536  | Hs.60975  | ESTs                                      | 2.26 | 4.50  |
|    | 452700 | AI859390  | Hs.288940 | five-span transmembrane protein M83       | 2.24 | 4.90  |
| 50 | 424618 | L29472    | Hs.1802   | major histocompatibility complex, class   | 2.22 | 5.40  |
|    | 409208 | Y00093    |           | integrin, alpha X (antigen CD11C (p150),  | 2.21 | 4.74  |
|    | 436455 | AW292677  | Hs.248122 | G protein-coupled receptor 24             | 2.19 | 4.61  |
|    | 419741 | NM_007019 | Hs.93002  | ubiquitin carrier protein E2-C            | 2.17 | 7.43  |
|    | 416448 | L13210    | Hs.79339  | lectin, galactoside-binding, soluble, 3   | 2.16 | 5.58  |
| 55 | 438555 | AI222089  | Hs.143878 | Homo sapiens mRNA for FLJ00024 protein,   | 2.13 | 4.26  |
|    | 407260 | L09095    |           | gb:Homo sapiens mRNA fragment             | 2.13 | 4.00  |
|    | 448243 | AW369771  |           | integrin, beta 8                          | 2.10 | 4.03  |
|    | 437938 | AI950087  |           | gb:wq05c02.x1 NCI_CGAP_Kid12 Homo sapien  | 2.07 | 4.45  |
|    | 425262 | D87119    | Hs.155418 | GS3955 protein                            | 2.06 | 4.36  |
| 60 | 414945 | BE076358  | Hs.77667  | lymphocyte antigen 6 complex, locus E     | 2.05 | 4.66  |
|    | 400261 |           |           | Eos Control                               | 2.04 | 4.22  |
|    | 432468 | AW402155  | Hs.3003   | CD3E antigen, epsilon polypeptide (TIT3   | 2.02 | 4.23  |
|    | 416967 | BE616731  | Hs.80645  | interferon regulatory factor 1            | 1.99 | 4.45  |
|    | 420626 | AF043722  | Hs.99491  | RAS guanyl releasing protein 2 (calcium   | 1.98 | 4.42  |
| 65 | 440672 | AF083811  | Hs.7345   | MAD1 (mitotic arrest deficient, yeast, h  | 1.98 | 4.55  |
|    | 452923 | BE276018  | Hs.288940 | five-span transmembrane protein M83       | 1.96 | 4.54  |
|    | 452244 | N33530    | Hs.176674 | ESTs                                      | 1.95 | 4.23  |
|    | 427239 | BE270447  |           | ubiquitin carrier protein                 | 1.94 | 4.93  |
|    | 418678 | NM_001327 | Hs.167379 | cancer/testis antigen (NY-ESO-1)          | 1.94 | 5.28  |
| 70 | 431836 | AF178532  | Hs.271411 | beta-site APP-cleaving enzyme 2           | 1.93 | 4.17  |
|    | 444090 | S69115    | Hs.10306  | natural killer cell group 7 sequence      | 1.93 | 5.06  |
|    | 404067 |           |           | Target Exon                               | 1.92 | 6.16  |
|    | 426890 | AA393167  | Hs.41294  | ESTs                                      | 1.91 | 4.23  |
|    | 453597 | BE281130  | Hs.33713  | myo-inositol 1-phosphate synthase A1      | 1.91 | 4.10  |
|    | 401914 |           |           | Target Exon                               | 1.87 | 4.76  |
| 75 | 448499 | BE613280  | Hs.77550  | hypothetical protein MGC1780              | 1.87 | 5.17  |
|    | 439627 | BE621702  | Hs.29076  | hypothetical protein FLJ21841             | 1.85 | 6.59  |
|    | 425923 | NM_005026 | Hs.162808 | phosphoinositide-3-kinase, catalytic, de  | 1.85 | 4.03  |
|    | 416819 | U77735    | Hs.80205  | pim-2 oncogene                            | 1.84 | 4.57  |
|    | 425069 | AA687465  | Hs.298184 | potassium voltage-gated channel, shaker-  | 1.84 | 6.40  |
| 80 | 430378 | Z29572    | Hs.2556   | tumor necrosis factor receptor superfam   | 1.78 | 4.02  |
|    | 435968 | AW161481  | Hs.111577 | integral membrane protein 3               | 1.76 | 5.25  |
|    | 410423 | AW402432  | Hs.63489  | protein tyrosine phosphatase, non-recept  | 1.75 | 4.30  |
|    | 434224 | AA380731  | Hs.84     | interleukin 2 receptor, gamma (severe co  | 1.74 | 4.91  |

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|            |                           |   |   |  |      |      |  |
|------------|---------------------------|---|---|--|------|------|--|
| 5          | 413566                    | AW604451  | Hs.285814   | sprouty (Drosophila) homolog 4           | 1.71 | 6.00 |  |
|            | 430148                    | BE387620  | Hs.234489   | lactate dehydrogenase B                  | 1.70 | 4.34 |  |
|            | 410068                    | AI633888  | Hs.58435  | FYN-binding protein (FYN-120/130)        | 1.69 | 4.04 |  |
|            | 437696                    | Z83844  | Hs.5790   | hypothetical protein dJ37E16.5           | 1.66 | 5.95 |  |
|            | 423984                    | AF163825  | Hs.136713   | pre-B lymphocyte gene 3                  | 1.64 | 6.26 |  |
|            | 426666                    | AW500131  | Hs.171763   | CD22 antigen                             | 1.63 | 4.33 |  |
|            | 406908                    | Z25437  |   | gb:H.sapiens protein-tyrosine kinase gen | 1.62 | 7.19 |  |
|            | 440087                    | W28969  | Hs.7718   | hypothetical protein FLJ22678            | 1.61 | 4.33 |  |
|            | 421859                    | AA356620  | Hs.108947   | KIAA0050 gene product                    | 1.59 | 4.30 |  |
|            | 415198                    | AW009480  | Hs.943  | natural killer cell transcript 4         | 1.56 | 4.12 |  |
| 10         | 406827                    | AA971409  |   | gb:op92c04.s1 NCI_CGAP_Lu5 Homo sapiens  | 1.55 | 4.29 |  |
|            | 413969                    | X14034  | Hs.75648  | phospholipase C, gamma 2 (phosphatidylin | 1.53 | 4.63 |  |
|            | 456086                    | AL161999  | Hs.77324  | eukaryotic translation termination facto | 1.52 | 4.11 |  |
|            | 433320                    | D60647  | Hs.250879   | ESTs, Highly similar to CTXN RAT CORTEXI | 1.52 | 4.36 |  |
|            | 406906                    | Z25424  |   | gb:H.sapiens protein-serine/threonine ki | 1.50 | 8.67 |  |
|            | 406885                    | D28423  |   | gb:Human mRNA for pre-mRNA splicing fact | 1.49 | 5.07 |  |
|            | 443759                    | BE390832  | Hs.134729   | FXYD domain-containing ion transport reg | 1.48 | 4.50 |  |
|            | 452423                    | AA991724  | Hs.180535   | hypothetical protein MGC10966            | 1.48 | 4.91 |  |
|            | 448143                    | AF039704  | Hs.20478  | ceroid-lipofuscinosis, neuronal 2, late  | 1.43 | 4.26 |  |
|            | 451524                    | AK001466  | Hs.26516  | hypothetical protein FLJ10604            | 1.43 | 4.74 |  |
| 20         | 417287                    | AI831678  | Hs.285714   | KIAA1599 protein                         | 1.41 | 4.01 |  |
|            | 432665                    | AW603880  |   | ATPase, H transporting, lysosomal (vacuo | 1.38 | 4.07 |  |
|            | 403043                    |   |   | Target Exon                              | 1.36 | 4.89 |  |
|            | 407239                    | AA076350  | Hs.67846  | leukocyte immunoglobulin-like receptor,  | 1.32 | 4.57 |  |
|            | 436553                    | AW407157  | Hs.8997   | immunoglobulin lambda locus              | 1.30 | 4.00 |  |
|            | 422934                    | BE244189  | Hs.122492   | hypothetical protein                     | 1.30 | 4.37 |  |
|            | 442680                    | BE270707  | Hs.8583   | similar to APOBEC1                       | 1.26 | 4.48 |  |
|            | TABLE 57B:                |   |   |  |      |      |  |
|            | Pkey:                     | Unique Eos probeset identifier number   |   |  |      |      |  |
|            | CAT number:               | Gene cluster number   |   |  |      |      |  |
| Accession: | Genbank accession numbers |   |   |  |      |      |  |
| 35         | Pkey                      | CAT Number  | Accession   |  |      |      |  |
|            | 438619                    | 35124_1   | NM_016575 AB032773 AI765521 BF593742 AI497757 AI761233 AW467938 BF000670 AI818496 N24761 AL043306 BF476138 BF593836 AA132787  |  |      |      |  |
|            |                           |   | AI147248 AI086795 AA151317 T95298 AW083548 AA058371 N27951 AI769860 AI784548 AW205506 AI800679 AI041733 AI459902 BE327641     |  |      |      |  |
|            |                           |   | AI865829 AI254736 AI302433 AI744176 AI241825 AA027842 AL524933 AL524932 BF947764 BF340737 BF948700 BG996395 N53455 N21027     |  |      |      |  |
|            |                           |   | AI127616 N35901 AA682443 AA678249 AA719371 AA132582 T15981 H99958 N40717 AW959402 AI267251 BF909329 AI142035 T95379 H29420    |  |      |      |  |
|            |                           |   | R59632 H17318 H17331 H29327 R40829 R43395 R59573 AI749561 R56599 H16755 AI694500 AA027907                                     |  |      |      |  |
|            |                           |   | AK055109 BC019085 AA187684 BG656226 BM023227 AI932311 AW264381 AA398371 BM021483 AI432433 AI375777 AI129580 AW262782          |  |      |      |  |
|            |                           |   | AA134107 BM023515 AA977504 AI859222 AI348454 R69725 AA975268 BM021207 AL080074 AA129218 AW207842 N90581 AA771919 AI092259     |  |      |      |  |
|            |                           |   | AI028416 AI074114 BG656536 BE501677 AW193419 AA917040 W90430 AI342984 AI378957 AL036486 AW020068 BI491093 BF476021 R41226     |  |      |      |  |
|            |                           |   | R69631 F04125 C02343 AA115589 R56480 AI400988 R54266 R31422   |  |      |      |  |
| 40         | 410600                    | 497855_1  | BF347859 AW499616 AA191322 AW499617 AL601010 AW575742 AA729043 BE463447 AA086179 BE549623 AI335824 AW408712 BM149172          |  |      |      |  |
|            | 452194                    | 90339_1   | AI694413 AW994700 AI912946 N73548 AI082035 AW271652 W24189 W24182 AI719718 AA024658 AW810120 AW015394 T79755 AA988043         |  |      |      |  |
|            |                           |   | AI709339  |  |      |      |  |
|            | 406782                    | 0_0   | AA430373 AA968771   |  |      |      |  |
|            | 409208                    | 10117_2   | AK074047 AI144342 AW014280 BM145128 N28267 AW206231 AA989041 H93197 AW594063 BG236296 AW236606 AW081031 AA765843 BM144372     |  |      |      |  |
|            |                           |   | AA989341 AI824838 AI963970 AI637671 AW196330 BG427526 BM148789 BF893644 BF881946  |  |      |      |  |
|            | 448243                    | 13061_2   | BG166513 AA479726 BE622314 AL134913 BE006305 BE006312 BE006298 AA044582 AW994956 AA234175 AA043906 BE006303 BF327669          |  |      |      |  |
|            |                           |   | BE006317 BF326759 BF541959  |  |      |      |  |
|            | 437938                    | 66997_1   | U71456 AA482911 W78802 AW856538 BF737212 N36809 N35320 AA282915 AW505512 AI653832 W87891 AI961530 T85904 H59397 R97278        |  |      |      |  |
|            |                           |   | W01059 AI820532 T82391 AI820501 T63226 R66056 R67840 AW961101 AA337499 W37181 AA180009 AW205862 AA988777 AA856975 BF172457    |  |      |      |  |
| 50         |                           |   | BG751124 AI741346 AI950344 AI689062 AI872193 AW102898 AW173586 AI763273 AI890387 AW150329 AI762688 AA488892 AI356394 AI539642 |  |      |      |  |
|            |                           |   | AA642789 AI950087 BF589902 N70208 AA283144 AA488964 H60052 R97040 BF886630 AW967677 AW971573 AW967671 AI308119 AA251875       |  |      |      |  |
|            |                           |   | AA908598 AI819225 AI564269 AA908741 AA293273 AA969759 AW276905 AA044209 H83488 T92487   |  |      |      |  |
|            | 400261                    | 23110_1   | AC006097 X03066 NM_002120 M26040 AW469119 AW469127 AI299772 AW518149 AI144456 AW628070 AI629032 AI358810 AI880433 AI440472    |  |      |      |  |
|            |                           |   | AI357070 AI865365 AW014799 AI767973 AW518041 AA909398 AW768606  |  |      |      |  |
|            | 427239                    | 20459_2   | AL532360 BE794750 AA582906 AI015067 AW271034 BG271636 AW075177 AW071374 AI345565 AI307208 BE138953 BE049086 AI334881          |  |      |      |  |
|            |                           |   | AW075006 AW075181 AA464019 AW302733 AW075100 AW073433 AI802854 AI334909 AI802853 AI345036 AI348921 AI340734 AI307478 AI251289 |  |      |      |  |
|            |                           |   | AW302327 AW072520 AI312145 AW073656 AW072513 AW071289 AI307559 AA876186 T29587 AI307493 AI255068 AI252868 AI252839 AW074809   |  |      |      |  |
|            |                           |   | AI252926 AI252160 AI251662 AI251262 AI610913 AI270787 AI270156 AI252075 AW073469 AW072901 AW072496 AW071420 AI305762 AI254764 |  |      |      |  |
|            |                           |   | AI802837 AI251264 AW073049 AW071311 AI340643 BE138965 BE138502 AW073456 AI334733 AI054335 BE139260 AI054302 AI054060 AI054057 |  |      |      |  |
| 60         |                           |   | AI053722 AI289711 BE139228 AW470478 AW271039 AW302085 BE041872 AI254494 AI271496 AI252427 BF178773 BF718645 AW074866 BE857822 |  |      |      |  |
|            | 406827                    | 0_0   | AA971409  |  |      |      |  |
|            | 432665                    | 27095_3   | BG165971 BE143233 AL577712 AI400326 AA769318 AA427866 AW088714 AI150755 AI924874 AI186243 AA804195 AA768972 AW574769          |  |      |      |  |
|            |                           |   | AW341643 AW204520 AA235326 AI005076 BE826687 AW004816 AW007235 BE826639 BE826634 BF222941 BE826631 BE826643 AA292639          |  |      |      |  |
|            |                           |   | AW514133 AI690331 AI673409 AA627727 AI923685 AA931499 AI249783 AI810663 AA548622 AA702095 AA832395 BI259508 AA262993 AW075840 |  |      |      |  |
|            |                           |   | AA810885  |  |      |      |  |
|            | TABLE 57C:                |   |   |  |      |      |  |
|            | Pkey:                     | Unique number corresponding to an Eos probeset  |   |  |      |      |  |
|            | Ref:                      | Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA |   |  |      |      |  |
|            |                           | sequence of human chromosome 22" Dunham, et al. (1999) <u>Nature</u> 402:489-495.   |   |  |      |      |  |
| 75         | Strand:                   | Indicates DNA strand from which exons were predicted.   |   |  |      |      |  |
|            | Nt_position:              | Indicates nucleotide positions of predicted exons.  |   |  |      |      |  |
| 80         | Pkey                      | Ref   | Strand  | Nt_position                              |      |      |  |
|            | 400750                    | 8119067   | Plus  | 198991-199168,199316-199548              |      |      |  |
|            | 402474                    | 7547175   | Minus   | 53526-53628,55755-55920,57530-57757      |      |      |  |
|            | 405506                    | 6466489   | Plus  | 80014-80401,80593-81125                  |      |      |  |
|            | 402829                    | 8918414   | Plus  | 101532-101852,102006-102263              |      |      |  |
|            | 404854                    | 7143420   | Plus  | 14260-14537                              |      |      |  |

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|   |        |         |       |                             |
|---|--------|---------|-------|-----------------------------|
| 5 | 400860 | 9757499 | Minus | 151830-152104,152649-152744 |
|   | 402994 | 2996643 | Minus | 4727-4969                   |
|   | 401591 | 9966977 | Minus | 55410-55835                 |
|   | 404067 | 3282162 | Plus  | 1415-2071                   |
|   | 401914 | 9369520 | Plus  | 62537-62945,63155-63308     |
|   | 403043 | 7768753 | Minus | 314423-316252               |

# TABLE 58A: ABOUT 183 GENES UPREGULATED IN MELANOMA METASTASES FROM PATIENTS WITH LIMITED DISEASE RELATIVE TO MELANOMA METASTASES FROM PATIENTS WITH PROGRESSIVE DISEASE

Table 58A lists about 183 genes upregulated in melanoma metastases from patients with limited disease relative to melanoma metastases from patients with progressive disease. Genes were selected from 59680 probesets on the Eos/Affymetrix Hu03 Genechip array. Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

|    |                |   |
|----|----------------|---|
| 15 | Pkey:          | Unique Eos probeset identifier number   |
|    | ExAccn:        | Exemplar Accession number, Genbank accession number   |
| 20 | UnigenelD:     | Unigene number  |
|    | Unigene Title: | Unigene gene title  |
|    | R1:            | 90th percentile of AIs for metastases from patients with limited disease divided by 90th percentile of AIs for metastases from patients with progressive disease  |
|    | R2:            | 90th percentile of AIs for metastases from patients with limited disease divided by 90th percentile of AIs for metastases from patients with progressive disease, where the 15th percentile of normal tissue AIs was subtracted from both the numerator and denominator |

|    | Pkey   | ExAccn    | UnigenelD | Unigene Title                            | R1    | R2    |
|----|--------|-----------|-----------|--|-------|-------|
| 25 | 415668 | AW957684  | Hs.306814 | hypothetical protein FLJ21889            | 12.74 | 12.92 |
|    | 447414 | D82343    | Hs.74376  | neuroblastoma (nerve tissue) protein     | 7.66  | 5.88  |
|    | 412659 | AW753865  | Hs.74376  | olfactomedin related ER localized protei | 7.23  | 5.76  |
|    | 430154 | AW583058  | Hs.234726 | serine (or cysteine) proteinase inhibito | 6.91  | 14.26 |
|    | 414430 | AI346201  | Hs.76118  | ubiquitin carboxyl-terminal esterase L1  | 6.86  | 7.10  |
| 30 | 436485 | X59135    | Hs.156110 | immunoglobulin kappa constant            | 6.85  | 6.81  |
|    | 426600 | NM_003378 | Hs.171014 | VGF nerve growth factor inducible        | 6.73  | 11.21 |
|    | 430822 | AJ005371  | Hs.248017 | glyceraldehyde-3-phosphate dehydrogenase | 5.53  | 4.63  |
|    | 416426 | AA180256  | Hs.210473 | Homo sapiens cDNA FLJ14872 fis, clone PL | 5.48  | 7.08  |
|    | 423858 | AL137326  | Hs.133483 | Homo sapiens mRNA; cDNA DKFZp434B0650 (f | 5.27  | 5.94  |
| 35 | 433658 | L03678    | Hs.156110 | immunoglobulin kappa constant            | 4.78  | 3.07  |
|    | 452436 | BE077546  | Hs.31447  | ESTs. Moderately similar to A46010 X-lin | 4.68  | 3.27  |
|    | 413916 | N49813    | Hs.75615  | apolipoprotein C-II                      | 4.62  | 4.82  |
|    | 407825 | NM_006152 | Hs.40202  | lymphoid-restricted membrane protein     | 4.55  | 3.12  |
|    | 406648 | AA563730  | Hs.277477 | major histocompatibility complex, class  | 4.31  | 4.15  |
| 40 | 409060 | AI815867  | Hs.50130  | necdin (mouse) homolog                   | 4.23  | 3.44  |
|    | 401941 |           |           | Target Exon                              | 3.89  | 3.19  |
|    | 447471 | AF039843  | Hs.18676  | sprouty (Drosophila) homolog 2           | 3.88  | 2.43  |
|    | 419628 | H67546    | Hs.49768  | ESTs                                     | 3.66  | 4.16  |
|    | 414863 | AW131473  | Hs.106185 | ral guanine nucleotide dissociation stim | 3.63  | 2.81  |
| 45 | 423416 | NM_004920 | Hs.128316 | apoptosis-associated tyrosine kinase     | 3.47  | 3.06  |
|    | 400275 |           |           | NM_006513*:Homo sapiens seryl-tRNA synth | 3.47  | 3.43  |
|    | 426283 | NM_003937 | Hs.169139 | kynureninase (L-kynurenine hydrolase)    | 3.42  | 1.96  |
|    | 442117 | AW664964  | Hs.128899 | ESTs; hypothetical protein for IMAGE:447 | 3.41  | 2.89  |
|    | 411763 | AW862589  |           | gb:QV0-CT0387-180300-167-a07 CT0387 Homo | 3.37  | 6.31  |
| 50 | 402007 |           |           | C18000503*:gi8922165[ref]NP_060080.1  h  | 3.34  | 3.74  |
|    | 424775 | AB014540  | Hs.153026 | SWAP-70 protein                          | 3.30  | 2.00  |
|    | 424036 | AA770688  |           | H2A histone family, member L             | 3.30  | 3.16  |
|    | 453464 | AI884911  | Hs.32989  | receptor (calcitonin) activity modifying | 3.30  | 5.58  |
|    | 401739 |           |           | NM_005622*:Homo sapiens SA (rat hyperten | 3.30  | 3.23  |
| 55 | 440274 | R24595    | Hs.7122   | scrapie responsive protein 1             | 3.27  | 2.47  |
|    | 413398 | D21262    | Hs.75337  | nucleolar and coiled-body phosphprotein  | 3.26  | 2.61  |
|    | 417165 | R80137    | Hs.302738 | Homo sapiens cDNA: FLJ21425 fis, clone C | 3.26  | 2.58  |
|    | 418478 | U38945    | Hs.1174   | cyclin-dependent kinase inhibitor 2A (me | 3.14  | 4.04  |
|    | 436965 | Z11894    | Hs.156110 | gb:H.sapiens rearranged mRNA for immunog | 3.13  | 2.38  |
| 60 | 453857 | AL080235  | Hs.35861  | DKFZP586E1621 protein                    | 3.13  | 2.47  |
|    | 404405 |           |           | Target Exon                              | 3.11  | 4.69  |
|    | 413719 | BE439580  | Hs.75498  | small inducible cytokine subfamily A (Cy | 3.11  | 2.10  |
|    | 443247 | BE514387  | Hs.333893 | c-Myc target JPO1                        | 3.10  | 2.26  |
|    | 400417 | X72475    |           | Target                                   | 3.08  | 2.32  |
| 65 | 401512 |           |           | NM_014080:Homo sapiens dual oxidase-like | 3.07  | 2.87  |
|    | 423242 | AL039402  | Hs.125783 | DEME-6 protein                           | 3.06  | 2.78  |
|    | 417501 | AL041219  | Hs.82222  | sema domain, immunoglobulin domain (Ig), | 3.06  | 2.81  |
|    | 451952 | AL120173  | Hs.301663 | ESTs                                     | 3.05  | 2.65  |
|    | 427419 | NM_000200 | Hs.177888 | histatin 3                               | 3.05  | 4.24  |
| 70 | 406663 | U24683    |           | immunoglobulin heavy constant mu         | 3.05  | 4.55  |
|    | 442104 | L20971    | Hs.188    | phosphodiesterase 4B, cAMP-specific (dun | 3.03  | 1.90  |
|    | 451993 | AA765776  | Hs.122983 | ESTs                                     | 3.02  | 1.71  |
|    | 421097 | AI280112  | Hs.125232 | Homo sapiens cDNA FLJ13266 fis, clone OV | 3.01  | 3.11  |
|    | 430129 | BE301708  | Hs.233955 | hypothetical protein FLJ20401            | 3.00  | 3.47  |
| 75 | 427700 | AA262294  | Hs.180383 | dual specificity phosphatase 6           | 3.00  | 2.22  |
|    | 400237 |           |           | NM_001087*:Homo sapiens angio-associated | 2.98  | 3.43  |
|    | 414063 | H26904    | Hs.75736  | apolipoprotein D                         | 2.97  | 5.76  |
|    | 426153 | AF057169  | Hs.182771 | vitelliform macular dystrophy (Best dise | 2.94  | 2.38  |
|    | 414781 | D50917    | Hs.77293  | KIAA0127 gene product                    | 2.94  | 2.88  |
| 80 | 445823 | AI478563  | Hs.145519 | FKSG87 protein                           | 2.92  | 1.98  |
|    | 404439 |           |           | ENSP00000067222*:Mitochondrial 28S ribos | 2.92  | 2.57  |
|    | 421218 | NM_000499 | Hs.72912  | cytochrome P450, subfamily I (aromatic c | 2.90  | 2.47  |
|    | 420350 | AW406896  | Hs.88269  | Homo sapiens, clone MGC.17339, mRNA, com | 2.90  | 3.87  |
|    | 424855 | AW204725  | Hs.25560  | ESTs                                     | 2.89  | 2.61  |
|    | 436700 | AI693690  | Hs.301406 | hypothetical protein PP3501              | 2.88  | 3.63  |

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|    |        |           |           |   |      |      |
|----|--------|-----------|-----------|---|------|------|
|    | 451131 | AI267586  | Hs.268012 | fatty-acid-Coenzyme A ligase, long-chain    | 2.87 | 2.92 |
|    | 427157 | U51166    | Hs.173824 | thymine-DNA glycosylase                     | 2.87 | 2.11 |
|    | 402273 |           |           | Target Exon                                 | 2.87 | 2.48 |
| 5  | 414135 | NM_004419 | Hs.2128   | dual specificity phosphatase 5              | 2.83 | 3.09 |
|    | 430643 | AW970065  | Hs.287425 | MEGF10 protein                              | 2.83 | 3.04 |
|    | 451979 | F06972    | Hs.27372  | endothelial tyrosine kinase (Etk) (BMX),    | 2.82 | 2.12 |
|    | 405642 | AJ245210  |           | gb:Homo sapiens mRNA for immunoglobulin     | 2.81 | 2.88 |
|    | 407360 | X13075    |           | gb:Human 2a12 mRNA for kappa-immunoglobulin | 2.81 | 3.43 |
|    | 405441 |           |           | Target Exon                                 | 2.80 | 3.15 |
| 10 | 450816 | BE271927  | Hs.87385  | ESTs  | 2.80 | 2.48 |
|    | 435675 | AA694099  | Hs.266820 | ESTs  | 2.78 | 2.70 |
|    | 426495 | NM_001151 | Hs.2043   | solute carrier family 25 (mitochondrial     | 2.78 | 2.53 |
|    | 441523 | AA315805  |           | desmoglein 2                                | 2.78 | 2.27 |
|    | 413336 | AI569936  | Hs.296178 | hypothetical protein FLJ22637               | 2.76 | 3.18 |
| 15 | 408527 | AL135018  | Hs.33074  | Homo sapiens, clone IMAGE:3606519, mRNA,    | 2.76 | 1.92 |
|    | 437740 | AA810265  | Hs.122915 | ESTs  | 2.76 | 1.88 |
|    | 426322 | J05068    | Hs.2012   | transcobalamin I (vitamin B12 binding pr    | 2.75 | 8.06 |
|    | 411852 | AA528140  | Hs.107515 | ESTs, Weakly similar to T00329 hypotheti    | 2.74 | 3.30 |
|    | 428422 | AI557280  | Hs.184270 | capping protein (actin filament) muscle     | 2.73 | 2.31 |
| 20 | 426793 | X89687    | Hs.172350 | HIR (histone cell cycle regulation defec    | 2.72 | 2.19 |
|    | 401454 |           |           | NM_014226*:Homo sapiens renal tumor anti    | 2.72 | 1.99 |
|    | 436825 | AW341123  | Hs.120275 | ESTs  | 2.72 | 2.89 |
|    | 407705 | AB023139  | Hs.37892  | KIAA0922 protein                            | 2.72 | 2.48 |
|    | 416782 | L35035    | Hs.79886  | ribose 5-phosphate isomerase A (ribose 5    | 2.72 | 2.63 |
| 25 | 449151 | AI632331  | Hs.196038 | ESTs  | 2.72 | 2.99 |
|    | 433464 | N92481    |           | gb:zb12g02.s1 Soares_fetal_lung_NbHL19W     | 2.69 | 3.17 |
|    | 401009 |           |           | Target Exon                                 | 2.69 | 3.28 |
|    | 427227 | AF103803  | Hs.283690 | hypothetical protein                        | 2.68 | 2.02 |
| 30 | 405268 |           |           | ENSP00000223174*:KIAA0783 PROTEIN.          | 2.67 | 2.18 |
|    | 410295 | AA741357  |           | nidogen (enadin)                            | 2.65 | 2.06 |
|    | 435905 | AW997484  | Hs.5003   | KIAA0456 protein                            | 2.65 | 2.12 |
|    | 430378 | Z29572    | Hs.2556   | tumor necrosis factor receptor superfami    | 2.65 | 2.52 |
|    | 457423 | AK000642  | Hs.265018 | hypothetical protein FLJ20635               | 2.64 | 2.51 |
|    | 448752 | AA593867  | Hs.300842 | KIAA1608 protein                            | 2.63 | 2.20 |
| 35 | 414931 | AK000342  | Hs.77646  | Homo sapiens mRNA; cDNA DKFZp761M0223 (f    | 2.63 | 1.83 |
|    | 441283 | AA927670  | Hs.131704 | ESTs  | 2.62 | 1.92 |
|    | 439352 | BE614347  | Hs.169615 | hypothetical protein FLJ20989               | 2.60 | 2.21 |
|    | 421391 | AW304350  | Hs.191958 | immunoglobulin superfamily receptor tran    | 2.60 | 3.06 |
| 40 | 406678 | U77534    |           | gb:Human clone 1A11 Immunoglobulin varia    | 2.54 | 3.06 |
|    | 430278 | AI673074  | Hs.116567 | ESTs, Weakly similar to T22914 hypotheti    | 2.49 | 3.44 |
|    | 425970 | AK001500  | Hs.165186 | hypothetical protein FLJ13852               | 2.47 | 3.46 |
|    | 407363 | AF035032  | Hs.8997   | gb:Homo sapiens clone MCA1L myosin-react    | 2.45 | 3.45 |
|    | 408367 | AK001178  | Hs.44424  | homolog of rat orphan transporter v7-3      | 2.44 | 3.52 |
| 45 | 420103 | AA382259  | Hs.95197  | aldehyde dehydrogenase 1 family, member     | 2.44 | 6.15 |
|    | 418635 | L11329    | Hs.1183   | dual specificity phosphatase 2              | 2.42 | 3.92 |
|    | 451558 | NM_001089 | Hs.26630  | ATP-binding cassette, sub-family A (ABC1    | 2.41 | 3.08 |
|    | 430354 | AA954810  | Hs.239784 | human homolog of Drosophila Scribble        | 2.36 | 3.99 |
|    | 405701 |           |           | ENSP00000004954*:Adseverin (Scinderin).     | 2.33 | 4.25 |
| 50 | 433427 | AI816449  | Hs.171889 | cholinephosphotransferase 1                 | 2.30 | 3.30 |
|    | 401965 |           |           | CGI-148 protein                             | 2.29 | 3.45 |
|    | 417866 | AW067903  | Hs.82772  | collagen, type XI, alpha 1                  | 2.23 | 4.07 |
|    | 428142 | NM_001308 | Hs.2246   | carboxypeptidase N, polypeptide 1, 50kD     | 2.19 | 3.17 |
|    | 422103 | AA984330  | Hs.111676 | protein kinase H11; small stress protein    | 2.18 | 4.18 |
|    | 425746 | NM_001701 | Hs.159440 | bile acid Coenzyme A: amino acid N-acylt    | 2.12 | 3.48 |
| 55 | 404835 |           |           | NM_018943*:Homo sapiens tubulin, alpha-I    | 2.09 | 5.72 |
|    | 401127 |           |           | Target Exon                                 | 2.09 | 4.38 |
|    | 406161 |           |           | Target Exon                                 | 2.08 | 3.22 |
|    | 421654 | AW163267  | Hs.106469 | suppressor of var1 (S.cerevisiae) 3-like    | 2.08 | 3.03 |
| 60 | 406632 | AB006838  |           | gb:Homo sapiens mRNA for HRV Fab N31-VH,    | 2.07 | 3.25 |
|    | 447940 | D86982    | Hs.20060  | KIAA0229 protein                            | 2.05 | 4.80 |
|    | 411771 | NM_006799 | Hs.72026  | protease, serine, 21 (testisin)             | 2.05 | 5.33 |
|    | 413211 | AW967107  | Hs.109274 | hypothetical protein MGC4365                | 2.02 | 4.74 |
|    | 425722 | AI659076  | Hs.97031  | hypothetical protein MGC13047               | 2.01 | 3.76 |
| 65 | 437044 | AL035864  | Hs.69517  | differentially expressed in Fanconi's an    | 1.96 | 5.27 |
|    | 436420 | AA443966  | Hs.31595  | ESTs  | 1.94 | 3.68 |
|    | 414809 | AI434699  | Hs.77356  | transferrin receptor (p90, CD71)            | 1.92 | 3.88 |
|    | 423420 | AI571364  | Hs.128382 | Homo sapiens mRNA; cDNA DKFZp76111224 (f    | 1.90 | 3.63 |
|    | 427923 | AW274357  | Hs.301406 | hypothetical protein PP3501                 | 1.90 | 3.04 |
|    | 406652 | AW150304  | Hs.277477 | major histocompatibility complex, class     | 1.88 | 3.00 |
| 70 | 435624 | AF218942  | Hs.24889  | formin 2                                    | 1.88 | 3.54 |
|    | 436552 | NM_014038 | Hs.5216   | HSPC028 protein                             | 1.86 | 3.29 |
|    | 408204 | AA454501  | Hs.43666  | protein tyrosine phosphatase type IVA, m    | 1.86 | 3.78 |
|    | 402728 |           |           | C100254.1*:gi4758590 ref NP_004249.1 im     | 1.86 | 3.14 |
| 75 | 420932 | AW374605  | Hs.11607  | ESTs, Weakly similar to T21697 hypotheti    | 1.84 | 4.72 |
|    | 458559 | AW028820  | Hs.283614 | ESTs  | 1.78 | 3.06 |
|    | 400278 |           |           | ENSP00000243264:Dolichyl-diphosphooligos    | 1.76 | 3.55 |
|    | 425751 | T19239    | Hs.1940   | crystallin, alpha B                         | 1.76 | 5.31 |
|    | 420737 | L08096    | Hs.99899  | CD70 ; tumor necrosis factor (ligand) s     | 1.74 | 3.00 |
|    | 410006 | AW732308  | Hs.57783  | eukaryotic translation initiation factor    | 1.74 | 3.79 |
| 80 | 454429 | BE273437  | Hs.301406 | hypothetical protein PP3501                 | 1.73 | 3.57 |
|    | 426321 | BE046490  | Hs.180677 | zinc finger protein 162                     | 1.72 | 3.27 |
|    | 402897 |           |           | NM_023068*:Homo sapiens sialoadhesin (SN    | 1.69 | 3.81 |
|    | 423639 | AB037826  | Hs.130411 | KIAA1405 protein                            | 1.67 | 3.31 |

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|    |        |          |           |  |      |      |
|----|--------|----------|-----------|--|------|------|
| 5  | 448848 | AF131851 | Hs.22241  | hypothetical protein                     | 1.65 | 4.27 |
|    | 414420 | AA043424 | Hs.76095  | immediate early response 3               | 1.60 | 3.02 |
|    | 440747 | AW297226 | Hs.137840 | ESTs, Moderately similar to SIX4_HUMAN H | 1.56 | 3.28 |
|    | 450635 | AW403954 | Hs.25237  | mesenchymal stem cell protein DSCD75     | 1.55 | 3.73 |
|    | 400252 |          |           | NM_004651*:Homo sapiens ubiquitin specif | 1.55 | 3.26 |
|    | 411825 | AK000334 |           | hypothetical protein FLJ20327            | 1.55 | 3.18 |
|    | 414328 | Z21566   | Hs.300463 | aconitase 2, mitochondrial               | 1.52 | 4.03 |
|    | 400263 |          |           | Eos Control                              | 1.51 | 3.42 |
| 10 | 421552 | AF026692 | Hs.105700 | secreted frizzled-related protein 4      | 1.50 | 3.19 |
|    | 436673 | AF201931 | Hs.5268   | hypothetical protein FLJ10479            | 1.49 | 3.33 |
|    | 404739 |          |           | Target Exon                              | 1.49 | 3.10 |
|    | 438344 | BE387726 | Hs.343411 | DEAD/H (Asp-Glu-Ala-Asp/His) box polypep | 1.46 | 3.42 |
|    | 421696 | AF035306 | Hs.106890 | Homo sapiens clone 23771 mRNA sequence   | 1.44 | 3.15 |
| 15 | 425240 | AA306495 | Hs.1869   | phosphoglucomutase 1                     | 1.44 | 3.04 |
|    | 412099 | U64198   | Hs.73165  | interleukin 12 receptor, beta 2          | 1.43 | 3.71 |
|    | 434642 | W25739   |           | chromobox homolog 5 (Drosophila HP1 alph | 1.42 | 3.07 |
|    | 404406 |          |           | Target Exon                              | 1.42 | 3.87 |
| 20 | 433320 | D60647   | Hs.250879 | ESTs, Highly similar to CTXN RAT CORTEXI | 1.41 | 3.80 |
|    | 447697 | W52125   |           | tubulin alpha 1                          | 1.40 | 4.45 |
|    | 415780 | U75898   | Hs.78846  | heat shock 27kD protein 2                | 1.40 | 3.28 |
|    | 447216 | R75812   | Hs.169248 | p75NTR-associated cell death executor, o | 1.39 | 3.77 |
|    | 401772 |          |           | NM_014520:Homo sapiens MYB binding prote | 1.39 | 3.67 |
|    | 413031 | BE515051 | Hs.75160  | phosphofructokinase, muscle              | 1.38 | 3.31 |
| 25 | 435604 | AA625279 | Hs.26892  | uncharacterized bone marrow protein BM04 | 1.37 | 3.17 |
|    | 428011 | BE387514 | Hs.181418 | KIAA0152 gene product                    | 1.37 | 3.05 |
|    | 445580 | AF167572 | Hs.12912  | skb1 (S. pombe) homolog                  | 1.35 | 3.11 |
|    | 436703 | AW880614 | Hs.146381 | RNA binding motif protein, X chromosome  | 1.34 | 3.05 |
|    | 438277 | AL022326 | Hs.6139   | synaptogyrin 1                           | 1.34 | 3.09 |
| 30 | 451481 | AA300228 | Hs.295866 | hypothetical protein DKFZp434N1923       | 1.32 | 3.23 |
|    | 421818 | AW992976 | Hs.50098  | NM_002489:Homo sapiens NADH dehydrogenas | 1.31 | 3.01 |
|    | 412968 | AW500508 | Hs.75102  | alanyl-tRNA synthetase                   | 1.28 | 3.58 |
|    | 452378 | AA025855 | Hs.19597  | KIAA1694 protein                         | 1.25 | 3.08 |
|    | 447455 | H38335   | Hs.6750   | Homo sapiens mRNA for FLJ00058 protein,  | 1.24 | 3.45 |
| 35 | 402212 |          |           | KIAA0430 gene product                    | 1.21 | 3.03 |
|    | 428773 | BE256238 | Hs.193163 | bridging integrator 1                    | 1.20 | 3.20 |
|    | 430067 | U79458   | Hs.231840 | VW domain binding protein 2              | 1.18 | 3.03 |
|    | 418289 | AW403103 | Hs.83951  | Hermansky-Pudlak syndrome                | 1.17 | 3.32 |
|    | 405752 |          |           | Target Exon                              | 1.00 | 3.40 |
| 40 | 422836 | AL037365 | Hs.194093 | AKAP-binding sperm protein ropporin      | 1.00 | 3.00 |

TABLE 58B:

Pkey: Unique Eos probeset identifier number  
CAT number: Gene cluster number  
Accession: Genbank accession numbers

|    |        |            |   |
|----|--------|------------|---|
| 45 | Pkey   | CAT Number | Accession   |
|    | 400275 | 18707_1    | NM_006513 BC009390 X91257 BC000716 BM450041 BI771139 AV710955 AU120415 AU141179 AU121081 BE409287 AU141397 AU122238<br>BI256788 BE386217 AU143368 AU133780 AU139704 BG531086 BE268235 BE545230 AU143414 AV761720 AU129842 AU143343 BE270064<br>BG473378 BE298813 BI772360 BE617354 AU140124 BE277005 BG746716 BE814960 AV161287 AV762084 BG898985 AW674875 AA313975<br>AV749916 AA374328 BM011248 AU098465 AW238888 BG940091 BG284599 AW410037 AA378483 D49914 AL573323 AL549819 AL572282<br>AL572871 AL568117 AL571945 AL547790 AL581217 AL514659 AL573926 AL540816 AW410038 BI262249 BG284713 AI659394 AI093582 AW965846<br>AA652206 AI686014 AA654357 AU146982 AW273447 AW157715 AW574750 BG683509 AW887824 AI818522 AA703770 BE542873 AA515504<br>AU154982 AA831254 AA828521 AI088602 AA854654 AA190869 BF062815 AA464944 BG261335 AI003584 BG402820 AA932098 W68695 AW182900<br>W37334 AI073864 C17924 C18528 AI299318 BF154399 BG319570 BF764242 BF764209 AI620320 T06029 BF447193 F29285 AI548949 BI333775<br>BE743602 BE618230 BE268139 BF036434 BE562718 BG774381 AA659833 AA297649 AA010945 BG105512 BE269205 T32623 BG015679 AL518518<br>AL517118 AL538396 AI049861 AL581976 AV752041 W26586 BE181609 AI963016 BG057603 AI720256 AA844560 AA055570 BE19606 C17428<br>AI042174 N53945 N69743 BF795208 AW057940 BI091399 AW975179 AA909936 H28712 W65445 AL515439 W37117 H66514 T85737 W37369<br>AW862589 AW860959 |
| 50 |        |            | NM_033445 BC001193 AI885781 BF794032 AA476620 AA810906 AA810905 AI291244 AI885097 AI359708 AI335629 H97396 AI344589 AA300377<br>AA457566 AW771833 BE465621 AI364068 AI364452 AI648505 AI918342 AI928670 AA886580 AL531029 AA886344 AI186419 BG329096 BM045465<br>AL531028 BG437151 BE868021 AA179427  |
| 55 |        |            | BC014122 M95627 NM_001087 BC020244 BC008809 AL542809 AL522027 AL517616 AL539615 AL555640 AL546094 AL528959 AL555071 BI858518<br>BI600907 AU120890 BE257146 AV707965 BI911155 BG575776 BE302876 BE277469 BE389232 AL533354 BE389814 BG829179 BE384687<br>BE276341 BG746912 BG425149 AI047913 BE250277 BG116066 AW410799 BG478074 BG471558 BF813165 AA016192 BG334833 BE383857<br>AA218784 AL517615 BI822297 BE677910 AW169102 AW410800 AU144298 AI215124 AW275306 AU147438 BE205773 AI343920 AI972200<br>AA666173 AI568496 AA742466 AI075003 BE858669 BI789274 BI964722 AI310312 AI928567 F28593 BI962793 AA053407 AA603722 AI419246<br>AA705597 BF445723 AA441804 AA774757 BG152609 AI301244 BF058147 AI879460 AI470194 D80510 AA923557 W69781 AI301243 AI880348<br>AL517973 AL542808 BE300552 AA143563 AL567123 AA553412 AA547999 AW262497 AW027349 AW469464 BE300553 AI687352 BG222276<br>AU146833 AA847176 AA724639 AI868270 AL530431 AI583619 AL563298 BI857771 C00178 AW130086 AI312650 AI470187 AL577668 BF816236<br>BF815492 BE221500 W48859 T54102 AI828100 AW190156 AI961278 AL565165 BF966475 BM013215 BG109077 BF793617 AA381776 AA381486<br>BF916382 BE745391 AA330239 BG117939 BF337403 BG770295 AL567952 AL571817 BE832508 BF032720<br>AJ245210 AJ245212 AJ245211 AJ245213  |
| 60 | 411763 | 1103041_1  | BC022413 BE395396 BF754175 AA506621 BE706665 BE706678 AA723159 BE153169 BE706729 BE706558 BE153312 BE706706 AW371853<br>AW371849 BE153241 BC017410 AI337912 AI090244 AW090300 BE219837 AI623661 BE501576 BE501734 AI742232 AI023964 AI458424 AA975373<br>AI288904 AI984583 AA890325 N32562 AI358102 AW241694 AI038448 AI672071 AI018389 AA576391 AA977874 AW189392 W37448 AA612894<br>AI277548 H89551 AI699774 H89365 AA315805 AW579186 BC014584 BC014581 AW780125 AI672414 BE328145 AW600919 BF031306 AW172758<br>BE708322 AA345675 BE875779 H28241 H25318 BF540913 BG179688 BF110202 AA528775 W37573 BE041644 AW366504 BM129522 BM129822<br>AI122760 BE718200 AW887496 AA149420 BE705307 BE539395 BE748765 AI373653 R75904 BF979185 BF691393 BG495595 BI094458 BE706702<br>BG496559 BF248373 BG494800   |
| 65 |        |            | N92481 AW674508 AA593748 AW974058 AI475594<br>BG402852 BG545066 AA150252 AL036760 AA452480 AI033256 W68776 W93372 N13248 AI052219 AI367635 W69374 N88610 R58194 BI524854<br>BI497111 BF940043 AI129268 AI359798 AI056480 AA121421 AI042150 AW449003 AI418180 AI419420 AI356058 BF832243 AI349330 AI359448<br>W76647 BF477170 AA099163 BF994549 AW608256 AA045418 H03770 AL574791 AW069455 BE302148 AW022281 AW960273 AA121268 AI336371  |
| 70 | 406642 | 0_0        |   |
|    | 441623 | 3362_1     |   |
| 75 |        |            |   |
| 80 | 433464 | 1015899_1  |   |
|    | 410295 | 2817_1     |   |

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|    |        |         |  |   |
|----|--------|---------|--|---|
| 5  |        |         |  | A1989381 A1131425 A1147483 A1311537 AW338638 A1141649 AA709414 A1187177 AA780884 A1333805 AA045312 A1623918 A1349421 W63753 W70299 AA557276 AA299007 N98212 W74064 N24823 T54892 AA054724 W73059 A1869152 N93462 N71889 A1537432 R71628 AA303089 A1498550 T60941 AV706417 AW067848 A1150677 AW338118 A1336313 AA826256 A1139518 AA662948 AA902723 A1970175 W68682 A1089380 A1148372 H99951 AV183001 A1270317 AA532767 AA044727 AA931652 R82469 AA150261 W67788 H67495 R80715 AW149812 N78914 A1862034 W61122 AW023118 W69375 T88917 T47984 N21531 R35646 AA055544 H15534 AA688295 AA090586 AA044764 BF994641 R79547 N21313 BF674610 H02874 AW975323 R16904 AA328030 AA054671 R79546 BF832310 A1249109 U77534 U77537   |
| 10 | 406678 | Q_0     |  | AB006838 AB006837 AB006836 AB006834 AB006835  |
|    | 406632 | Q_0     |  | Y00281 NM_002950 BC010839 BC007995 BG675232 BM468552 A1555484 BG831516 BF035300 BG677277 BF852972 BE314901 BF850656   |
|    | 400278 | 170_1   |  | A1371816 AA292474 AA375747 AA308414 BM454544 BI333370 BM049921 BI461428 BI465007 BI223401 BE856245 AW821164 BF914775 BF914761 A1125835 BI222678 BI091137 BF340536 BM462798 BI224452 BG707915 A1569160 AA443815 AW572867 AW363410 BF739268 BG010283 BI013120 BF818845 BF763468 AA305165 A1630370 AA039826 R24906 H02046 T96891 BF981330 AW936510 AA478169 H04587 BG166574 BI869342 BE562482 BE539637 AA165089 A1579118 AL553699 BE044054 AW117440 A1520674 BF435417 AW245648 A952404 T29534 AU153459 AU152168 AW591591 AU146918 A1393187 AA478013 AU148143 A1224471 A1640728 A1871537 AW264752 N93787 A1189357 AV756134 A1471659 AU147466 AA779206 AU149419 AU149104 AU159135 AA312221 AW445119 AW021912 A1799771 F04407 A1265530 A1914643 AW068751 AA513325 AA164627 AA639285 AA569644 T96892 A1923594 BF439180 BI770936 BF032438 AU154884 AA682793 AW072992 AU158815 A1884444 AL048031 A158922 AU152546 A1695187 A1048033 A1245650 AU148507 AW467451 BE536868 BF913001 BF062707 AL573082 AW067993 AA523354 BE866727 A1890705 AU159092 A1982693 A1817553 AA236729 A1687858 BG163767 A1524675 A1678155 AA127100 A1762661 AU159718 A1469720 AA483627 AW131696 R26868 A1199885 AW875614 AW938694 AW578974 BI763988 BG819168 BE874767 BG978292 BE162948 A1555483 AW189719 T56783 A1018819 A1476552 A1492837 A1824440 BG996262 AA932887 A1830726 R79530 AA622108 A1262575 T56782 R27437 BE784153 AW129549 A1675567 A1866759 BG987935 |
| 15 |        |         |  | U44839 NM_004651 BC000350 BI458316 AU117940 BG759024 BG749694 BE799505 BG831537 A1816335 AA325352 AL547005 AW157038 A1859331 A1816186 AU150786 AL043549 AW152880 AU159233 A1143169 T03478 BE727648 AA764725 BE206603 A1369814 A1584369 AW157545 BE221486 H99016 AU159025 A1074496 A1494516 BE245950 AA704385 AA280862 A1479595 A1369776 BE671398 T05538 AA682249 BI677303 BE545335 A1359434 H92868 D52599 D53609 D54715 T06015 BE222174 A1954706 D53218 D53787 R69889 W85896 A1497670 R70771 BF309414 BE620147 BG910597 AW964968 BE836120 A1579715 H56512 D55956 BI044097 AL555239 BF220278 AA081991 A1819544 AW001573 AW131600 A1858764 D52367 W22034 BG818979 BG024561 BE702779 BI458863 BI910399 BG070775 BF348284 H10055 BI086315 BE620574 H41088 BG119517 W23267 W21941 AA328817   |
| 20 | 400252 | 2656_2  |  | AK000695 AK000489 BC001588 BG235988 AW006329 A1887644 A1207230 A1148213 A1304333 A1634653 AW662636 A1281247 AA946921 AA424487 BE272330 A1830588 AA159183 AA977141 BG231801 AA631793 AA975194 BF817537 AA477798 BI906631 AW083424 AA625199 NM_017767 AK000334 BF984048 AW815634 AL573992 AA430612 AA928390 AA464447 AW340827 AA424290 A1927759 BG951502 AW881353 BI765535 T11692 X51466 NM_001961 M19997 BI224253 BG830478 AU122147 AU123437 BG113591 BG752624 BE886804 BI868669 BG337216 AW6529935 BM016525 A1560409 AL562866 A1909178 BF849556 AA371735 BF038841 BF727115 BC006547 BG757526 AL555664 BI261304 BG770095 BI033486 BI517580 BG876486 BI011828 A1313235 BG831724 BF869862 BG998348 BI011834 BF888337 BF898627 BF092380 AW803215 F01241 BF805719 BG876487 AW498536 BF988866 BG998849 AA248724 BG829202 BG756456 BG032392 BI859287 BM016990 BG332369 BE933685 BE166758 BM452445 A1937808 AW026128 N23684 AW006041 A1337521 F33111 BF344301 BG105450 BG387343 BF569547 BF154671 BM007368 BF569385 BE772007 BI199487 BF761700 BI261519 BF944452 BF898506 A1038390 BM044934 AW381142 BG743618 BE769206 BE893973 BI015047 BF886479 BF761350 BE769769 BG766117 BF847365 BE397834 AW371121 BF089125 BE082996 BF183193 BG180964 BF089940 BI000274 BG255503 BG674499 BG774174 BI015084   |
| 25 |        |         |  | AF147443 BM471094 AA948055 AA973157 AA284289 W25739 BI021926 BF898367 W02720 BF798341 BF378312 AA427766 BG955568 BF899591 BF884215  |
| 30 | 411825 | 7891_1  |  | BE742621 AL528391 AA328484 W52125 AA321596 AA022458 AW971024 A1052029 A1761638 AA628498 BE619513 AA412069 A1027538 AW514954 A1884599 A1097362 A1499259 A1419408 AW469200 A1992152 A1142045 A1066572 A1275439 AA581877 A1347308 A1016726 A1127541 AW002064 A1141786 AW051842 A1355329 A1198198 A1347858 A1027870 A1039163 AA576695 A1183286 A1362001 A1361994 AA594668 AA459257 AA745778 A1139667 F20651 A1201510 AA832171 BM464599 BM464574 A1972621 A1183887 AW131911 AW771584 BE619828 AA492218 AA025767 AA977354 AA385481 N45137 W73596 A1864400 A1200026 A1270953 F18139 V46301 H55825 A1039867 A1457570 A1928639 A1824685 A1083898 AW024570 AA285299 AW381097 AW582409 BE964181  |
| 35 | 400263 | 18977_1 |  |   |
| 40 | 434642 | 15461_1 |  |   |
|    | 447697 | MH497_6 |  |   |
| 45 |        |         |  |   |
| 50 |        |         |  | TABLE 58C:<br>Pkey: Unique number corresponding to an Eos probe set<br>Ref: Sequence source. The 7 digit numbers in this column are GenBank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) Nature 402:489-495.<br>Strand: Indicates DNA strand from which exons were predicted.<br>Nt_position: Indicates nucleotide positions of predicted exons.  |
| 55 |        |         |  |   |
| 60 |        |         |  |   |
| 65 |        |         |  |   |
| 70 |        |         |  |   |
| 75 |        |         |  |   |
| 80 |        |         |  |   |

TABLE 59A: ABOUT 201 GENES UPREGULATED IN MELANOMA METASTASES FROM PATIENTS WITH PROGRESSIVE DISEASE RELATIVE TO MELANOMA METASTASES FROM PATIENTS WITH LIMITED DISEASE

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Table 59A lists about 201 genes upregulated in melanoma metastases from patients with progressive disease relative to melanoma metastases from patients with limited disease. Genes were selected from 59680 probesets on the Eos/Affymetrix Hu03 Genechip array. Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

Pkey: Unique Eos probeset identifier number

ExAccn: Exemplar Accession number, Genbank accession number

UnigenelD: Unigene number

Unigene Title: Unigene gene title

R1: 90th percentile of AIs for metastases from patients with progressive disease divided by the 90th percentile of AIs for metastases from patients with limited disease

R2: 90th percentile of AIs for metastases from patients with progressive disease divided by the 90th percentile of AIs for metastases from patients with limited disease, where the 15th percentile of normal tissue AIs was subtracted from both the numerator and denominator

| Pkey   | ExAccn    | UnigenelD | Unigene Title                            | R1   | R2    |
|--------|-----------|-----------|--|------|-------|
| 422168 | AA586894  | Hs.112408 | S100 calcium-binding protein A7 (psorias | 8.58 | 13.77 |
| 448966 | AW372914  | Hs.86149  | phosphoinositol 3-phosphate-binding prot | 7.43 | 5.91  |
| 440099 | AL080058  | Hs.6909   | DKFZP564G202 protein                     | 7.07 | 4.56  |
| 431211 | M86849    | Hs.323733 | gap junction protein, beta 2, 26kD (conn | 6.91 | 3.51  |
| 420859 | AW468397  | Hs.100000 | S100 calcium-binding protein A8 (calgran | 6.90 | 6.44  |
| 418067 | AI127958  | Hs.83393  | cystatin E/M                             | 6.62 | 10.34 |
| 422166 | W72424    | Hs.112405 | S100 calcium-binding protein A9 (calgran | 6.47 | 13.26 |
| 409632 | W74001    | Hs.55279  | serine (or cysteine) proteinase inhibito | 6.25 | 3.41  |
| 401780 |           |           | NM_005557* Homo sapiens keratin 16 (foca | 6.10 | 4.24  |
| 437191 | NM_006846 | Hs.331555 | serine protease inhibitor, Kazal type, 5 | 5.97 | 6.60  |
| 422511 | AU076442  | Hs.117938 | collagen, type XVII, alpha 1             | 5.89 | 3.57  |
| 412636 | NM_004415 |           | desmoplakin (DPI, DPII)                  | 5.82 | 3.51  |
| 417124 | BE122762  | Hs.25338  | ESTs                                     | 5.16 | 3.16  |
| 430686 | NM_031942 | Hs.2633   | desmoglein 1                             | 5.03 | 3.57  |
| 421733 | AL119671  | Hs.1420   | fibroblast growth factor receptor 3 (ach | 4.84 | 4.15  |
| 422192 | AA305159  | Hs.113019 | fts485                                   | 4.79 | 4.59  |
| 407366 | AF026942  | Hs.17518  | gb.Homo sapiens cig33 mRNA, partial sequ | 4.33 | 2.37  |
| 429493 | AL134708  | Hs.145998 | ESTs                                     | 4.28 | 4.79  |
| 456525 | AW468397  | Hs.100000 | S100 calcium-binding protein A8 (calgran | 4.23 | 4.82  |
| 409010 | AI648675  |           | Homo sapiens, Similar to RIKEN cDNA 1700 | 4.23 | 3.69  |
| 410748 | BE383816  | Hs.12532  | chromosome 1 open reading frame 21       | 4.11 | 2.33  |
| 409760 | AA302840  |           | gb:EST10534 Adipose tissue, white I Homo | 4.06 | 3.65  |
| 424670 | W61215    | Hs.116651 | epithelial V-like antigen 1              | 4.02 | 4.07  |
| 417366 | BE185289  | Hs.1076   | small proline-rich protein 1B (comifin)  | 3.97 | 4.71  |
| 418663 | AK001100  | Hs.41690  | desmocollin 3                            | 3.95 | 5.08  |
| 402075 |           |           | ENSP00000251056* Plasma membrane calcium | 3.93 | 5.85  |
| 426330 | L22524    | Hs.2256   | matrix metalloproteinase 7 (matrilysin,  | 3.90 | 3.19  |
| 427809 | M26380    | Hs.180878 | lipoprotein lipase                       | 3.87 | 3.21  |
| 413859 | AW992356  | Hs.8364   | Homo sapiens pyruvate dehydrogenase kina | 3.85 | 5.75  |
| 431048 | R50253    | Hs.249129 | cell death-inducing DFFA-like effector a | 3.80 | 3.10  |
| 431369 | BE184455  | Hs.251754 | secretory leukocyte protease inhibitor ( | 3.79 | 3.36  |
| 421485 | AA243499  | Hs.104800 | hypothetical protein FLJ10134            | 3.67 | 3.35  |
| 429852 | AB010445  | Hs.225948 | small inducible cytokine subfamily A (Cy | 3.65 | 4.14  |
| 418686 | Z36830    | Hs.87268  | annexin A8                               | 3.65 | 3.62  |
| 448429 | D17408    | Hs.21223  | calponin 1, basic, smooth muscle         | 3.64 | 3.18  |
| 422963 | M79141    | Hs.13234  | ESTs                                     | 3.60 | 4.10  |
| 428874 | W32133    | Hs.194366 | transferrin (prealbumin, amyloidosis t   | 3.58 | 3.97  |
| 401785 |           |           | NM_002275* Homo sapiens keratin 15 (KRT1 | 3.58 | 5.05  |
| 454117 | BE410100  | Hs.40368  | adaptor-related protein complex 1, sigma | 3.56 | 1.92  |
| 419329 | AY007220  | Hs.288998 | S100-type calcium binding protein A14    | 3.54 | 5.62  |
| 424012 | AW368377  | Hs.137569 | tumor protein 63 kDa with strong homolog | 3.53 | 4.70  |
| 417515 | L24203    | Hs.82237  | ataxia-telangiectasia group D-associated | 3.52 | 8.33  |
| 430376 | AW292053  | Hs.12532  | chromosome 1 open reading frame 21       | 3.51 | 2.32  |
| 454229 | AW957744  | Hs.278469 | lacrimal proline rich protein            | 3.50 | 3.12  |
| 401781 |           |           | Target Exon                              | 3.45 | 3.57  |
| 408000 | L11690    | Hs.198689 | bullous pemphigoid antigen 1 (230/240kD) | 3.45 | 5.07  |
| 431567 | N51357    | Hs.260855 | Homo sapiens cDNA: FLJ21410 fis, clone C | 3.44 | 5.03  |
| 419648 | T73661    | Hs.91877  | thyroid hormone responsive SPOT14 (rat)  | 3.42 | 7.72  |
| 414798 | AI286323  | Hs.97411  | hypothetical protein MGC12335            | 3.41 | 2.65  |
| 442315 | AA173992  | Hs.7956   | ESTs, Moderately similar to ZN91_HUMAN Z | 3.41 | 5.03  |
| 442498 | U54617    | Hs.8364   | Homo sapiens pyruvate dehydrogenase kina | 3.32 | 2.86  |
| 410883 | D43767    | Hs.66742  | CCL17 chemokine (TARC) (SCYA17)          | 3.28 | 3.18  |
| 418026 | BE379727  | Hs.83213  | fatty acid binding protein 4, adipocyte  | 3.26 | 3.10  |
| 453309 | AI791809  | Hs.32949  | delensin, beta 1                         | 3.24 | 3.64  |
| 420783 | AI659838  | Hs.99923  | lectin, galactoside-binding, soluble, 7  | 3.21 | 3.64  |
| 409601 | AF237621  | Hs.80828  | keratin 1 (epidermolytic hyperkeratosis) | 3.19 | 4.37  |
| 413163 | Y00815    | Hs.75216  | protein tyrosine phosphatase, receptor t | 3.16 | 5.48  |
| 452101 | T60298    | Hs.10844  | Homo sapiens cDNA FLJ14476 fis, clone MA | 3.15 | 3.60  |
| 412633 | AF001691  | Hs.74304  | perlecan                                 | 3.15 | 3.98  |
| 407839 | AA045144  | Hs.161566 | ESTs                                     | 3.15 | 4.11  |
| 427318 | AF186081  | Hs.175783 | zinc transporter                         | 3.11 | 3.58  |
| 427899 | AA829286  | Hs.332053 | serum amyloid A1                         | 3.10 | 3.53  |
| 421948 | L42583    | Hs.334309 | keratin 6A                               | 3.08 | 2.75  |
| 452744 | AI267652  | Hs.246107 | Homo sapiens mRNA; cDNA DKFZp434E082 (fr | 3.05 | 2.99  |
| 410001 | AB041036  | Hs.57771  | kalikrein 11                             | 3.04 | 3.02  |
| 413435 | X51405    | Hs.75360  | carboxypeptidase E                       | 3.00 | 2.40  |
| 428500 | AI815395  | Hs.184641 | fatty acid desaturase 2                  | 2.98 | 5.22  |
| 410099 | AA081630  |           | KIAA0036 gene product                    | 2.97 | 2.05  |
| 437679 | NM_014214 | Hs.5753   | inositol(myo)-1(or 4)-monophosphate 2    | 2.93 | 3.45  |
| 413835 | AI272727  | Hs.249163 | fatty acid hydroxylase                   | 2.93 | 4.78  |



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|    |        |           |           |   |      |      |
|----|--------|-----------|-----------|---|------|------|
|    | 446068 | AL049801  | Hs.13649  | Novel human gene mapping to chromosome 13 | 2.89 | 2.93 |
|    | 450680 | AF131784  | Hs.25318  | Homo sapiens clone 25194 mRNA sequence    | 2.88 | 3.14 |
|    | 428398 | AJ249368  | Hs.98558  | ESTs                                      | 2.88 | 2.05 |
|    | 417433 | BE270266  | Hs.82128  | ST4 oncofetal trophoblast glycoprotein    | 2.86 | 2.12 |
| 5  | 427919 | AA173942  | Hs.326416 | Homo sapiens mRNA; cDNA DKFZp564H1916 (f  | 2.84 | 2.98 |
|    | 412676 | NM_000165 | Hs.74471  | gap junction protein, alpha 1, 43kD (con  | 2.83 | 2.82 |
|    | 428695 | AI355647  | Hs.189999 | purinergic receptor (family A group 5)    | 2.83 | 2.37 |
|    | 446989 | AK001898  | Hs.16740  | hypothetical protein FLJ11036             | 2.82 | 2.73 |
|    | 428471 | X57348    | Hs.184510 | stratfin                                  | 2.79 | 3.31 |
| 10 | 416305 | AU076628  | Hs.79187  | coxsackie virus and adenovirus receptor   | 2.79 | 3.72 |
|    | 433147 | AF091434  | Hs.43080  | platelet derived growth factor C          | 2.77 | 1.70 |
|    | 412326 | R07566    | Hs.73817  | small inducible cytokine A3 (homologous   | 2.76 | 2.18 |
|    | 425787 | AA363867  | Hs.155029 | ESTs                                      | 2.75 | 2.42 |
|    | 450172 | NM_005864 | Hs.24587  | signal transduction protein (SH3 contain  | 2.75 | 2.36 |
| 15 | 421773 | W69233    | Hs.112457 | ESTs                                      | 2.73 | 5.59 |
|    | 408536 | AW381532  | Hs.135188 | ESTs                                      | 2.73 | 5.17 |
|    | 437143 | AW204056  | Hs.8917   | ESTs                                      | 2.72 | 1.84 |
|    | 452862 | AW378065  | Hs.8687   | ADAMTS2 (a disintegrin-like and metallo   | 2.70 | 1.82 |
|    | 418394 | AF132818  | Hs.84728  | Kruppel-like factor 5 (intestinal)        | 2.69 | 4.62 |
| 20 | 410325 | AB023154  | Hs.62264  | KIAA0937 protein                          | 2.69 | 2.32 |
|    | 447164 | AF026941  | Hs.17518  | vipirin; similar to inflammatory respon   | 2.69 | 3.74 |
|    | 444984 | H15474    | Hs.132898 | fatty acid desaturase 1                   | 2.67 | 2.36 |
|    | 434727 | H43374    | Hs.7890   | Homo sapiens mRNA for KIAA1671 protein,   | 2.65 | 1.78 |
|    | 420876 | AA918425  | Hs.177744 | ESTs                                      | 2.64 | 7.26 |
| 25 | 426106 | AI678765  | Hs.21812  | ESTs                                      | 2.64 | 2.51 |
|    | 419517 | AF052107  | Hs.90797  | Homo sapiens clone 23620 mRNA sequence    | 2.64 | 2.66 |
|    | 409509 | AL036923  | Hs.322710 | ESTs                                      | 2.62 | 2.09 |
|    | 426354 | NM_004010 | Hs.169470 | dystrophin (muscular dystrophy, Duchenne  | 2.62 | 2.68 |
|    | 432503 | AA551196  | Hs.188952 | ESTs                                      | 2.62 | 4.64 |
| 30 | 409341 | AI963376  | Hs.12532  | chromosome 1 open reading frame 21        | 2.62 | 1.74 |
|    | 421116 | T19132    | Hs.101850 | retinol-binding protein 1, cellular       | 2.62 | 2.90 |
|    | 456247 | R09746    |           | gb:yt27d10.r1 Soares fetal liver spleen   | 2.61 | 3.43 |
|    | 414217 | AI309298  | Hs.279898 | Homo sapiens cDNA: FLJ23165 fis, clone L  | 2.60 | 3.84 |
|    | 439706 | AW872527  | Hs.59761  | ESTs, Weakly similar to DAP1_HUMAN DEATH  | 2.58 | 3.49 |
| 35 | 440659 | AF134160  | Hs.7327   | claudin 1                                 | 2.57 | 3.97 |
|    | 459710 | AI701596  | Hs.121592 | ESTs                                      | 2.57 | 3.59 |
|    | 430937 | X53463    | Hs.2704   | glutathione peroxidase 2 (gastrointestin  | 2.56 | 3.35 |
|    | 433882 | U90441    | Hs.3622   | procollagen-proline, 2-oxoglutarate 4-di  | 2.51 | 3.75 |
| 40 | 427666 | AI791495  | Hs.180142 | calmodulin-like skin protein (CLSP)       | 2.51 | 3.02 |
|    | 431103 | M57399    | Hs.44     | pleiotrophin (heparin binding growth fac  | 2.47 | 3.53 |
|    | 449550 | AA353125  | Hs.184721 | ESTs                                      | 2.43 | 4.22 |
|    | 424675 | NM_005512 | Hs.151641 | glycoprotein A repetitions predominant    | 2.40 | 6.22 |
|    | 442000 | H38671    | Hs.8071   | KIAA0735 gene product; synaptic vesicle   | 2.38 | 3.14 |
| 45 | 427122 | AW057736  | Hs.323910 | HER2 receptor tyrosine kinase (c-erb-b2,  | 2.36 | 3.59 |
|    | 420039 | NM_004605 | Hs.94581  | sulfotransferase family, cytosolic, 2B,   | 2.36 | 2.91 |
|    | 412477 | AA150864  |           | microsomal glutathione S-transferase 1    | 2.34 | 4.15 |
|    | 450693 | AW450461  | Hs.203965 | ESTs                                      | 2.32 | 3.93 |
|    | 406433 |           |           | Target Exon                               | 2.29 | 3.20 |
| 50 | 423017 | AW178761  | Hs.227948 | serine (or cysteine) proteinase inhibito  | 2.24 | 4.40 |
|    | 422158 | L10343    | Hs.112341 | protease inhibitor 3, skin-derived (SKAL  | 2.23 | 4.87 |
|    | 421314 | BE440002  | Hs.180324 | Homo sapiens, clone IMAGE:4183312, mRNA,  | 2.23 | 4.22 |
|    | 422083 | NM_001141 | Hs.111256 | arachidonate 15-lipoxygenase, second typ  | 2.22 | 5.71 |
|    | 442503 | AF147078  | Hs.150853 | p53-responsive gene 5                     | 2.21 | 4.86 |
| 55 | 418007 | M13509    | Hs.83169  | matrix metalloproteinase 1 (interstitial  | 2.19 | 3.90 |
|    | 442572 | AI001922  | Hs.135121 | hypothetical protein FLJ22415             | 2.16 | 2.87 |
|    | 413278 | BE563085  | Hs.833    | interferon-stimulated protein, 15 kDa     | 2.13 | 3.27 |
|    | 414521 | D28124    | Hs.76307  | neuroblastoma, suppression of tumorigeni  | 2.09 | 5.28 |
|    | 428899 | AA744610  | Hs.194431 | palladin                                  | 2.08 | 3.76 |
| 60 | 417079 | U65590    | Hs.81134  | interleukin 1 receptor antagonist         | 2.06 | 3.09 |
|    | 439496 | BE616501  | Hs.32343  | Homo sapiens, Similar to RIKEN cDNA 1110  | 2.05 | 2.88 |
|    | 450423 | AA486735  | Hs.31869  | sialoadhesin                              | 2.02 | 3.04 |
|    | 444105 | AW189097  |           | ESTs                                      | 2.01 | 3.05 |
|    | 430410 | AF099144  | Hs.347933 | tryptase beta 1                           | 2.01 | 3.71 |
| 65 | 409453 | AI885516  | Hs.95612  | ESTs                                      | 2.01 | 4.34 |
|    | 429655 | U48959    | Hs.211582 | myosin, light polypeptide kinase          | 2.00 | 5.28 |
|    | 432374 | W68815    | Hs.301885 | Homo sapiens cDNA FLJ11346 fis, clone PL  | 1.99 | 3.59 |
|    | 447990 | BE048821  | Hs.20144  | small inducible cytokine subfamily A (Cy  | 1.92 | 4.16 |
|    | 451541 | BE279383  | Hs.26557  | plakophilin 3                             | 1.89 | 3.90 |
| 70 | 425206 | NM_002153 | Hs.155109 | hydroxysteroid (17-beta) dehydrogenase 2  | 1.89 | 3.29 |
|    | 410197 | NM_005518 | Hs.59889  | 3-hydroxy-3-methylglutaryl-Coenzyme A sy  | 1.84 | 3.04 |
|    | 401760 |           |           | Target Exon                               | 1.84 | 3.32 |
|    | 427579 | AA366143  | Hs.179669 | hypothetical protein FLJ20637             | 1.83 | 4.69 |
|    | 424263 | M77640    | Hs.1757   | L1 cell adhesion molecule (hydrocephalus  | 1.83 | 2.96 |
| 75 | 452208 | AA024792  | Hs.31895  | hypothetical protein MGC4093              | 1.82 | 3.70 |
|    | 420074 | AA253425  | Hs.190074 | ESTs                                      | 1.81 | 2.90 |
|    | 429299 | AI620463  | Hs.347408 | hypothetical protein MGC13102             | 1.79 | 3.65 |
|    | 427540 | R12014    | Hs.20976  | ESTs                                      | 1.77 | 2.92 |
|    | 429259 | AA420450  | Hs.292911 | Plakophilin                               | 1.76 | 3.65 |
|    | 422106 | D84239    | Hs.111732 | Fc fragment of IgG binding protein        | 1.75 | 4.06 |
| 80 | 453556 | AA425414  | Hs.33287  | nuclear factor I/B                        | 1.74 | 3.07 |
|    | 436895 | AF037335  | Hs.5338   | carbonic anhydrase XII                    | 1.73 | 3.22 |
|    | 406851 | AA609784  |           | major histocompatibility complex, class   | 1.73 | 3.96 |
|    | 444726 | NM_006147 |           | interferon regulatory factor 6            | 1.71 | 3.65 |

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|    |        |           |           |   |      |      |
|----|--------|-----------|-----------|---|------|------|
| 5  | 444781 | NM_014400 | Hs.11950  | GPI-anchored metastasis-associated prote  | 1.71 | 4.13 |
|    | 445051 | BE048061  | Hs.37054  | ephrin-A3                                 | 1.68 | 3.61 |
|    | 408522 | AI541214  | Hs.46320  | Small proline-rich protein SPRK (human,   | 1.67 | 3.00 |
|    | 450835 | BE262773  | Hs.25584  | hypothetical protein FLJ10767             | 1.66 | 3.11 |
|    | 432004 | BE018302  | Hs.2894   | placental growth factor, vascular endothe | 1.66 | 3.23 |
| 10 | 431179 | AI338644  | Hs.195432 | aldehyde dehydrogenase 2 family (mitocho  | 1.64 | 3.29 |
|    | 415213 | NM_002933 | Hs.78224  | ribonuclease, RNase A family, 1 (pancrea  | 1.57 | 3.94 |
|    | 423184 | NM_004428 | Hs.1624   | ephrin-A1                                 | 1.56 | 2.88 |
|    | 414694 | NM_015362 | Hs.76907  | HSPC002 protein                           | 1.56 | 2.92 |
|    | 458746 | AI380797  | Hs.158992 | ESTs                                      | 1.56 | 2.92 |
| 15 | 433091 | Y12642    | Hs.3185   | lymphocyte antigen 6 complex, locus D     | 1.55 | 3.75 |
|    | 438367 | N79688    | Hs.204354 | ras homolog gene family, member B         | 1.54 | 4.56 |
|    | 403903 |           |           | C5001632".gi 10645308 gb AAG21430.1 AC00  | 1.53 | 3.99 |
|    | 445656 | W22050    | Hs.21299  | ESTs, Weakly similar to AF151840 1 CGI-8  | 1.52 | 3.16 |
|    | 443604 | C03577    | Hs.9615   | myosin regulatory light chain 2, smooth   | 1.50 | 4.25 |
| 20 | 429211 | AF052693  | Hs.198249 | gap junction protein, beta 5 (connexin 3  | 1.50 | 3.35 |
|    | 415274 | AF001548  | Hs.78344  | myosin, heavy polypeptide 11, smooth mus  | 1.49 | 3.21 |
|    | 418226 | AA424202  | Hs.83834  | cytochrome b-5                            | 1.49 | 3.90 |
|    | 454184 | BE141599  |           | gb:QV2-HT0083-071299-018-h01 HT0083 Homo  | 1.48 | 2.98 |
|    | 434879 | M34572    | Hs.159263 | collagen, type VI, alpha 2                | 1.46 | 3.26 |
| 25 | 418400 | BE243026  | Hs.301989 | KIAA0246 protein                          | 1.46 | 4.00 |
|    | 409178 | BE393948  | Hs.50915  | kallikrein 5                              | 1.45 | 2.94 |
|    | 433662 | W07162    | Hs.150826 | RAB25 RAB25, member RAS oncogene family   | 1.44 | 3.18 |
|    | 429002 | AW248439  | Hs.2340   | junction plakoglobin                      | 1.43 | 3.07 |
|    | 422087 | X58968    | Hs.111301 | matrix metalloproteinase 2 (gelatinase A  | 1.40 | 4.61 |
| 30 | 452934 | AA581322  | Hs.4213   | hypothetical protein MGC16207             | 1.38 | 3.11 |
|    | 417483 | BE549343  | Hs.82208  | acyl-Coenzyme A dehydrogenase, very long  | 1.37 | 4.32 |
|    | 427929 | BE613835  | Hs.181159 | Homo sapiens mRNA: cDNA DKFZp434F0217 (f  | 1.37 | 2.99 |
|    | 425184 | BE278288  | Hs.155048 | Lutheran blood group (Auberger b antigen  | 1.36 | 3.17 |
|    | 407143 | C14076    | Hs.332329 | EST                                       | 1.36 | 2.99 |
| 35 | 416950 | AL049798  | Hs.80552  | dermatopontin                             | 1.35 | 3.39 |
|    | 406799 | AA908548  |           | gb:cg83g12.s1 NCI_CGAP_Ov8 Homo sapiens   | 1.34 | 3.17 |
|    | 442599 | AF078037  | Hs.324051 | RelA-associated inhibitor                 | 1.33 | 3.30 |
|    | 413659 | BE155647  |           | gb:PM2-HT0353-130100-002-e09 HT0353 Homo  | 1.32 | 2.89 |
|    | 454478 | AW805749  |           | superoxide dismutase 2, mitochondrial     | 1.30 | 3.50 |
| 40 | 404467 |           |           | Target Exon                               | 1.29 | 3.57 |
|    | 452516 | AA058630  | Hs.29759  | RNA POLYMERASE I AND TRANSCRIPT RELEASE   | 1.28 | 3.00 |
|    | 412524 | AA417813  | Hs.44208  | hypothetical protein FLJ23153             | 1.27 | 3.05 |
|    | 422354 | U20982    | Hs.1516   | insulin-like growth factor-binding prote  | 1.24 | 2.86 |
|    | 406711 | N25514    | Hs.77385  | myosin, light polypeptide 6, alkali, smo  | 1.24 | 3.29 |
| 45 | 450796 | NM_001988 | Hs.25482  | envoplakin                                | 1.23 | 3.21 |
|    | 431526 | Y10129    | Hs.258742 | myosin-binding protein C, cardiac         | 1.23 | 3.65 |
|    | 452791 | AA227581  | Hs.30634  | hypothetical protein FLJ20509             | 1.22 | 2.90 |
|    | 406742 | AI468091  | Hs.279860 | tumor protein, translationally-controlle  | 1.19 | 3.47 |
|    | 406712 | M31212    | Hs.77385  | myosin, light polypeptide 6, alkali, smo  | 1.18 | 2.91 |
| 50 | 443672 | AA323362  | Hs.9657   | butyrobetaine (gamma), 2-oxoglutarate di  | 1.10 | 3.50 |
|    | 413048 | M93221    | Hs.75182  | mannose receptor, C type 1                | 1.00 | 2.99 |
|    | 453165 | S74727    | Hs.32042  | aspartoacylase (aminoacylase 2, Canavan   | 1.00 | 2.91 |
|    |        |           |           |   |      |      |
|    |        |           |           |   |      |      |
| 55 |        |           |           |   |      |      |
|    |        |           |           |   |      |      |
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|    |        |           |           |   |      |      |
| 60 |        |           |           |   |      |      |
|    |        |           |           |   |      |      |
|    |        |           |           |   |      |      |
|    |        |           |           |   |      |      |
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| 65 |        |           |           |   |      |      |
|    |        |           |           |   |      |      |
|    |        |           |           |   |      |      |
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| 70 |        |           |           |   |      |      |
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| 75 |        |           |           |   |      |      |
|    |        |           |           |   |      |      |
|    |        |           |           |   |      |      |
|    |        |           |           |   |      |      |
|    |        |           |           |   |      |      |
| 80 |        |           |           |   |      |      |
|    |        |           |           |   |      |      |
|    |        |           |           |   |      |      |
|    |        |           |           |   |      |      |
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|    |        |           |  |
|----|--------|-----------|--|
| 5  | 409010 | 10331_1   | AL575207 AL551714 BM014781 BG542863 BG771232 AA429722 AI377511 AI770155 AA716665 BG003427 AA810811 AA442760 AA128610<br>AA059411 AI796263 AI494075 AI572127 AA420992 BF436083 AI648675 AA878813 BI488614 BG700886 AA128609 AV702879 AA731146 AI580336<br>AI373224 AA919169 AI758175 AA976350 BG701414 BF057794 AW135598 AA062583 BI549631 AI185077 AA933879 AW024454 AA193289 AA045194<br>BG928396 BE856883 BF435859 AA196423 AW237471 R99289 D61992 BE856637 BF368270 AA194235 N51319 AA383499 N63055 BG548812<br>BF027898 BG779448<br>AA302840 T93015 T92950 AU184997 AA077551<br>AK055674 AW965247 AV751598 AA290926 R53043 AA331387 AK056148 BI917678 BG819395 BG911971 BG820167 AI174254 AA348720 AA364503<br>BG714279 AW893230 AA081774 H24222 AV727176 BF875715 AA081630 BE000834 AA334890 AL563737 BG029709 W52882 AI439658 BE551237<br>AA283724 BF109530 AI457096 AI805992 BE467736 AA693467 AI697593 AI887863 AI167419 AW901980 AW901768 BE702179 AA484549 T23811<br>BE327043 AA716027 AA917004 AA157714 BF339675 AA084618 AI418634 T31586 AA436630 AI366472 AA706191 AI422304 AI204899 AI041169<br>AA211402 AW827081 AA788593 T32736 AI767935 AA747914 T03534 AW959843 AL119527 BE327037 AW901982 AW993370 AW901977 AW902071<br>W60090 N79906 D52685 T07735 BE702069 BE702172 T08671 BE767121 BE767117 BE767113<br>R10170 R09746<br>AI220117 AI857837 AI218371 BM091400 AI304964 AI198508 AI400738 AW571549 AW950042 AI089943 AA437280 AU150878 BF197070 AI267984<br>BF594181 BF196688 AI433152 AI338921 AI620364 AI280197 AA652531 AI674938 AI342447 AI620350 AI281295 AI148621 N54787 AI338121<br>AI281153 N51899 AI087072 AA954788 AW069054 AI346309 BG529629 AI340135 BF083036 AI167365 AW819657 AA935468 AI467868 AW148701<br>AI383720 BE047685 AW015498 AA937149 AA708346 AW771478 AW802508 H53334 AW389204 AW798230 AI553922 AI560688 AW950043 AI561682<br>AV706506 R01853 AA126514 N62757 AI536893 AI926052 AI418720 N99964 AI568933 AI915737 AI080691 AI185358 N48996 N68575 H82824 H60037<br>AI247247 T95664 BF593863 AI749637 AW088541 AA991294 AA887452 AI073726 AA633132 AA629674 AA629649 AA629656 AA578595 AI168758<br>AA804572 AI085786 AA994396 AA991209 AA948663 AA929054 AA927952 T87001 AA928210 AA629296 AW802267 AW384129 BF744400 AA194110<br>AI382839 AA194837 AA406284 AI250750 R37035 AI525586 W01244<br>AW189097 AI123917 AI123926<br>AA609784 R97304<br>BG285809 BE940673 BG432524 BE157554 BG676980 AU144284 AI745383 AU159045 AI693500 AW293668 AW371408 BE856107 AI338042<br>AW188320 AI698246 BE673290 AW297653 AA156532 AI017342 AI916754 AI190644 AI184302 AA857671 BE857018 AI307420 AI318157 AW204327<br>AW664668 AW274339 AA582788 AI345741 AW301433 AI873468 AW137388 BF718731 BF718413 AA877495 BF001575 AI824693 AW849604<br>AW849405 AW849396 AW849173 BE673179 AI611327 AA705753 BE715478 AW849414 AW849399 AI085759 AI140849 T67412 AI889885 AW104647<br>AI912495 AI889874 AI744241 BE717113 BE717108 BE715584 AI872527 AA029457 C00338 AI469558 BE715577 AA045413 BF843813<br>BE141599 AW845895 AW178095 BE140914 BE140909 AW178107 AW178094 AW845883 BF349267 AW845898 AW845811 AW845814 BF767720<br>AA908548<br>BE155647 BE155627<br>AW796921 AW798102 AW805749 AW805872 BF985060 AW794380 BF380449 AW794466 AW794538 |
| 10 | 409760 | 865166_1  |  |
|    | 410099 | 16732_1   |  |
| 15 | 456247 | 2142387_1 |  |
|    | 412477 | 8659_2    |  |
| 20 | 444105 | 649788_1  |  |
|    | 406951 | 0_0       |  |
|    | 444726 | 3503_2    |  |
| 25 | 454194 | 171445_1  |  |
|    | 406799 | 0_0       |  |
|    | 413659 | 1526081_1 |  |
|    | 454478 | 4273_16   |  |

|    |              |   |
|----|--------------|---|
| 35 | TABLE 59C:   |   |
|    | Pkey:        | Unique number corresponding to an Eos probeset  |
|    | Ref:         | Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <u>Nature</u> 402:489-495. |
|    | Strand:      | Indicates DNA strand from which exons were predicted.   |
| 40 | Nt_position: | Indicates nucleotide positions of predicted exons.  |

|    |        |         |        |  |
|----|--------|---------|--------|--|
|    | Pkey   | Ref     | Strand | Nt_position                              |
|    | 401780 | 7249190 | Minus  | 28397-28617,28920-29045,29135-29296,2941 |
|    | 402075 | 8117407 | Plus   | 121907-122035,122804-122921,124019-12416 |
|    | 401785 | 7249190 | Minus  | 165776-165996,166189-166314,166408-16656 |
| 45 | 401781 | 7249190 | Minus  | 83215-83435,83531-83656,83740-83901,8423 |
|    | 406433 | 9256507 | Plus   | 58094-58565                              |
|    | 401760 | 9929699 | Plus   | 83126-83250,85320-85540,94719-95287      |
|    | 403903 | 7710671 | Minus  | 101165-102597                            |
| 50 | 404467 | 8077630 | Minus  | 24951-25853                              |

|    |  |   |
|----|--|---|
| 55 | TABLE 60A: ABOUT 53 GENES UPREGULATED IN BENIGN NEVI RELATIVE TO NORMAL TISSUES  |   |
|    | Table 60A lists about 53 genes upregulated in benign nevi relative to normal tissues. These genes were selected from 59680 probesets on the Eos/Affymetrix Hu03 Genechip array. Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression. |   |
|    | Pkey:  | Unique Eos probeset identifier number   |
|    | ExAccn:  | Exemplar Accession number, Genbank accession number   |
|    | UnigenelD:   | Unigene number  |
|    | Unigene Title:   | Unigene gene title  |
| 60 | R1:  | average of benign nevi AIs divided by the 90th percentile of normal tissue AIs  |
|    | R2:  | average of benign nevi AIs divided by 90th percentile of normal tissue AIs, where the 15th percentile of normal tissue AIs was subtracted from both the numerator and denominator |

|    |        |           |           |   |      |       |
|----|--------|-----------|-----------|---|------|-------|
|    | Pkey   | ExAccn    | UnigenelD | Unigene Title                             | R1   | R2    |
| 65 | 430377 | NM_001922 | Hs.301865 | dopachrome tautomerase (dopachrome delta  | 8.69 | 5.62  |
|    | 409601 | AF237621  | Hs.80828  | keratin 1 (epidermolytic hyperkeratosis)  | 8.37 | 13.47 |
|    | 430686 | NM_001942 | Hs.2633   | desmoglein 1                              | 7.26 | 4.78  |
|    | 406964 | M21305    |           | FGENES predicted novel secreted protein   | 6.50 | 3.73  |
|    | 426555 | NM_000372 | Hs.2053   | tyrosinase (oculocutaneous albinism IA)   | 6.40 | 7.35  |
| 70 | 429852 | AB010445  | Hs.225948 | small inducible cytokine subfamily A (Cy  | 6.23 | 8.85  |
|    | 430822 | AJ005371  | Hs.248017 | glyceraldehyde-3-phosphate dehydrogenase  | 5.49 | 4.32  |
|    | 420208 | BE276055  | Hs.95972  | silver (mouse homolog) like               | 5.45 | 9.84  |
|    | 431360 | NM_000427 | Hs.251680 | loricrin                                  | 3.88 | 3.00  |
|    | 421773 | W69233    | Hs.112457 | ESTs                                      | 3.80 | 9.04  |
|    | 438380 | T06430    | Hs.6194   | chondroitin sulfate proteoglycan BEHAB/b  | 3.74 | 4.23  |
| 75 | 431089 | BE041395  |           | ESTs, Weakly similar to unknown protein   | 3.21 | 2.34  |
|    | 420798 | W93774    | Hs.99936  | keratin 10 (epidermolytic hyperkeratosis) | 3.08 | 3.20  |
|    | 442503 | AF147078  | Hs.150853 | p53-responsive gene 5                     | 2.88 | 5.01  |
|    | 405451 |           |           | dihydropyrimidinase-like 3                | 2.88 | 2.85  |
| 80 | 452240 | AI591147  | Hs.61232  | ESTs                                      | 2.86 | 1.90  |
|    | 402525 |           |           | NM_002699*:Homo sapiens POU domain, clas  | 2.78 | 2.72  |
|    | 413171 | AA318325  | Hs.75219  | tyrosinase-related protein 1              | 2.65 | 5.58  |
|    | 439496 | BE616501  | Hs.32343  | Homo sapiens, Similar to RIKEN cDNA 1110  | 2.55 | 3.18  |
|    | 422656 | AI870435  | Hs.1569   | LIM homeobox protein 2                    | 2.45 | 2.38  |

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|--------|-----------|-----------|---|------|------|
| 453317 | NM_002277 | Hs.41696  | keratin, hair, acidic, 1                  | 2.34 | 3.76 |
| 420783 | A1659838  | Hs.99923  | lectin, galactoside-binding, soluble, 7   | 2.33 | 2.43 |
| 422511 | AU076442  | Hs.117938 | collagen, type XVII, alpha 1              | 2.28 | 2.00 |
| 427666 | A1791495  | Hs.180142 | calmodulin-like skin protein (CLSP)       | 2.28 | 2.50 |
| 459702 | A1204995  |           | gb an03c03.x1 Stratagene schizo brain S1  | 2.25 | 1.85 |
| 451668 | Z43948    | Hs.326444 | cartilage acidic protein 1                | 2.23 | 2.42 |
| 431703 | AA514264  | Hs.4437   | triosephosphate isomerase 1               | 2.15 | 2.20 |
| 453511 | AL031224  | Hs.33102  | AP-2 beta transcription factor            | 2.13 | 2.20 |
| 401780 |           |           | NM_005557*:Homo sapiens keratin 16 (foca  | 2.13 | 2.02 |
| 416640 | BE262478  | Hs.79404  | neuron-specific protein                   | 2.11 | 2.02 |
| 444105 | AW189097  |           | ESTs                                      | 2.11 | 1.46 |
| 428748 | AW593206  | Hs.98785  | Ksp37 protein                             | 2.09 | 1.52 |
| 418067 | A127958   | Hs.83393  | cystatin E/M                              | 2.09 | 2.32 |
| 417017 | AA976064  | Hs.180842 | ribosomal protein L13                     | 2.08 | 2.52 |
| 401781 |           |           | Target Exon                               | 2.02 | 2.03 |
| 407178 | AA195651  |           | AP-2 beta transcription factor            | 1.88 | 2.17 |
| 452308 | A167560   | Hs.61297  | ESTs                                      | 1.84 | 2.38 |
| 429348 | AJ242859  | Hs.199731 | Langerhans cell specific c-type lectin    | 1.83 | 3.26 |
| 402880 |           |           | Target Exon                               | 1.69 | 2.10 |
| 434276 | AF123659  | Hs.93605  | leucine zipper, putative tumor suppresso  | 1.69 | 2.20 |
| 401963 |           |           | NM_006311:Homo sapiens nuclear receptor   | 1.66 | 2.02 |
| 424010 | AL080188  | Hs.137556 | Homo sapiens mRNA; cDNA DKF Zp434A132 (fr | 1.65 | 2.05 |
| 432800 | BE391046  | Hs.278962 | AIM-1 protein                             | 1.61 | 2.83 |
| 400328 | X87344    |           | transporter 2, ATP-binding cassette, sub  | 1.57 | 2.27 |
| 412580 | AA113262  | Hs.17901  | Homo sapiens, clone IMAGE:3937015, mRNA,  | 1.55 | 2.42 |
| 435292 | N20514    | Hs.172965 | ESTs                                      | 1.53 | 2.21 |
| 408561 | A1308037  | Hs.84120  | hypothetical protein MGC13016             | 1.52 | 2.01 |
| 427923 | AW274357  | Hs.301406 | hypothetical protein PP3501               | 1.47 | 2.71 |
| 447763 | BE619911  | Hs.115803 | hypothetical protein                      | 1.40 | 2.10 |
| 454478 | AW805749  |           | superoxide dismutase 2, mitochondrial     | 1.30 | 2.36 |
| 427289 | A1097346  |           | phosphoserine aminotransferase            | 1.24 | 2.02 |
| 430513 | AJ012008  | Hs.241586 | G6C protein                               | 1.20 | 2.18 |
| 411388 | X72925    | Hs.69752  | desmocollin 1                             | 1.00 | 2.43 |

TABLE 60B:

Pkey: Unique Eos probeset identifier number

CAT number: Gene cluster number

Accession: Genbank accession numbers

| Pkey   | CAT Number | Accession  |
|--------|------------|--|
| 431089 | 125941_2   | BG940189 AW063489 AA715980 BF001091 BF880066 AA666102 AA621946 AA491826  |
| 459702 | 539529_1   | BG207209 BE166299 AI204995 BG199355 AW969908 AA528756 AW440776 BI044354  |
| 444105 | 649788_1   | AW189097 AI123917 AI123926   |
| 407178 | 683007_1   | AW235123 AA195651  |
| 454478 | 4273_16    | AW796921 AW798102 AW805749 AW805872 BF985060 AW794380 BF380449 AW794466 AW794538   |
| 427289 | 1820_2     | BC007350 BG766159 BG769338 BG761999 BG744385 BG770572 AW370610 AW370581 AA978353 AW327973 AW402425 AI889380 AA868504         |
|        |            | AW612968 AA630644 AI751211 N26980 AI394506 AA747849 BF154926 BF477185 AA649647 R39135 AI750216 T35363 W36278 AW079375        |
|        |            | AW612240 AA505495 AA515380 BG760793 AW370651 BG766029 AW370595 BF229885 BG762422 BG764907 T50662 AA025671 AW815715           |
|        |            | AV703420 H65047 AA485582 R56186 H90385 R55913 BI261497 BI018403 BF376945 T75578 BF933325 BF932853 BG502266 AW868934 AV683504 |
|        |            | BI018121 N41953 BF933343 BF932871 H08334 R14012 BF897622 T50816 BG698803 BF340083 Z20199                                     |

TABLE 60C:

Pkey: Unique number corresponding to an Eos probeset

Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA

Strand: Indicates DNA strand from which exons were predicted.

Nt\_position: Indicates nucleotide positions of predicted exons.

| Pkey   | Ref     | Strand | Nt_position                              |
|--------|---------|--------|--|
| 405451 | 7622517 | Minus  | 145949-146227                            |
| 402525 | 9800048 | Minus  | 19748-20683                              |
| 401780 | 7249190 | Minus  | 28397-28617,28920-29045,29135-29296,2941 |
| 401781 | 7249190 | Minus  | 83215-83435,83531-83656,83740-83901,8423 |
| 402880 | 9926561 | Minus  | 41555-41865                              |
| 401963 | 3126783 | Plus   | 51382-51521                              |

TABLE 61A: ABOUT 72 GENES UPREGULATED IN BENIGN NEVI RELATIVE TO PRIMARY MELANOMAS

Table 61A lists about 72 genes upregulated in benign nevi relative to primary melanomas. Genes were selected from 59680 probesets on the Eos/Arraymatrix Hu03 Genechip array.

Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

Pkey: Unique Eos probeset identifier number

ExAccn: Exemplar Accession number, Genbank accession number

UnigenelD: Unigene number

Unigene Title: Unigene gene title

R1 average of benign nevi AIs divided by the 90th percentile of primary melanoma AIs

R2 average of benign nevi AIs divided by the 90th percentile of primary melanoma AIs, where the 15th percentile of normal tissue AIs was subtracted from both the

numerator and denominator

| Pkey   | ExAccn   | UnigenelD | Unigene Title                            | R1   | R2   |
|--------|----------|-----------|--|------|------|
| 431103 | M57399   | Hs.44     | pleiotrophin (heparin binding growth fac | 3.80 | 2.50 |
| 424897 | D63216   | Hs.153684 | frizzled-related protein                 | 3.40 | 2.69 |
| 429852 | AB010445 | Hs.225948 | small inducible cytokine subfamily A (Cy | 2.90 | 3.25 |
| 431089 | BE041395 |           | ESTs, Weakly similar to unknown protein  | 2.82 | 1.56 |

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|    |             |  |  |  |      |      |  |  |  |
|----|-------------|--|--|--|------|------|--|--|--|
| 5  | 456034      | AW450979                                       |  | gb:U1-H-BI3-ala-a-12-0-U1.s1 NCL_CGAP_Su | 2.73 | 3.00 |  |  |  |
|    | 417017      | AA976064                                       | Hs.180842  | ribosomal protein L13                    | 2.71 | 3.73 |  |  |  |
|    | 402880      |  |  | Target Exon                              | 2.56 | 3.55 |  |  |  |
|    | 422556      | A1870435                                       | Hs.1569  | LIM homeobox protein 2                   | 2.45 | 3.38 |  |  |  |
|    | 426451      | A1908165                                       | Hs.169946  | GATA-binding protein 3 (T-cell receptor  | 2.41 | 1.91 |  |  |  |
| 10 | 423467      | AK000214                                       | Hs.129014  | hypothetical protein FLJ20207            | 2.32 | 2.24 |  |  |  |
|    | 424797      | AA622394                                       | Hs.153177  | ribosomal protein S28                    | 2.29 | 2.53 |  |  |  |
|    | 459702      | A1204995                                       |  | gb:an03c03.x1 Stratagene schizo brain S1 | 2.25 | 2.19 |  |  |  |
|    | 406964      | M21305   |  | FGENES predicted novel secreted protein  | 2.24 | 1.65 |  |  |  |
|    | 428748      | AW593206                                       | Hs.98785   | Ksp37 protein                            | 2.09 | 1.43 |  |  |  |
| 15 | 402525      |  |  | NM_002699*:Homo sapiens POU domain, clas | 2.06 | 2.03 |  |  |  |
|    | 415823      | R81864   | Hs.205103  | ESTs                                     | 2.05 | 1.87 |  |  |  |
|    | 412432      | AA126311                                       | Hs.9879  | ESTs                                     | 2.05 | 2.48 |  |  |  |
|    | 421733      | AL119671                                       | Hs.1420  | fibroblast growth factor receptor 3 (ach | 2.03 | 2.20 |  |  |  |
|    | 414876      | AW950925                                       | Hs.924   | crystallin, mu                           | 2.02 | 2.30 |  |  |  |
| 20 | 432306      | Y18207   | Hs.303090  | protein phosphatase 1, regulatory (inhib | 2.02 | 2.39 |  |  |  |
|    | 424010      | AL080188                                       | Hs.137556  | Homo sapiens mRNA: cDNA DKFZp434A132 (fr | 1.95 | 2.72 |  |  |  |
|    | 453317      | NM_002277                                      | Hs.41696   | keratin, hair, acidic, 1                 | 1.95 | 2.66 |  |  |  |
|    | 452887      | A1702223                                       | Hs.107253  | hypothetical protein DKFZp761F241        | 1.88 | 2.85 |  |  |  |
|    | 410545      | U32324   | Hs.64310   | interleukin 11 receptor, alpha           | 1.85 | 3.07 |  |  |  |
| 25 | 400496      |  |  | ENSP00000224716*:GTP-binding protein SAR | 1.84 | 2.09 |  |  |  |
|    | 406972      | M32053   |  | gb:Human H19 RNA gene, complete cds.     | 1.83 | 4.14 |  |  |  |
|    | 406266      |  |  | Target Exon                              | 1.75 | 2.38 |  |  |  |
|    | 414309      | AK000639                                       | Hs.75884   | DKFZP586A011 protein                     | 1.73 | 2.80 |  |  |  |
|    | 416250      | AA581386                                       | Hs.73452   | hypothetical protein MGC10791            | 1.72 | 2.27 |  |  |  |
| 30 | 451649      | A199261  | Hs.27191   | hypothetical protein from clone 24796    | 1.70 | 2.09 |  |  |  |
|    | 441134      | W29092   | Hs.346950  | cellular retinoic acid-binding protein 1 | 1.68 | 2.37 |  |  |  |
|    | 401963      |  |  | NM_006311:Homo sapiens nuclear receptor  | 1.66 | 2.38 |  |  |  |
|    | 430947      | U01212   | Hs.248153  | olfactory marker protein                 | 1.65 | 2.00 |  |  |  |
|    | 413391      | A1223328                                       | Hs.75335   | glycine amidinotransferase (L-arginine:g | 1.63 | 2.18 |  |  |  |
| 35 | 406387      |  |  | Target Exon                              | 1.57 | 2.14 |  |  |  |
|    | 405776      |  |  | cytochrome c-1                           | 1.55 | 2.23 |  |  |  |
|    | 410677      | NM_003278                                      | Hs.65424   | tetranectin (plasminogen-binding protein | 1.53 | 3.26 |  |  |  |
|    | 406807      | AA057605                                       | Hs.180920  | ribosomal protein S9                     | 1.53 | 2.67 |  |  |  |
|    | 420438      | AW403621                                       | Hs.1311  | CD1C antigen, c polypeptide              | 1.52 | 2.09 |  |  |  |
| 40 | 422089      | AA523172                                       | Hs.103135  | ESTs, Weakly similar to SFR4_HUMAN SPLIC | 1.52 | 2.66 |  |  |  |
|    | 456898      | NM_001928                                      | Hs.155597  | D component of complement (adipsin)      | 1.48 | 2.57 |  |  |  |
|    | 402412      |  |  | Target Exon                              | 1.48 | 2.42 |  |  |  |
|    | 427795      | BE268268                                       | Hs.180842  | ribosomal protein L13                    | 1.48 | 3.48 |  |  |  |
|    | 452547      | AA335295                                       | Hs.74120   | adipose specific 2                       | 1.47 | 3.89 |  |  |  |
| 45 | 414323      | NM_014759                                      | Hs.334688  | KIAA0273 gene product                    | 1.46 | 3.14 |  |  |  |
|    | 425831      | U46689   | Hs.159608  | aldehyde dehydrogenase 3 family, member  | 1.45 | 2.09 |  |  |  |
|    | 457090      | AL080243                                       | Hs.180920  | ribosomal protein S9                     | 1.40 | 2.86 |  |  |  |
|    | 445431      | AF137386                                       | Hs.12701   | plasmolipin                              | 1.39 | 2.00 |  |  |  |
|    | 445636      | AW105401                                       |  | ribosomal protein L29                    | 1.38 | 2.08 |  |  |  |
| 50 | 414682      | AL021154                                       | Hs.76884   | inhibitor of DNA binding 3, dominant neg | 1.37 | 3.32 |  |  |  |
|    | 406845      | A1567284                                       | Hs.119598  | ribosomal protein L3                     | 1.37 | 2.04 |  |  |  |
|    | 406808      | A1690307                                       | Hs.180920  | ribosomal protein S9                     | 1.36 | 3.32 |  |  |  |
|    | 403986      |  |  | Target Exon                              | 1.34 | 2.09 |  |  |  |
|    | 402218      |  |  | NM_022165*:Homo sapiens Lin-7b protein ( | 1.31 | 2.16 |  |  |  |
| 55 | 400649      |  |  | Target Exon                              | 1.29 | 2.07 |  |  |  |
|    | 432647      | A1807481                                       | Hs.278581  | fibroblast growth factor receptor 2 (bac | 1.28 | 2.40 |  |  |  |
|    | 403211      |  |  | NM_005400*:Homo sapiens protein kinase C | 1.26 | 2.13 |  |  |  |
|    | 452678      | A1243131                                       | Hs.164661  | ESTs, Weakly similar to TGLX_HUMAN PROTE | 1.26 | 2.14 |  |  |  |
|    | 406889      | D50310   | Hs.79933   | cyclin I                                 | 1.26 | 2.37 |  |  |  |
| 60 | 447299      | AF043897                                       | Hs.18075   | chromosome 9 open reading frame 3        | 1.25 | 2.39 |  |  |  |
|    | 404406      |  |  | Target Exon                              | 1.24 | 2.09 |  |  |  |
|    | 432894      | AW167668                                       | Hs.279772  | brain specific protein                   | 1.23 | 2.28 |  |  |  |
|    | 406757      | T65957   | Hs.77039   | ATP synthase, H transporting, mitochondr | 1.21 | 2.01 |  |  |  |
|    | 425883      | AL137708                                       | Hs.161031  | Homo sapiens mRNA: cDNA DKFZp434K0322 (f | 1.20 | 2.07 |  |  |  |
| 65 | 409726      | A1479341                                       | Hs.724   | thyroid hormone receptor, alpha (avian e | 1.17 | 2.62 |  |  |  |
|    | 436398      | H87136   | Hs.5174  | ribosomal protein S17                    | 1.17 | 2.42 |  |  |  |
|    | 444674      | BE562200                                       | Hs.244   | amino-terminal enhancer of split         | 1.16 | 2.02 |  |  |  |
|    | 402450      |  |  | Target Exon                              | 1.16 | 2.08 |  |  |  |
|    | 406758      | AA552326                                       | Hs.77039   | ATP synthase, H transporting, mitochondr | 1.16 | 2.03 |  |  |  |
| 70 | 431243      | U46455   | Hs.252189  | syndecan 4 (amphiglycan, ryudocan)       | 1.13 | 2.23 |  |  |  |
|    | 407032      | U73799   |  | gb:Human dynactin mRNA, partial cds.     | 1.10 | 2.01 |  |  |  |
|    | 402921      |  |  | ENSP00000244047*:Cadherin-like protein V | 1.00 | 2.00 |  |  |  |
|    |             |  |  |  |      |      |  |  |  |
|    |             |  |  |  |      |      |  |  |  |
| 75 | TABLE 61B:  |  |  |  |      |      |  |  |  |
|    | Pkey:       | Unique Eos probeset identifier number          |  |  |      |      |  |  |  |
|    | CAT number: | Gene cluster number                            |  |  |      |      |  |  |  |
|    | Accession:  | Genbank accession numbers                      |  |  |      |      |  |  |  |
| 80 | Pkey        | CAT Number                                     | Accession  |  |      |      |  |  |  |
|    | 431089      | 125941_2                                       | BG940189 AW063489 AA715980 BF001091 BF880065 AA666102 AA621946 AA491826  |  |      |      |  |  |  |
|    | 456034      | 685586_1                                       | AA136653 AA136656 AW450979 AA984358 AA809054 AW238038 AA492073 BE168945  |  |      |      |  |  |  |
|    | 459702      | 539529_1                                       | BG207209 BE166299 A1204995 BG199355 AW969908 AA528756 AW440776 B1044354  |  |      |      |  |  |  |
|    | 445636      | 8561_5   | BF339388 A1345516 BG391657 BE708967 BG026034 BE261703 H56716 H65572 H93801 T48830 R96953 R96989 R39707 BE867593 AA090310 |  |      |      |  |  |  |
|    |             |  | AA090672   |  |      |      |  |  |  |
|    | TABLE 61C:  |  |  |  |      |      |  |  |  |
|    | Pkey:       | Unique number corresponding to an Eos probeset |  |  |      |      |  |  |  |

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Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) Nature 402:489-495.

Strand: Indicates DNA strand from which exons were predicted.

Nt\_position: Indicates nucleotide positions of predicted exons.

|    |        |         |        |  |
|----|--------|---------|--------|--|
| 5  | Pkey   | Ref     | Strand | Nt_position                              |
|    | 402880 | 9926561 | Minus  | 41555-41865                              |
|    | 402525 | 9800048 | Minus  | 19748-20683                              |
|    | 400496 | 9743564 | Plus   | 41515-41695                              |
| 10 | 406266 | 7528342 | Minus  | 2365-2518                                |
|    | 401963 | 3126783 | Plus   | 51382-51521                              |
|    | 406387 | 9256180 | Plus   | 116229-116371,117512-117651              |
|    | 405776 | 7159748 | Minus  | 105911-107251                            |
| 15 | 402412 | 7408036 | Plus   | 75075-75679                              |
|    | 403986 | 8576059 | Plus   | 90692-91238                              |
|    | 402218 | 7689783 | Plus   | 127677-127886                            |
|    | 400649 | 8117705 | Plus   | 93097-93792                              |
|    | 403211 | 7630841 | Minus  | 159211-159369                            |
| 20 | 404406 | 7329316 | Minus  | 47543-47928                              |
|    | 402450 | 9796674 | Plus   | 137536-137682,137920-138045              |
|    | 402921 | 7981303 | Minus  | 52242-52384,55599-55858,57124-57309,5963 |

TABLE 62A: ABOUT 121 GENES UPREGULATED IN BENIGN NEVI RELATIVE TO NORMAL SKIN

Table 62A lists about 121 genes upregulated in benign nevi relative to normal skin. These genes were selected from 59680 probesets on the Eos/Affymetrix Hu03 Genechip array. Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 R1: average of benign nevi AIs divided by the 90th percentile of normal skin AIs  
 R2: average of benign nevi AIs divided by the 90th percentile of normal skin AIs, where the 15th percentile of normal tissue AIs was subtracted from both the numerator and denominator

|    |        |           |           |  |      |      |
|----|--------|-----------|-----------|--|------|------|
| 35 | Pkey   | ExAccn    | UnigenelD | Unigene Title                            | R1   | R2   |
|    | 430377 | NM_001922 | Hs.301865 | dopachrome tautomerase (dopachrome delta | 8.69 | 7.66 |
|    | 438380 | T06430    | Hs.6194   | chondroitin sulfate proteoglycan BEHAB/b | 6.71 | 8.11 |
|    | 406964 | M21305    |           | FGENES predicted novel secreted protein  | 6.50 | 3.35 |
|    | 426555 | NM_000372 | Hs.2053   | tyrosinase (oculocutaneous albinism IA)  | 6.40 | 4.32 |
| 40 | 430822 | AJ005371  | Hs.248017 | glyceraldehyde-3-phosphate dehydrogenase | 5.16 | 4.12 |
|    | 415752 | BE314524  | Hs.78776  | putative transmembrane protein           | 4.77 | 3.59 |
|    | 431103 | M57399    | Hs.44     | pleiotrophin (heparin binding growth fac | 4.63 | 4.99 |
|    | 451668 | Z43948    | Hs.326444 | cartilage acidic protein 1               | 4.62 | 6.04 |
|    | 449644 | AW960707  | Hs.148324 | ESTs                                     | 3.97 | 3.41 |
| 45 | 435056 | AW023337  | Hs.5422   | glycoprotein M6B                         | 3.42 | 2.29 |
|    | 431089 | BE041395  |           | ESTs, Weakly similar to unknown protein  | 3.21 | 2.57 |
|    | 452973 | H88409    | Hs.40527  | ESTs                                     | 3.16 | 3.12 |
|    | 408393 | AW015318  | Hs.23165  | ESTs                                     | 3.12 | 2.00 |
|    | 417355 | D13168    | Hs.82002  | endothelin receptor type B               | 3.11 | 2.45 |
| 50 | 415314 | N88802    | Hs.5422   | glycoprotein M6B                         | 2.86 | 2.39 |
|    | 417632 | R20855    | Hs.5422   | glycoprotein M6B                         | 2.78 | 2.16 |
|    | 457211 | AW972565  | Hs.32399  | ESTs, Weakly similar to S51797 vasodilat | 2.75 | 3.71 |
|    | 456034 | AW450979  |           | gb:U1-H-BI3-ala-a-12-0-UI.s1 NCL_CGAP_Su | 2.73 | 3.00 |
|    | 404356 |           |           | Target Exon                              | 2.63 | 2.69 |
| 55 | 414876 | AW950925  | Hs.924    | crystallin, mu                           | 2.57 | 3.15 |
|    | 420208 | BE276055  | Hs.95972  | silver (mouse homolog) like              | 2.46 | 2.89 |
|    | 422656 | AI870435  | Hs.1569   | LIM homeobox protein 2                   | 2.45 | 2.20 |
|    | 439963 | AW247529  | Hs.6793   | platelet-activating factor acetylhydrola | 2.43 | 2.11 |
|    | 432222 | AI204995  |           | gb:an03c03.x1 Stratagene schizo brain S1 | 2.31 | 1.96 |
| 60 | 401116 |           |           | Target Exon                              | 2.29 | 2.24 |
|    | 410326 | AI368909  | Hs.47650  | ESTs                                     | 2.27 | 2.77 |
|    | 459702 | AI204995  |           | gb:an03c03.x1 Stratagene schizo brain S1 | 2.25 | 3.49 |
|    | 435730 | AB020635  | Hs.4984   | KIAA0828 protein                         | 2.24 | 2.24 |
|    | 404977 |           |           | Insulin-like growth factor 2 (somatomedi | 2.24 | 1.99 |
| 65 | 414221 | AW450979  |           | gb:U1-H-BI3-ala-a-12-0-UI.s1 NCL_CGAP_Su | 2.16 | 2.36 |
|    | 437862 | AW978107  | Hs.5884   | Homo sapiens mRNA; cDNA DKFp586C0224 (f  | 2.13 | 2.09 |
|    | 402181 |           |           | Target Exon                              | 2.12 | 2.74 |
|    | 447907 | AI439110  | Hs.170796 | ESTs                                     | 2.05 | 2.02 |
|    | 434276 | AF123659  | Hs.93605  | leucine zipper, putative tumor suppresso | 2.04 | 3.14 |
| 70 | 459246 | NM_006834 | Hs.32217  | RAB32, member RAS oncogene family        | 2.02 | 1.83 |
|    | 405451 |           |           | dihydropyrimidinase-like 3               | 2.01 | 2.00 |
|    | 446727 | AB011095  | Hs.16032  | KIAA0523 protein                         | 2.01 | 2.36 |
|    | 417017 | AA976064  | Hs.180842 | ribosomal protein L13                    | 2.00 | 2.37 |
|    | 413171 | AA318325  | Hs.75219  | tyrosinase-related protein 1             | 1.94 | 2.77 |
| 75 | 408209 | NM_004454 | Hs.43697  | ets variant gene 5 (ets-related molecule | 1.94 | 2.76 |
|    | 455657 | BE065209  |           | gb:RC1-BT0314-310300-015-b12 BT0314 Homo | 1.92 | 2.91 |
|    | 419200 | AW966405  |           | EST                                      | 1.85 | 2.91 |
|    | 419687 | AI638859  | Hs.227699 | ESTs, Weakly similar to T2D3_HUMAN TRANS | 1.84 | 2.27 |
|    | 402217 |           |           | C19001662:gi5753872[ref][NP_034345.1]i   | 1.83 | 2.33 |
| 80 | 406040 |           |           | Target Exon                              | 1.81 | 2.04 |
|    | 435292 | N20514    | Hs.172965 | ESTs                                     | 1.81 | 3.41 |
|    | 430947 | U01212    | Hs.248153 | olfactory marker protein                 | 1.79 | 2.00 |
|    | 434574 | AI424458  | Hs.33470  | ESTs                                     | 1.78 | 4.00 |

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|    |             |                                       |   |      |      |
|----|-------------|---------------------------------------|---|------|------|
|    | 403532      |                                       | NM_024638:Homo sapiens hypothetical prot                                | 1.75 | 2.06 |
|    | 402829      |                                       | C1002500:gi 6754254 ref NP_034610.1  hea                                | 1.72 | 2.20 |
|    | 403828      |                                       | C4000447*:gi 7705570 ref NP_038851.1  Ki                                | 1.72 | 2.04 |
| 5  | 453837      | AL138387                              | Hs.256126   | 1.68 | 2.40 |
|    | 407826      | AA128423                              | Hs.40300  | 1.67 | 2.13 |
|    | 441253      | AI632744                              | Hs.129501   | 1.67 | 2.13 |
|    | 405776      |                                       | ESTs  | 1.66 | 2.36 |
|    | 430540      | AW245422                              |   | 1.66 | 2.08 |
| 10 | 445745      | AB007924                              | Hs.13245  | 1.66 | 2.34 |
|    | 401963      |                                       | NM_006311:Homo sapiens nuclear receptor                                 | 1.66 | 2.97 |
|    | 402994      |                                       | NM_002463*:Homo sapiens myxovirus (influ                                | 1.66 | 2.56 |
|    | 406016      |                                       | Target Exon   | 1.65 | 2.23 |
|    | 429186      | BE503443                              | Hs.112095   | 1.65 | 2.30 |
|    | 402911      |                                       | hypothetical protein DKFZp434F1819                                      | 1.63 | 2.46 |
| 15 | 412926      | AI879076                              | Hs.75061  | 1.61 | 2.28 |
|    | 440437      | AI923201                              | Hs.192352   | 1.59 | 2.07 |
|    | 403960      |                                       | ESTs  | 1.59 | 2.41 |
|    | 406266      |                                       | ENSP00000174317*:KIAA0303 (FRAGMENT).                                   | 1.56 | 2.16 |
| 20 | 424481      | R19453                                | Hs.1787   | 1.55 | 3.14 |
|    | 403803      |                                       | proteolipid protein 1 (Pelizaeus-Merzbac                                | 1.54 | 2.04 |
|    | 407038      | X00237                                |   | 1.53 | 2.09 |
|    | 424412      | H15512                                | Hs.10043  | 1.53 | 2.45 |
|    | 431836      | AF178532                              | Hs.271411   | 1.52 | 2.75 |
|    | 427923      | AW274357                              | Hs.301406   | 1.52 | 3.04 |
| 25 | 419849      | BE041436                              | Hs.93379  | 1.51 | 3.42 |
|    | 404790      |                                       | eukaryotic translation initiation factor                                | 1.50 | 2.16 |
|    | 434596      | T59538                                |   | 1.48 | 2.02 |
|    | 425069      | AA687465                              | Hs.298184   | 1.47 | 4.05 |
| 30 | 438549      | BE386801                              | Hs.21858  | 1.46 | 2.48 |
|    | 427289      | AI097346                              |   | 1.44 | 4.46 |
|    | 425818      | AB021225                              | Hs.159581   | 1.43 | 2.32 |
|    | 432800      | BE391046                              | Hs.278962   | 1.43 | 2.08 |
|    | 447763      | BE619911                              | Hs.115803   | 1.42 | 2.21 |
|    | 443219      | AI354669                              | Hs.187461   | 1.41 | 2.31 |
| 35 | 451489      | NM_005503                             | Hs.26468  | 1.41 | 2.35 |
|    | 459641      | AW064121                              | Hs.279175   | 1.41 | 2.01 |
|    | 405318      |                                       | ESTs  | 1.40 | 2.31 |
|    | 402343      |                                       | C7002129*:gi 3638957 gb AAC36301.1  (AC0                                | 1.40 | 2.35 |
| 40 | 447108      | AW449602                              | Hs.241493   | 1.40 | 2.11 |
|    | 431222      | X56777                                | Hs.273790   | 1.39 | 2.06 |
|    | 400263      |                                       | zona pellucida glycoprotein 3A (sperm re                                | 1.39 | 2.60 |
|    | 403986      |                                       | Eos Control   | 1.38 | 2.09 |
|    | 437912      | BE278594                              | Hs.5912   | 1.36 | 2.27 |
| 45 | 426020      | AL110195                              | Hs.165017   | 1.36 | 2.77 |
|    | 401914      |                                       | microphthalmia-associated transcription                                 | 1.33 | 2.43 |
|    | 450395      | BE048545                              | Hs.161757   | 1.29 | 2.01 |
|    | 425535      | AB007937                              | Hs.158287   | 1.29 | 2.94 |
|    | 450358      | AB010098                              | Hs.24907  | 1.28 | 2.84 |
| 50 | 427560      | AA405394                              | Hs.161851   | 1.27 | 2.14 |
|    | 402450      |                                       | ESTs  | 1.27 | 2.89 |
|    | 406885      | D28423                                |   | 1.26 | 3.19 |
|    | 404067      |                                       | gb:Human mRNA for pre-mRNA splicing fact                                | 1.26 | 2.45 |
|    | 406368      |                                       | Target Exon   | 1.25 | 2.06 |
| 55 | 454429      | BE273437                              | Hs.301406   | 1.23 | 2.07 |
|    | 414580      | BE386918                              |   | 1.22 | 2.21 |
|    | 414060      | BE246327                              | Hs.123164   | 1.22 | 2.01 |
|    | 400867      |                                       | gb:TCBAP1E1967 Pediatric pre-B cell acut                                | 1.21 | 2.19 |
|    | 437026      | AW976573                              |   | 1.21 | 2.31 |
| 60 | 402605      |                                       | cofilin 1 (non-muscle)  | 1.20 | 2.09 |
|    | 431008      | H84058                                | Hs.25734  | 1.17 | 2.22 |
|    | 448143      | AF039704                              | Hs.20478  | 1.17 | 2.25 |
|    | 416630      | H69392                                | Hs.174051   | 1.16 | 2.34 |
|    | 407239      | AA076350                              | Hs.67846  | 1.14 | 2.58 |
| 65 | 419045      | T85693                                |   | 1.13 | 2.08 |
|    | 443923      | X60702                                | Hs.210  | 1.11 | 2.24 |
|    | 457585      | AB040799                              | Hs.278283   | 1.08 | 2.04 |
|    | 452958      | AA883929                              | Hs.40527  | 1.03 | 2.28 |
|    | 403969      |                                       | ESTs  | 1.00 | 2.04 |
| 70 | 436878      | BE465204                              | Hs.47448  | 1.00 | 2.12 |
|    | 415929      | AA724373                              | Hs.49344  | 1.00 | 2.18 |
|    | 404632      |                                       | hypothetical protein FLJ11006   | 1.00 | 2.19 |
|    | 452838      | U65011                                | Hs.30743  | 1.00 | 2.35 |
|    | 447937      | AL109716                              | Hs.20034  | 1.00 | 2.41 |
| 75 | TABLE 62B:  |                                       |   |      |      |
|    | Pkey:       | Unique Eos probeset identifier number |   |      |      |
|    | CAT number: | Gene cluster number                   |   |      |      |
|    | Accession:  | Genbank accession numbers             |   |      |      |
| 80 | Pkey        | CAT Number                            | Accession   |      |      |
|    | 431089      | 125941_2                              | BC940189 AW063489 AA715980 BF001091 BF880066 AA666102 AA621946 AA491826 |      |      |
|    | 456034      | 685586_1                              | AA136653 AA136656 AW450979 AA984358 AA809054 AW238038 AA492073 BE168945 |      |      |
|    | 432222      | 539529_1                              | BG207209 BE166299 AI204995 BG199355 AW969908 AA528756 AW440776 BI044354 |      |      |

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|        |  |   |
|--------|--|---|
| 459702 | 539529_1   | BG207209 BE166299 AI204995 BG199355 AW969908 AA528756 AW440776 BI044354   |
| 414221 | 685585_1   | AA136653 AA136656 AW450979 AA984358 AA809054 AW238038 AA492073 BE168945   |
| 455657 | 1490185_1  | BE065209 BE065364 BE065110 BE065111   |
| 419200 | 9531_1   | BF036043 AW190446 BG194731 AW662036 AI445021 BE937550 AW818972 AW393132 AA834685 BF112058 AV721682 H16423 AI270167 AI857345   |
| 5      |  | AA937302 AW818444 BE929780 BG498678 BF155010 BI598271 BI599811 BE161728 AW578737 AW753711 AW379707 AW381918 BG506608          |
|        |  | AW028637 AW994240 BF887392 BF790073 AW381624 AV727105 BF439618 AA443174 AI018009 N42850 AW573242 AI417258 AA463483 AI676131   |
|        |  | AI167170 AA836627 AA443828 AW592922 AA235129 AA730278 AW439062 AW474332 BI043239 AW474342 BG708553 AW362423 BF090028          |
|        |  | BE827256 R16550 R39478 R39479 R94368 BG540916 BM314745 AA251087 D54231 D55274 BF085805 D31589 AW966405 AW994425 D81879        |
|        |  | BE093545 AW901107 AA383529 BI021552 R56420 N39976 AA573281 H82595 AA234955 BE093539 AW367006 BF358697 BF366318 AA663856       |
| 10     |  | BE702099 BF035969 AI267384 AI267232 BE348320 AA621574 AA861212 BF083343 BF083341 AV745131 D53074 AW954476 AW954472 AA376836   |
|        |  | AV724531 D53063 C14928 AA093287 AA062638 BG483558 BE940050 AA765954 T70171 BE938775 BE940057 D53502 AW373300 AL118798         |
|        |  | BM128728 AA193411 AW444709 AW952455 AI887612 BF431948 BI496876 AI264159 BM128481 AI624657 AI689301 AI969467 AA861685 AA251595 |
|        |  | AA625761 AA872090 AI826790 AA328366 BE827416 R75951 D56918 R68122 BE827384 AL118797 AI184164 AA164411 BI495332 BE858113       |
| 15     | 430540 713_2   | AI863860 H00660 T69849 AW780389 C14667 BE934995 BI018652 R92801 AA164410 H00752 AW373305 AW373299 AW373302                    |
|        |  | BC017171 BC012195 NM_007126 AF100752 AL137377 Z70768 BM474865 BG754806 AU124376 BG757203 BG764420 BG775028 BG824418           |
|        |  | BM045810 AU120387 BG770238 BG686740 BG913323 BI759980 BG395998 BM048875 BE881070 BE313689 BE879144 BM309834 AW245847          |
|        |  | AI770171 BF196861 BE856897 AA463876 AI375927 AA648810 AA948193 AA490916 AI459893 AI458188 AI240408 AI191843 AI131029 AW768399 |
|        |  | AI365196 AW337984 AW026150 BE466591 BE674599 AI818438 AA772197 AI651927 AW151143 BI198825 BG819083 BM458764 BE903567          |
| 20     |  | BE732715 BM043200 BE900263 BE900706 BE731097 BE390023 BG875384 BF996406 BF988930 BM475542 AW246215 BE501897 BE903610          |
|        |  | BE561530 BE560537 BE903782 BE732947 BI227204 BG761305 BE262642 BE391848 BE382475 BG008258 BI547991 BI459099 BE391391 BE259420 |
|        |  | BE298109 AW245422 AI423847 AI914618 H80534 BE301004 AL531791 AI435581 BF793112 AL577303 AA373265 BE746965 BF743630 BE879296   |
|        |  | AI359493 BM018598 AI689260 AW072450 F20201 AW151405 AW517572 AA773468 BG259694 BE391163 BG621529 AI421728 BG767231 BM462953   |
|        |  | BG340524 W52648 AA113434 BE785431 BI041981 BG832385 BG253168 BG759470 BF369329 BF981332 BE259418 BE785738 BI091658 N72512     |
| 25     |  | W58732 W85890 BG958989 AI205206 H19721 W17051 W77958 BI262010 AA844319 W74143 W72214 N85194 BE734033 BG164099 AA931069        |
|        |  | F13645 R41394 AK025758 BG180977 BE349455 AA812018 AA740241 AI027722 AI150356 AA886395 AW977627 BE220225 AA884082 AW518114     |
|        |  | AI243844 AA809493 AA481029 AA825718 AI347866 AI431670 AA814436 AI251109 R07704 AA765606 AA724593 AI918399 AI537550 AA491103   |
|        |  | AW008188 R07703 AA989120 AA746235 AW028983 AA789102 AU185751 AW971465 AA489681 AW971893 AW612086 BE077936 BI860809            |
|        |  | BE002760 BG746251 BE962912 BM454584 AL134894 BF104082 H80591  |
| 30     | 434596 14701_1<br>427289 1820_2                        | AF147374 T59538 T59589 T59598 T59542  |
|        |  | BC007350 BG766159 BG769338 BG761999 BG744385 BG770572 AW370610 AW370581 AA978353 AW372973 AW402425 AI889380 AA868504          |
|        |  | AW612968 AA630644 AI751211 N26980 AI394506 AA747849 BF154926 BF477185 AA649647 R39135 AI750216 T35363 W36278 AW079375         |
|        |  | AW612240 AA505495 AA515380 BG760793 AW370651 BG766029 AW370595 BF229885 BG762422 BG764907 T50662 AA025671 AW815715            |
|        |  | AV703420 H65047 AA485582 R56186 H90385 R55913 BI261497 BI018403 BF376945 T75578 BF932853 BG502266 AW868934 AV683504           |
| 35     | 400263 18977_1   | BI018121 N41953 BF933343 BF932871 H08334 R14012 BF897622 T50816 BG698803 BF340083 Z20199                                      |
|        |  | T11692 X51466 NM_001961 M19997 BI224253 BG830478 AU122147 AU123437 BG113591 BG752624 BE886804 BI868669 BG337216 AW629935      |
|        |  | BM016525 AI560409 AL562866 AI909178 BF849556 AA371735 BF038841 BF727115 BC006547 BG757526 AL555664 BI261304 BG770095 BI033486 |
|        |  | BI517580 BG876486 BI011828 AI313235 BG831724 BF869862 BG998348 BI011834 BF888337 BF898627 BF092380 AW803215 F01241 BF805719   |
|        |  | BG876487 AW498536 BF988866 BG998849 AA248724 BG829202 BG756456 BG032392 BI859287 BM016990 BG332369 BE933685 BE166758          |
| 40     |  | BM452445 AI937808 AW026128 N23684 AW006041 AI337621 F33111 BF344301 BG105450 BG387343 BF569547 BF154671 BM007368 BF569385     |
|        |  | BE772007 BI199487 BF761700 BI261519 BF944452 BF898506 AI038390 BM044934 AW381142 BG743618 BE769206 BE893973 BI015047 BF886479 |
|        |  | BF761350 BE769769 BG766117 BF847365 BE397834 AW371121 BF089125 BE082996 BF183193 BG180964 BF089940 BI000274 BG255503          |
|        |  | BG674499 BG774174 BI015084  |
| 45     | 414580 623093_1<br>437026 1240260_1<br>419045 348516_2 | BG333973 BE385437 BE408833 BE387650<br>AW976573 AA742335 AA830000<br>BF981324 BG723297 T85693 T81681 T81909                   |

TABLE 62C:

|              |   |
|--------------|---|
| Pkey:        | Unique number corresponding to an Eos probeset  |
| Ref:         | Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495. |
| Strand:      | Indicates DNA strand from which exons were predicted.   |
| Nt_position: | Indicates nucleotide positions of predicted exons.  |

|    |        |         |        |                                     |
|----|--------|---------|--------|-------------------------------------|
| 55 | Pkey   | Ref     | Strand | Nt_position                         |
|    | 404356 | 7630858 | Minus  | 126433-126623                       |
|    | 401116 | 9966559 | Plus   | 123579-124447                       |
|    | 404977 | 3738341 | Minus  | 43081-43229                         |
|    | 402181 | 8575912 | Plus   | 449746-450040                       |
|    | 405451 | 7622517 | Minus  | 145949-146227                       |
| 60 | 402217 | 9795981 | Minus  | 21521-21757                         |
|    | 406040 | 6758938 | Minus  | 23063-23599                         |
|    | 403532 | 8076842 | Minus  | 81750-81901                         |
|    | 402829 | 8918414 | Plus   | 101532-101852,102006-102263         |
|    | 403828 | 9838214 | Plus   | 31755-32148                         |
| 65 | 405776 | 7159748 | Minus  | 105911-107251                       |
|    | 401963 | 3126783 | Plus   | 51382-51521                         |
|    | 402994 | 2996643 | Minus  | 4727-4969                           |
|    | 406016 | 8272661 | Plus   | 41341-41940                         |
|    | 402911 | 7263904 | Plus   | 142689-142979                       |
| 70 | 403960 | 8224409 | Minus  | 90999-94843                         |
|    | 406266 | 7528342 | Minus  | 2365-2518                           |
|    | 403803 | 8112965 | Plus   | 55513-55778                         |
|    | 404790 | 7230958 | Plus   | 38611-38761                         |
|    | 405318 | 3638954 | Plus   | 79689-79967                         |
| 75 | 402343 | 8099256 | Plus   | 4677-6084                           |
|    | 403986 | 8576059 | Plus   | 90692-91238                         |
|    | 401914 | 9369520 | Plus   | 62537-62945,63155-63308             |
|    | 402450 | 9796674 | Plus   | 137536-137682,137920-138045         |
|    | 404067 | 3282162 | Plus   | 1415-2071                           |
| 80 | 406358 | 9256126 | Minus  | 72447-72588,72673-72802,73119-73245 |
|    | 400867 | 9838275 | Plus   | 34136-34846                         |
|    | 402605 | 9909420 | Minus  | 47680-47973                         |
|    | 403969 | 8569909 | Plus   | 31237-31375,32405-32506             |



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404632 9796668 Plus 45096-45229

TABLE 63A: ABOUT 181 GENES UPREGULATED IN BENIGN NEVI RELATIVE TO MELANOMA METASTASES

Table 63A lists about 181 genes upregulated in benign nevi relative to melanoma metastases. Genes were selected from 59680 probesets on the Eos/Affymetrix Hu03 Genechip array. Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 R1: average of benign nevi AIs divided by the 90th percentile of melanoma metastasis AIs  
 R2: average of benign nevi AIs divided by the 90th percentile of melanoma metastasis AIs, where the 15th percentile of normal tissue AIs was subtracted from both the numerator and denominator

| Pkey   | ExAccn    | UnigenelD | Unigene Title                             | R1    | R2    |
|--------|-----------|-----------|---|-------|-------|
| 401781 |           |           | Target Exon                               | 19.33 | 19.21 |
| 422511 | AU076442  | Hs.117938 | collagen, type XVII, alpha 1              | 13.54 | 14.18 |
| 401780 |           |           | NM_005557*:Homo sapiens keratin 16 (foca  | 12.97 | 13.63 |
| 409601 | AF237621  | Hs.80828  | keratin 1 (epidermolytic hyperkeratosis)  | 12.61 | 31.19 |
| 412536 | NM_004415 |           | desmoplakin (DPL, DPLI)                   | 11.73 | 6.91  |
| 420783 | AI659838  | Hs.99923  | lectin, galactoside-binding, soluble, 7   | 10.18 | 14.08 |
| 409632 | W74001    | Hs.55279  | serine (or cysteine) proteinase inhibitor | 8.48  | 6.79  |
| 421733 | AL119671  | Hs.1420   | fibroblast growth factor receptor 3 (ach  | 8.28  | 9.62  |
| 430686 | NM_001942 | Hs.2633   | desmoglein 1                              | 7.26  | 5.64  |
| 429852 | AB010445  | Hs.225948 | small inducible cytokine subfamily A (Cy  | 7.12  | 10.88 |
| 442577 | AA292998  | Hs.163900 | ESTs                                      | 7.01  | 6.59  |
| 406964 | M21305    |           | FGENES predicted novel secreted protein   | 6.50  | 8.82  |
| 401785 |           |           | NM_002275*:Homo sapiens keratin 15 (KRT1  | 6.40  | 9.77  |
| 410001 | AB041036  | Hs.57771  | kallikrein 11                             | 6.18  | 6.16  |
| 417515 | L24203    | Hs.82237  | ataxia-telangiectasia group D-associated  | 5.73  | 16.57 |
| 418686 | Z36830    | Hs.87268  | annexin A8                                | 5.32  | 5.27  |
| 439496 | BE616501  | Hs.32343  | Homo sapiens, Similar to RIKEN cDNA 1110  | 4.89  | 9.81  |
| 452240 | AI591147  | Hs.61232  | ESTs                                      | 4.89  | 6.67  |
| 402525 |           |           | NM_002699*:Homo sapiens POU domain, clas  | 4.74  | 4.80  |
| 431360 | NM_000427 | Hs.251680 | loricrin                                  | 4.66  | 3.98  |
| 431103 | M57399    | Hs.44     | pleiotrophin (heparin binding growth fac  | 4.63  | 5.69  |
| 418067 | AI127958  | Hs.83393  | cystatin E/M                              | 4.56  | 6.78  |
| 424012 | AW368377  | Hs.137569 | tumor protein 63 kDa with strong homolog  | 4.56  | 5.73  |
| 418663 | AK001100  | Hs.41690  | desmocollin 3                             | 4.44  | 5.23  |
| 419329 | AY007220  | Hs.288998 | S100-type calcium binding protein A14     | 4.24  | 6.49  |
| 439706 | AW872527  | Hs.59761  | ESTs, Weakly similar to DAP1_HUMAN DEATH  | 3.95  | 3.37  |
| 421773 | W69233    | Hs.112457 | ESTs                                      | 3.88  | 9.60  |
| 408536 | AW381532  | Hs.135188 | ESTs                                      | 3.82  | 10.18 |
| 418394 | AF132818  | Hs.84728  | Kruppel-like factor 5 (intestinal)        | 3.78  | 6.33  |
| 408000 | L11690    | Hs.198689 | bullous pemphigoid antigen 1 (230/240kD)  | 3.77  | 4.92  |
| 432374 | W68815    | Hs.301885 | Homo sapiens cDNA FLJ11345 fis, clone PL  | 3.70  | 5.30  |
| 424049 | AB014524  | Hs.138380 | KIAA0624 protein                          | 3.68  | 4.41  |
| 421948 | L42583    | Hs.334309 | keratin 6A                                | 3.62  | 3.13  |
| 427666 | AI791495  | Hs.180142 | calmodulin-like skin protein (CLSP)       | 3.59  | 4.40  |
| 422168 | AA586894  | Hs.112408 | S100 calcium-binding protein A7 (psorias  | 3.48  | 6.09  |
| 436895 | AF037335  | Hs.5338   | carbonic anhydrase XII                    | 3.42  | 3.28  |
| 437191 | NM_006846 | Hs.331555 | serine protease inhibitor, Kazal type, 5  | 3.28  | 3.89  |
| 401760 |           |           | Target Exon                               | 3.21  | 7.11  |
| 431089 | BE041395  |           | ESTs, Weakly similar to unknown protein   | 3.21  | 5.78  |
| 434293 | NM_004445 | Hs.3796   | EphB5                                     | 3.14  | 3.11  |
| 412432 | AA126311  | Hs.9879   | ESTs                                      | 3.14  | 4.85  |
| 442503 | AF147078  | Hs.150853 | p53-responsive gene 5                     | 3.11  | 5.92  |
| 414987 | AA524394  | Hs.294022 | hypothetical protein FLJ14950             | 3.07  | 4.89  |
| 420798 | W93774    | Hs.99936  | keratin 10 (epidermolytic hyperkeratosis  | 2.99  | 3.09  |
| 433339 | AF019226  | Hs.8036   | glioblastoma overexpressed                | 2.96  | 2.75  |
| 414876 | AW950925  | Hs.924    | crystallin, mu                            | 2.94  | 3.82  |
| 437233 | D81448    | Hs.339352 | Homo sapiens brother of CDO (BOC) mRNA,   | 2.87  | 3.42  |
| 424897 | D63216    | Hs.153684 | frizzled-related protein                  | 2.87  | 1.96  |
| 456034 | AW450979  |           | gb:U1-H-BI3-ata-a-12-0-U1.s1 NCI_CGAP_Su  | 2.73  | 2.54  |
| 424364 | AW383226  | Hs.163834 | ESTs, Weakly similar to G01763 atrophin-  | 2.72  | 2.92  |
| 427318 | AF186081  | Hs.175783 | zinc transporter                          | 2.71  | 2.21  |
| 452887 | AI702223  | Hs.107253 | hypothetical protein DKFZp761F241         | 2.67  | 6.47  |
| 452308 | AI167580  | Hs.61297  | ESTs                                      | 2.67  | 4.61  |
| 407788 | BE514982  | Hs.38991  | S100 calcium-binding protein A2           | 2.64  | 2.68  |
| 431369 | BE184455  | Hs.251754 | secretory leukocyte protease inhibitor (  | 2.57  | 3.91  |
| 451541 | BE279383  | Hs.26557  | plakophilin 3                             | 2.49  | 5.47  |
| 453317 | NM_002277 | Hs.41696  | keratin, hair, acidic, 1                  | 2.45  | 4.17  |
| 412633 | AF001691  | Hs.74304  | periplakin                                | 2.42  | 4.90  |
| 417233 | W25005    | Hs.24395  | small inducible cytokine subfamily B (Cy  | 2.41  | 2.68  |
| 424797 | AA622394  | Hs.153177 | ribosomal protein S28                     | 2.39  | 2.67  |
| 424010 | AL080188  | Hs.137556 | Homo sapiens mRNA; cDNA DKFZp434A132 (fr  | 2.39  | 4.07  |
| 453241 | H58995    | Hs.37648  | ESTs                                      | 2.39  | 2.34  |
| 426451 | AI908165  | Hs.169946 | GATA-binding protein 3 (T-cell receptor   | 2.36  | 1.88  |
| 423467 | AK000214  | Hs.129014 | hypothetical protein FLJ20207             | 2.32  | 2.24  |
| 432222 | AI204995  |           | gb:an03c03.x1 Stratagene schizo brain S1  | 2.31  | 1.99  |
| 430168 | AW968343  | Hs.145582 | DKFZP434I1735 protein                     | 2.30  | 2.60  |
| 457121 | AI743770  | Hs.180513 | ESTs, Weakly similar to KIAA0822 protein  | 2.28  | 1.91  |

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|    |        |           |           |  |      |      |
|----|--------|-----------|-----------|--|------|------|
|    | 433091 | Y12642    | Hs.3185   | lymphocyte antigen 6 complex, locus D    | 2.27 | 8.50 |
|    | 446989 | AK001898  | Hs.16740  | hypothetical protein FLJ11036            | 2.27 | 2.21 |
|    | 429365 | AA451798  | Hs.99249  | ESTs                                     | 2.25 | 2.54 |
| 5  | 459702 | AI204995  |           | gb:an03c03.x1 Stralagene schizo brain S1 | 2.25 | 2.35 |
|    | 420511 | AF052692  | Hs.98485  | gap junction protein, beta 3, 31kD (conn | 2.23 | 2.17 |
|    | 444946 | AW139205  | Hs.155457 | hypothetical protein FLJ22408            | 2.23 | 3.23 |
|    | 417017 | AA976064  | Hs.180842 | ribosomal protein L13                    | 2.21 | 2.74 |
|    | 433124 | U51712    | Hs.13775  | hypothetical protein SMAP31              | 2.21 | 1.68 |
| 10 | 430152 | AB001325  | Hs.234642 | aquaporin 3                              | 2.20 | 3.32 |
|    | 444726 | NM_006147 |           | interferon regulatory factor 6           | 2.15 | 5.20 |
|    | 454034 | NM_000691 | Hs.575    | aldehyde dehydrogenase 3 family, member  | 2.15 | 2.82 |
|    | 425483 | AF231022  | Hs.158159 | FAT tumor suppressor (Drosophila) homolo | 2.14 | 2.96 |
|    | 419912 | AF249745  | Hs.6066   | Rho guanine nucleotide exchange factor ( | 2.14 | 2.25 |
| 15 | 431441 | U81961    | Hs.2794   | sodium channel, nonvoltage-gated 1 alpha | 2.12 | 2.99 |
|    | 444105 | AW189097  |           | ESTs                                     | 2.11 | 2.98 |
|    | 428748 | AW593206  | Hs.98785  | Ksp37 protein                            | 2.09 | 1.51 |
|    | 456826 | AI871742  | Hs.302428 | wingless-type MMTV integration site fami | 2.09 | 3.25 |
|    | 413163 | Y00815    | Hs.75216  | protein tyrosine phosphatase, receptor t | 2.09 | 4.97 |
| 20 | 410677 | NM_003278 | Hs.65424  | tetranectin (plasminogen-binding protein | 2.06 | 5.68 |
|    | 430285 | AI917602  | Hs.106440 | ESTs                                     | 2.06 | 2.04 |
|    | 444781 | NM_014400 | Hs.11950  | GPI-anchored metastasis-associated prote | 2.05 | 5.92 |
|    | 451668 | Z43948    | Hs.326444 | cartilage acidic protein 1               | 2.04 | 2.19 |
|    | 441134 | W29092    | Hs.346950 | cellular retinoic acid-binding protein 1 | 2.04 | 3.08 |
| 25 | 433428 | T29975    | Hs.33104  | Huntingtin interacting protein C         | 2.04 | 1.63 |
|    | 425831 | U46689    | Hs.159608 | aldehyde dehydrogenase 3 family, member  | 2.03 | 3.92 |
|    | 446727 | AB011095  | Hs.16032  | KIAA0523 protein                         | 2.01 | 2.60 |
|    | 431703 | AA514264  | Hs.4437   | triosephosphate isomerase 1              | 2.01 | 2.05 |
|    | 452554 | AW452434  | Hs.58006  | ESTs, Weakly similar to ALU5_HUMAN ALU S | 1.99 | 4.04 |
| 30 | 439625 | AF086453  | Hs.58611  | ESTs                                     | 1.99 | 2.31 |
|    | 402880 |           |           | Target Exon                              | 1.99 | 2.75 |
|    | 428471 | X57348    | Hs.184510 | stratifin                                | 1.98 | 2.10 |
|    | 413859 | AW992356  | Hs.8364   | Homo sapiens pyruvate dehydrogenase kina | 1.97 | 3.16 |
|    | 452547 | AA335295  | Hs.74120  | adipose specific 2                       | 1.95 | 3.89 |
| 35 | 437679 | NM_014214 | Hs.5753   | inositol(myo)-1(or 4)-monophosphatase 2  | 1.94 | 2.06 |
|    | 429259 | AA420450  | Hs.292911 | Plakophilin                              | 1.93 | 2.96 |
|    | 406387 |           |           | Target Exon                              | 1.92 | 2.97 |
|    | 455797 | BE091833  |           | gb:IL2-BT0731-260400-076-F04 BT0731 Homo | 1.91 | 3.46 |
|    | 437202 | AA326110  |           | nuclear transcription factor Y, gamma    | 1.89 | 2.00 |
| 40 | 426150 | NM_003558 | Hs.167218 | BarH-like homeobox 2                     | 1.86 | 2.60 |
|    | 434574 | AI424458  | Hs.33470  | ESTs                                     | 1.85 | 4.61 |
|    | 446051 | BE048061  | Hs.37054  | ephrin-A3                                | 1.85 | 3.48 |
|    | 424471 | AA341329  | Hs.311524 | ESTs                                     | 1.84 | 2.62 |
|    | 422106 | D84239    | Hs.111732 | Fc fragment of IgG binding protein       | 1.83 | 4.69 |
| 45 | 451721 | NM_006946 | Hs.26915  | spectrin, beta, non-erythrocytic 2       | 1.82 | 2.00 |
|    | 451849 | AI199261  | Hs.27191  | hypothetical protein from clone 24796    | 1.81 | 2.31 |
|    | 429348 | AJ242859  | Hs.199731 | Langerhans cell specific c-type lectin   | 1.79 | 3.07 |
|    | 423523 | AW299828  | Hs.193580 | ESTs                                     | 1.77 | 3.37 |
|    | 432543 | AA552690  | Hs.152423 | Homo sapiens cDNA: FLJ21274 fis, clone C | 1.76 | 2.46 |
| 50 | 403828 |           |           | C4000447:gi 7705570 ref NP_038851.1  KJ  | 1.73 | 2.06 |
|    | 412446 | AI768015  |           | ESTs                                     | 1.68 | 3.16 |
|    | 420039 | NM_004605 | Hs.94581  | sulfotransferase family, cytosolic, 2B,  | 1.67 | 2.22 |
|    | 411274 | NM_002776 | Hs.69423  | kalikrein 10                             | 1.66 | 2.26 |
| 55 | 401963 |           |           | NM_006311:Homo sapiens nuclear receptor  | 1.66 | 2.52 |
|    | 435016 | AI284219  | Hs.130749 | ESTs, Weakly similar to I38022 hypothesi | 1.65 | 2.20 |
|    | 437897 | AA770561  | Hs.146170 | hypothetical protein FLJ22969            | 1.64 | 3.21 |
|    | 419648 | T73661    | Hs.91877  | thyroid hormone responsive SPOT14 (rat)  | 1.63 | 2.94 |
|    | 410545 | U32324    | Hs.64310  | interleukin 11 receptor, alpha           | 1.62 | 2.58 |
|    | 429211 | AF052693  | Hs.198249 | gap junction protein, beta 5 (connexin 3 | 1.62 | 3.92 |
| 60 | 456898 | NM_001928 | Hs.155597 | D component of complement (adipsin)      | 1.60 | 3.43 |
|    | 423526 | AB011086  | Hs.129739 | KIAA0514 gene product                    | 1.60 | 2.18 |
|    | 416305 | AA076628  | Hs.79187  | coxsackie virus and adenovirus receptor  | 1.60 | 2.47 |
|    | 413966 | AA133935  | Hs.173704 | ESTs, Moderately similar to A53959 throm | 1.59 | 2.99 |
|    | 414217 | AI309298  | Hs.279898 | Homo sapiens cDNA: FLJ23165 fis, clone L | 1.59 | 2.82 |
| 65 | 429299 | AI620463  | Hs.347408 | hypothetical protein MGC13102            | 1.57 | 2.64 |
|    | 432647 | AI807481  | Hs.278581 | fibroblast growth factor receptor 2 (bac | 1.56 | 2.74 |
|    | 429002 | AW248439  | Hs.2340   | junction plakoglobin                     | 1.56 | 2.97 |
|    | 430171 | AF086289  | Hs.234766 | skin-specific protein                    | 1.54 | 2.18 |
|    | 422717 | AI557623  | Hs.119475 | cold inducible RNA-binding protein       | 1.51 | 2.19 |
| 70 | 414323 | NM_014759 | Hs.334688 | KIAA0273 gene product                    | 1.51 | 3.73 |
|    | 423184 | NM_004428 | Hs.1624   | ephrin-A1                                | 1.50 | 2.18 |
|    | 433101 | AW572317  | Hs.12082  | Homo sapiens mRNA: cDNA DKFZp566L203 (fr | 1.50 | 2.00 |
|    | 424362 | AL137646  |           | Homo sapiens mRNA: cDNA DKFZp586F0824 (f | 1.48 | 2.04 |
|    | 433662 | W07162    | Hs.150826 | RAB25 RAB25, member RAS oncogene family  | 1.46 | 2.83 |
| 75 | 445431 | AF137386  | Hs.12701  | plasmolipin                              | 1.46 | 2.00 |
|    | 456906 | AF117646  | Hs.156637 | Cas-Br-M (murine) ectropic retroviral tr | 1.44 | 2.04 |
|    | 442599 | AF078037  | Hs.324051 | RelA-associated inhibitor                | 1.42 | 3.50 |
|    | 445656 | W22050    | Hs.21299  | ESTs, Weakly similar to AF151840 1 CGI-8 | 1.42 | 2.53 |
|    | 444672 | Z95636    | Hs.11669  | laminin, alpha 5                         | 1.40 | 2.36 |
| 80 | 447990 | BE048821  | Hs.20144  | small inducible cytokine subfamily A (Cy | 1.40 | 2.29 |
|    | 418462 | BE001596  | Hs.85266  | integrin, beta 4                         | 1.39 | 2.86 |
|    | 453023 | AW028733  | Hs.31439  | senne protease inhibitor, Kunitz type,   | 1.38 | 2.28 |
|    | 416340 | N31772    | Hs.79226  | fasciculation and elongation protein zet | 1.38 | 2.24 |
|    | 433417 | AA587773  | Hs.8859   | Homo sapiens, Similar to RIKEN cDNA 5830 | 1.38 | 2.14 |

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|    |             |                                       |  |  |      |      |
|----|-------------|---------------------------------------|--|--|------|------|
| 5  | 407815      | AW373860                              | Hs.183860  | hypothetical protein FLJ20277            | 1.36 | 2.34 |
|    | 432894      | AW167668                              | Hs.279772  | brain specific protein                   | 1.36 | 5.09 |
|    | 439733      | AL365412                              | Hs.107203  | hypothetical protein from EUROIMAGE 1759 | 1.36 | 2.00 |
|    | 454478      | AW805749                              |  | superoxide dismutase 2, mitochondrial    | 1.35 | 2.85 |
|    | 423515      | AA327017                              | Hs.176594  | ESTs                                     | 1.35 | 2.45 |
|    | 436663      | AW410458                              | Hs.5258  | chromosome 11 open reading frame2        | 1.35 | 2.07 |
|    | 404246      |                                       |  | Target Exon                              | 1.34 | 2.96 |
|    | 411939      | AI365585                              | Hs.146246  | ESTs                                     | 1.33 | 2.31 |
|    | 409178      | BE393948                              | Hs.50915   | kallikrein 5                             | 1.33 | 2.03 |
| 10 | 427795      | BE268268                              | Hs.180842  | ribosomal protein L13                    | 1.33 | 2.29 |
|    | 447299      | AF043897                              | Hs.18075   | chromosome 9 open reading frame 3        | 1.32 | 2.78 |
|    | 447330      | BE279949                              | Hs.18141   | ladinin 1                                | 1.32 | 3.37 |
|    | 433399      | N46405                                | Hs.84700   | similar to phosphatidylcholine transfer  | 1.31 | 2.71 |
|    | 403986      |                                       |  | Target Exon                              | 1.31 | 2.09 |
| 15 | 407597      | AA043925                              | Hs.339352  | Homo sapiens brother of CDO (BOC) mRNA,  | 1.30 | 2.28 |
|    | 450796      | NM_001988                             | Hs.25482   | envoplakin                               | 1.30 | 3.45 |
|    | 415550      | L13720                                | Hs.78501   | growth arrest-specific 6                 | 1.29 | 2.76 |
|    | 415512      | Y16270                                | Hs.78482   | paralemmin                               | 1.26 | 2.49 |
|    | 430513      | AJ012008                              | Hs.241586  | G6C protein                              | 1.26 | 3.07 |
| 20 | 422581      | NM_016339                             | Hs.118562  | Link guanine nucleotide exchange factor  | 1.23 | 2.04 |
|    | 420048      | AW206824                              | Hs.25766   | ESTs                                     | 1.23 | 2.21 |
|    | 425883      | AL137708                              | Hs.161031  | Homo sapiens mRNA: cDNA DKFZp434K0322 (f | 1.23 | 2.22 |
|    | 430560      | Z28942                                | Hs.243960  | N-myc downstream-regulated gene 2        | 1.23 | 2.42 |
| 25 | 426377      | AK001921                              | Hs.169575  | hypothetical protein MGC2550             | 1.23 | 2.20 |
|    | 402218      |                                       |  | NM_022165: Homo sapiens Lin-7b protein ( | 1.23 | 2.01 |
|    | 413944      | AW001579                              | Hs.9645  | Homo sapiens mRNA for KIAA1741 protein,  | 1.18 | 2.24 |
|    | 414186      | U33446                                | Hs.75799   | protease, serine, 8 (prolasin)           | 1.16 | 2.16 |
|    | 426068      | AF029778                              | Hs.166154  | jagged 2                                 | 1.15 | 2.07 |
| 30 | 431243      | U46455                                | Hs.252189  | syndecan 4 (amphiglycan, ryudocan)       | 1.14 | 2.33 |
|    | 411388      | X72925                                | Hs.69752   | desmocollin 1                            | 1.00 | 2.61 |
|    | 443672      | AA323362                              | Hs.9667  | butyrobetaine (gamma), 2-oxoglutarate di | 1.00 | 2.63 |
| 35 | TABLE 63B:  |                                       |  |  |      |      |
|    | Pkey:       | Unique Eos probeset identifier number |  |  |      |      |
|    | CAT number: | Gene cluster number                   |  |  |      |      |
|    | Accession:  | Genbank accession numbers             |  |  |      |      |
| 40 | Pkey        | CAT Number                            | Accession  |  |      |      |
|    | 412636      | 1438_1                                | M77830 NM_004415 AF139065 BG681115 BG740377 BI712964 BG000656 AA128470 BI438324 H27408 BE931630 BE167165 AW370827 AW370813 J05211 BG698865 BG740734 BG680618 BG739778 BI765807 BM353403 BM353248 AW177784 AW205789 AW951576 AW848592 BE182164 BF149266 BE940187 BI060445 BI060444 BF350983 BE720095 BE720069 BE715154 BE082584 BE082576 BE004047 AA857316 BI039774 BE713818 BE713548 AW170253 BE160433 BI039775 AW886475 BM462504 BE931734 BF149264 AA340777 BF381183 BG621737 AU127260 AW364859 BF993352 BG223489 BE819009 BF381184 BE715956 R58704 AA852212 AW366566 BI090358 BF087707 BE819046 BE819005 AA377127 BE073467 BE819069 BE819048 BI036306 BG990973 BI040954 BF919911 AU140155 AI951766 AI434518 AW804674 BF752969 BE837009 BE925826 BF149265 AW995615 BE814264 BI039782 AU140407 BE144243 BE709863 BF985642 BE001923 BF933510 AW265328 BG436319 BE182166 AW365175 AW847688 BE818280 AW177933 BF873679 AW178000 BE082526 BF476866 BF086994 BF592276 BE082507 BE082514 BE082505 BF873693 AW068840 AW847678 BF804153 AW365157 BE813930 BE002030 AW365153 BE184941 BF749421 BE184920 BF839562 BE184933 BF842254 BE598470 BE931048 BF999889 BF368816 BE184924 BE159646 BE714632 BE184948 BG986845 AA131128 AA099891 W39488 C04715 BF096124 BE865341 AW799304 AL603116 BE149760 BE705967 BE705966 BE705968 AW848723 AW376699 AW376817 AW376697 BG005097 BF751115 BE696084 AW848371 AW376782 AW848789 AW849074 AW361413 BF927725 BF094211 AW997139 BE865474 BE185187 BE156621 BE715089 BE713297 BE713298 BE179915 AW799309 BF872345 BF088676 BE705939 AW752599 BG005197 BF350086 BE715196 BE715155 BF752396 BF093817 BF831190 BF752409 BE006561 BG959922 BF094833 BF094748 BF094583 AW377699 AW607238 BE082519 AW377700 BF349467 AI190590 AI554403 AI392926 AU158477 BI467252 AU159919 AI760816 BF082516 AI439101 AA451923 AI340326 AI590975 BI791553 AI700963 AI142882 AA039975 AA946936 AA644381 BM314884 AA702424 AI417612 AW190555 AI220573 AI304772 AI270345 AI627383 AA552300 AI911702 AW166807 AI345078 W95070 AA149191 AA026864 AI830049 AW780435 AI078449 AI819984 AI858282 AI468588 AI860584 AI025932 AA026047 AA703232 AA658154 AA515500 AW192085 AA918281 T77861 AI927207 AI205263 BF082491 AW021347 AI568096 BE939862 AA088866 D12062 AA056527 AA782109 W19287 W02156 AW150038 AA022701 T87181 H44405 AI910434 BF082513 AI494069 AI270027 AI635878 AA128330 BG681425 BE706078 R20904 BG680059 BG576647 BF764409 AA026654 AV745530 BI762796 BG287391 AW798780 BE706045 BE926470 AW799118 BF087996 BE002273 AW879451 AI571075 BE067786 AV721320 AI022862 N29754 C03378 N84767 AA131077 H30146 BE714290 AI686689 AI568892 AI915596 AW105614 AI887258 AI538577 BE926474 BE067737 BG319486 AA247685 AW799883 AW103521 BF989173 AW860878 BE939707 BE185750 BE714064 BE713903 BE713868 BE713763 BG950164 BE713810 AW365151 BG955489 BE005272 BF915937 AW365148 AI905927 BF992780 AW853812 BG954443 BI770853 BG679406 BG740832 BG681087 BG698430 AA455100 T87267 BE596209 BE696210 BI089483 BE006273 BE872225 AW391912 BE925515 BG677012 BG741970 AA026480 BE705999 BG677157 BE009090 BG681378 BE712291 BG940189 AW063489 AA715980 BF001091 BF880066 AA666102 AA621946 AA491826 AA136653 AA136656 AW450979 AA984358 AA809054 AW238038 AA492073 BE168945 BG207209 BE166299 AI204995 BG199355 AW969908 AA528756 AW440776 BI044354 BG207209 BE166299 AI204995 BG199355 AW969908 AA528756 AW440776 BI044354 BG285808 BE940673 BG432524 BE157554 BG676980 AU144284 AI745383 AU159045 AI693500 AW293668 AW371408 BE856107 AI338042 AW188320 AI698246 BE673290 AW297653 AA155532 AI017342 AI916754 AI190644 AI184302 AA857671 BE857018 AI307420 AI318157 AW204327 AW654668 AW274339 AA582788 AI345741 AW301433 AI873468 AW137388 BF718731 BF718413 AA877495 BF001575 AI824693 AW849604 AW849405 AW849396 AW849173 BE673179 AI611327 AA705753 BE715478 AW849414 AW849399 AI085759 AI140849 T67412 AI889885 AW104647 AI912495 AI889874 AI744241 BE717113 BE717108 BE715564 AI872527 AA029457 C00338 AI469558 BE715577 AA045413 BF843813 AW189097 AI123917 AI123926 BE091833 BE091874 BE091871 AI110199 AL598719 AA152097 W84430 AI304351 BE670780 BF003019 AI271659 AW338914 AI127763 AI191873 AI922951 AI568416 AI077680 AA358674 AI138802 AI589070 AI088745 AW418696 BF475830 AI144150 AA724257 AA622339 AI375884 AI880453 AW874251 BF941345 AI619746 AI225114 AI801268 AI554474 BM023333 AI093946 AI699306 AI803839 AA496797 AI361531 AI123010 AW169313 BM023082 AI081626 AA513457 AA278720 AW518810 AA361091 AI499891 AI686346 BF436872 AI681496 AL572961 AI334148 AW138291 AI419063 AA278226 AA370719 AA152023 AI401749 AA127464 AL573761 BG913208 T07824 AI346417 H44939 AV721378 N48299 W72005 AA302424 AI611143 AW514684 BE041749 |  |      |      |
| 45 |             |                                       |  |  |      |      |
| 50 |             |                                       |  |  |      |      |
| 55 |             |                                       |  |  |      |      |
| 60 |             |                                       |  |  |      |      |
| 65 |             |                                       |  |  |      |      |
| 70 | 431089      | 125941_2                              | AI686689 AI568892 AI915596 AW105614 AI887258 AI538577 BE926474 BE067737 BG319486 AA247685 AW799883 AW103521 BF989173 AW860878 BE939707 BE185750 BE714064 BE713903 BE713868 BE713763 BG950164 BE713810 AW365151 BG955489 BE005272 BF915937 AW365148 AI905927 BF992780 AW853812 BG954443 BI770853 BG679406 BG740832 BG681087 BG698430 AA455100 T87267 BE596209 BE696210 BI089483 BE006273 BE872225 AW391912 BE925515 BG677012 BG741970 AA026480 BE705999 BG677157 BE009090 BG681378 BE712291 BG940189 AW063489 AA715980 BF001091 BF880066 AA666102 AA621946 AA491826 AA136653 AA136656 AW450979 AA984358 AA809054 AW238038 AA492073 BE168945 BG207209 BE166299 AI204995 BG199355 AW969908 AA528756 AW440776 BI044354 BG207209 BE166299 AI204995 BG199355 AW969908 AA528756 AW440776 BI044354 BG285808 BE940673 BG432524 BE157554 BG676980 AU144284 AI745383 AU159045 AI693500 AW293668 AW371408 BE856107 AI338042 AW188320 AI698246 BE673290 AW297653 AA155532 AI017342 AI916754 AI190644 AI184302 AA857671 BE857018 AI307420 AI318157 AW204327 AW654668 AW274339 AA582788 AI345741 AW301433 AI873468 AW137388 BF718731 BF718413 AA877495 BF001575 AI824693 AW849604 AW849405 AW849396 AW849173 BE673179 AI611327 AA705753 BE715478 AW849414 AW849399 AI085759 AI140849 T67412 AI889885 AW104647 AI912495 AI889874 AI744241 BE717113 BE717108 BE715564 AI872527 AA029457 C00338 AI469558 BE715577 AA045413 BF843813  |  |      |      |
| 75 | 444105      | 649788_1                              | AW189097 AI123917 AI123926 BE091833 BE091874 BE091871  |  |      |      |
|    | 455797      | 1511159_1                             | AI110199 AL598719 AA152097 W84430 AI304351 BE670780 BF003019 AI271659 AW338914 AI127763 AI191873 AI922951 AI568416 AI077680  |  |      |      |
|    | 437202      | 27670_1                               | AA358674 AI138802 AI589070 AI088745 AW418696 BF475830 AI144150 AA724257 AA622339 AI375884 AI880453 AW874251 BF941345 AI619746  |  |      |      |
| 80 |             |                                       | AI225114 AI801268 AI554474 BM023333 AI093946 AI699306 AI803839 AA496797 AI361531 AI123010 AW169313 BM023082 AI081626 AA513457  |  |      |      |
|    |             |                                       | AA278720 AW518810 AA361091 AI499891 AI686346 BF436872 AI681496 AL572961 AI334148 AW138291 AI419063 AA278226 AA370719 AA152023  |  |      |      |
|    |             |                                       | AI401749 AA127464 AL573761 BG913208 T07824 AI346417 H44939 AV721378 N48299 W72005 AA302424 AI611143 AW514684 BE041749  |  |      |      |

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|   |        |         |   |
|---|--------|---------|---|
| 5 | 112446 | 63467_1 | AW370992 R42918 H10757 R10703 C01061 R27637 A1827230 AW151953 AA651675 AA228006 AA233950 BE858910 R30801 W32704 H39784<br>BE090279 BG697660 AW877265 B1818938 BF528291 AW953624 R57461 BF969694<br>BC021735 A1669212 AL120184 A1769949 BE701002 BE184363 BE819031 BG702238 BF090049 BF963318 BF961912 BF943013 AA934514 AA151245<br>BF960659 AA987907 Z14149 BF908059 BF908053 BF908049 BE699424 BF908060 BF962832 BF952020 BF963134 B1035538 BF908052 BF908057<br>BF090026 BF943158 A1632924 BF512340 BF952021 BF960776 BF943437 BF942847 A1768015 F09778 F04816 F02721 AA102645 A1633838<br>AA617929 BF947001 B1035448 BE935876 AW890837 AW898604 BF957405 BF963433 BG704815<br>424362 2318_7 AF284421 AL137646 BG542551 A1278088 A1423919 A1274095 BE838965 BE839174 BE839102 BF924520 B1913343 AW238809 AL134380 AW793289<br>AL534638 T97116 AW855182 C02210 A1783480 AW024874<br>454478 4273_16 AW796921 AW798102 AW805749 AW805872 BF985060 AW794380 BF380449 AW794466 AW794538 |
|---|--------|---------|---|

TABLE 63C:

|              |   |
|--------------|---|
| Pkey:        | Unique number corresponding to an Eos probeset  |
| Ref:         | Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <u>Nature</u> 402:489-495. |
| Strand:      | Indicates DNA strand from which exons were predicted.   |
| NL_position: | Indicates nucleotide positions of predicted exons.  |

|    |        |         |        |  |
|----|--------|---------|--------|--|
| 20 | Pkey   | Ref     | Strand | NL_position                              |
|    | 401781 | 7249190 | Minus  | 83215-83435,83531-83656,83740-83901,8423 |
|    | 401780 | 7249190 | Minus  | 28397-28617,28920-29045,29135-29296,2941 |
|    | 401785 | 7249190 | Minus  | 165776-165996,166189-166314,166408-16656 |
|    | 402525 | 9800048 | Minus  | 19748-20683                              |
| 25 | 401760 | 9929699 | Plus   | 83126-83250,85320-85540,94719-95287      |
|    | 402880 | 9926561 | Minus  | 41555-41865                              |
|    | 406387 | 9256180 | Plus   | 116229-116371,117512-117651              |
|    | 403828 | 9838214 | Plus   | 31755-32148                              |
|    | 401963 | 3126783 | Plus   | 51382-51521                              |
| 30 | 404246 | 7406725 | Plus   | 82477-82628,82721-82817,82910-83071,8314 |
|    | 403986 | 8576059 | Plus   | 90692-91238                              |
|    | 402218 | 7689783 | Plus   | 127677-127886                            |

TABLE 64A: ABOUT 929 GENES DOWNREGULATED IN PRIMARY MELANOMAS AND/OR MELANOMA METASTASES RELATIVE TO NORMAL SKIN

Table 64A lists about 929 genes downregulated in primary melanomas and/or melanoma metastases relative to normal skin. Genes were selected from 59680 probesets on the Eos/Affymetrix Hu03 Genechip array. Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

|                |  |
|----------------|--|
| Pkey:          | Unique Eos probeset identifier number  |
| ExAccn:        | Exemplar Accession number, Genbank accession number  |
| UnigenelD:     | Unigene number   |
| Unigene Title: | Unigene gene title   |
| R1             | 90th percentile of normal skin AIs divided by the 90th percentile of primary melanoma and melanoma metastasis AIs  |
| R2             | 90th percentile of normal skin AIs divided by the 90th percentile of primary melanoma and melanoma metastasis AIs, where the 15th percentile of normal tissue AIs was subtracted from both the numerator and denominator |

|    |        |           |           |   |       |       |
|----|--------|-----------|-----------|---|-------|-------|
| 45 | Pkey   | ExAccn    | UnigenelD | Unigene Title                             | R1    | R2    |
|    | 420813 | X51501    | Hs.99949  | prolactin-induced protein                 | 27.72 | 20.12 |
|    | 408591 | AF015224  | Hs.46452  | mammaglobin 1                             | 26.40 | 24.26 |
|    | 431360 | NM_000427 | Hs.251680 | loricrin                                  | 26.16 | 20.45 |
|    | 401781 |           |           | Target Exon                               | 19.68 | 19.56 |
| 50 | 412636 | NM_004415 |           | desmoplakin (DPI, DP1)                    | 18.12 | 10.36 |
|    | 429441 | AJ224172  | Hs.204096 | lipophilin B (uteroglobin family member)  | 16.61 | 18.06 |
|    | 418067 | A1127958  | Hs.83393  | cystatin E/M                              | 16.00 | 25.32 |
|    | 409632 | W74001    | Hs.55279  | serine (or cysteine) proteinase inhibitor | 15.64 | 11.81 |
|    | 409601 | AF237621  | Hs.80828  | keratin 1 (epidermolytic hyperkeratosis)  | 15.03 | 37.51 |
| 55 | 401780 |           |           | NM_005557*:Homo sapiens keratin 16 (foca  | 14.20 | 14.86 |
|    | 422168 | AA586894  | Hs.112408 | S100 calcium-binding protein A7 (psorias  | 13.95 | 28.08 |
|    | 420783 | A1659838  | Hs.99923  | lectin, galactoside-binding, soluble, 7   | 13.52 | 18.85 |
|    | 422511 | AU076442  | Hs.117938 | collagen, type XVII, alpha 1              | 13.14 | 13.81 |
|    | 428330 | L22524    | Hs.2256   | matrix metalloproteinase 7 (matrilysin,   | 12.78 | 6.35  |
| 60 | 421733 | AL119671  | Hs.1420   | fibroblast growth factor receptor 3 (ach  | 12.78 | 15.22 |
|    | 426824 | W23624    | Hs.173059 | ESTs                                      | 12.67 | 13.24 |
|    | 453309 | A1791809  | Hs.32949  | defensin, beta 1                          | 12.02 | 12.42 |
|    | 446227 | A1281459  | Hs.270114 | ESTs                                      | 11.79 | 12.32 |
|    | 421948 | L42583    | Hs.334309 | keratin 6A                                | 11.58 | 9.02  |
| 65 | 432877 | AW974111  | Hs.292477 | ESTs                                      | 11.18 | 11.30 |
|    | 412047 | AA934589  | Hs.49696  | ESTs                                      | 11.04 | 11.07 |
|    | 407230 | AA157857  | Hs.182265 | keratin 19                                | 10.79 | 11.40 |
|    | 421296 | NM_002666 | Hs.103253 | perlipin                                  | 10.73 | 7.94  |
|    | 410001 | AB041036  | Hs.57771  | kallikrein 11                             | 10.72 | 10.70 |
| 70 | 418026 | BE379727  | Hs.83213  | fatty acid binding protein 4, adipocyte   | 10.33 | 7.16  |
|    | 447966 | AA340605  | Hs.105887 | ESTs, Weakly similar to Homolog of rat Z  | 10.09 | 9.67  |
|    | 401203 |           |           | Target Exon                               | 9.95  | 7.37  |
|    | 452308 | A1167560  | Hs.61297  | ESTs                                      | 9.71  | 20.05 |
|    | 425580 | L11144    | Hs.1907   | galanin                                   | 9.66  | 8.41  |
| 75 | 433124 | U51712    | Hs.13775  | hypothetical protein SMAP31               | 9.50  | 4.96  |
|    | 420919 | M57892    | Hs.100322 | carbonic anhydrase VI                     | 9.41  | 6.34  |
|    | 443162 | T49951    | Hs.9029   | DKFZP434G032 protein                      | 9.36  | 10.58 |
|    | 427666 | A1791495  | Hs.180142 | calmodulin-like skin protein (CLSP)       | 9.19  | 11.73 |
|    | 431369 | BE184455  | Hs.251754 | secretory leukocyte protease inhibitor (  | 8.85  | 17.76 |
| 80 | 408536 | AW381532  | Hs.135188 | ESTs                                      | 8.82  | 26.43 |
|    | 430686 | NM_001942 | Hs.2633   | desmoglein 1                              | 8.73  | 6.58  |
|    | 436895 | AF037335  | Hs.5338   | carbonic anhydrase XII                    | 8.69  | 6.81  |
|    | 418663 | AK001100  | Hs.41690  | desmocollin 3                             | 8.61  | 9.15  |

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|    |        |           |           |  |      |       |
|----|--------|-----------|-----------|--|------|-------|
| 5  | 429852 | AB010445  | Hs.225948 | small inducible cytokine subfamily A (Cy | 8.51 | 13.13 |
|    | 424012 | AW368377  | Hs.137569 | tumor protein 63 kDa with strong homolog | 8.44 | 9.61  |
|    | 430130 | AL137311  | Hs.234074 | Homo sapiens mRNA; cDNA DKFp761G02121 (  | 8.39 | 5.13  |
|    | 442577 | AA292998  | Hs.163900 | ESTs                                     | 8.34 | 7.92  |
|    | 437191 | NM_006846 | Hs.331555 | serine protease inhibitor, Kazal type, 5 | 8.16 | 10.08 |
| 10 | 420859 | AW468397  | Hs.100000 | S100 calcium-binding protein A8 (calgran | 8.04 | 7.55  |
|    | 413859 | AW992356  | Hs.8364   | Homo sapiens pyruvate dehydrogenase kina | 7.68 | 7.81  |
|    | 452240 | AI591147  | Hs.61232  | ESTs                                     | 7.63 | 9.39  |
|    | 442757 | AI739528  | Hs.28345  | ESTs                                     | 7.62 | 7.31  |
|    | 450680 | AF131784  | Hs.25318  | Homo sapiens clone 25194 mRNA sequence   | 7.51 | 6.17  |
| 15 | 456525 | AW468397  | Hs.100000 | S100 calcium-binding protein A8 (calgran | 7.49 | 7.12  |
|    | 407328 | AA508857  |           | ESTs, Weakly similar to ALU1_HUMAN ALU S | 7.35 | 7.20  |
|    | 414217 | AI309298  | Hs.279898 | Homo sapiens cDNA: FLJ23165 fis, clone L | 7.16 | 8.39  |
|    | 417240 | N57568    | Hs.48028  | EST                                      | 7.13 | 15.05 |
|    | 410052 | AA525225  | Hs.334630 | Homo sapiens cDNA FLJ14462 fis, clone MA | 7.13 | 7.28  |
| 20 | 431842 | NM_005764 | Hs.271473 | epithelial protein up-regulated in carci | 7.06 | 6.93  |
|    | 426488 | X03350    | Hs.4      | alcohol dehydrogenase 1B (class I), beta | 7.03 | 7.85  |
|    | 439394 | AA149250  | Hs.56105  | ESTs                                     | 7.00 | 4.53  |
|    | 422963 | M79141    | Hs.13234  | ESTs                                     | 6.99 | 5.30  |
|    | 417515 | L24203    | Hs.82237  | ataxia-telangiectasia group D-associated | 6.97 | 20.68 |
| 25 | 410530 | M25809    | Hs.64173  | ATPase, H transporting, lysosomal (vacuo | 6.96 | 7.04  |
|    | 446989 | AK001898  | Hs.16740  | hypothetical protein FLJ11036            | 6.96 | 6.68  |
|    | 427890 | AA435761  |           | ESTs                                     | 6.94 | 6.68  |
|    | 432374 | W58815    | Hs.301885 | Homo sapiens cDNA FLJ11346 fis, clone PL | 6.84 | 8.44  |
|    | 429624 | AA458648  | Hs.99476  | ESTs, Weakly similar to 1313184B alpha1  | 6.83 | 6.37  |
| 30 | 451029 | AA852097  | Hs.25829  | ras-related protein                      | 6.81 | 8.96  |
|    | 403000 | L11690    | Hs.198689 | bullous pemphigoid antigen 1 (230/240kD) | 6.80 | 7.68  |
|    | 439496 | BE616501  | Hs.32343  | Homo sapiens, Similar to RIKEN cDNA 1110 | 6.77 | 14.06 |
|    | 431713 | AK000388  | Hs.267997 | EHM2 gene                                | 6.72 | 7.11  |
|    | 451253 | H48299    | Hs.26126  | claudin 10                               | 6.71 | 7.17  |
| 35 | 414987 | AA524394  | Hs.294022 | hypothetical protein FLJ14950            | 6.67 | 11.68 |
|    | 400304 | AF005082  | Hs.113261 | Homo sapiens skin-specific protein (xp33 | 6.64 | 7.90  |
|    | 408063 | BE086548  | Hs.42346  | calcineurin-binding protein calcarsin-1  | 6.60 | 7.29  |
|    | 424364 | AW383226  | Hs.163834 | ESTs, Weakly similar to G01763 atrophin- | 6.58 | 6.78  |
|    | 421773 | W69233    | Hs.112457 | ESTs                                     | 6.55 | 17.59 |
| 40 | 425280 | U31519    | Hs.1872   | phosphoenolpyruvate carboxykinase 1 (sol | 6.55 | 6.79  |
|    | 411388 | X72925    | Hs.69752  | desmocollin 1                            | 6.55 | 8.97  |
|    | 401785 |           |           | NM_002275*:Homo sapiens keratin 15 (KRT1 | 6.51 | 9.94  |
|    | 406867 | AA157857  | Hs.182265 | keratin 19                               | 6.50 | 6.23  |
|    | 429504 | X99133    | Hs.204238 | lipocalin 2 (oncogene 24p3) (NGAL)       | 6.43 | 6.79  |
| 45 | 426106 | AI678765  | Hs.21812  | ESTs                                     | 6.41 | 7.69  |
|    | 413172 | M38180    | Hs.38586  | hydroxy-delta-5-steroid dehydrogenase, 3 | 6.39 | 7.09  |
|    | 407395 | AF005082  |           | gb:Homo sapiens skin-specific protein (x | 6.39 | 7.71  |
|    | 422166 | W72424    | Hs.112405 | S100 calcium-binding protein A9 (calgran | 6.36 | 9.23  |
|    | 437176 | AW176909  | Hs.42346  | calcineurin-binding protein calcarsin-1  | 6.30 | 5.45  |
| 50 | 440383 | AA884208  | Hs.30484  | ESTs                                     | 6.26 | 6.25  |
|    | 419329 | AY007220  | Hs.288998 | S100-type calcium binding protein A14    | 6.22 | 10.13 |
|    | 418686 | Z36830    | Hs.87268  | annexin A8                               | 6.19 | 6.14  |
|    | 440116 | AI798851  |           | hemoglobin, gamma G                      | 6.18 | 4.28  |
|    | 424049 | AB014524  | Hs.138380 | KIAA0624 protein                         | 6.18 | 6.91  |
| 55 | 417366 | BE185289  | Hs.1076   | small proline-rich protein 1B (comifin)  | 6.17 | 7.42  |
|    | 432543 | AA552690  | Hs.152423 | Homo sapiens cDNA: FLJ21274 fis, clone C | 6.16 | 6.86  |
|    | 414449 | AA557660  | Hs.76152  | decorin                                  | 6.15 | 3.93  |
|    | 441188 | AW292830  | Hs.255609 | ESTs                                     | 6.12 | 6.68  |
|    | 424008 | R02740    | Hs.137555 | putative chemokine receptor; GTP-binding | 6.12 | 5.33  |
| 60 | 431319 | AA873350  | Hs.302232 | ESTs                                     | 6.11 | 6.84  |
|    | 444105 | AW189097  |           | ESTs                                     | 5.97 | 6.20  |
|    | 428358 | AA993222  | Hs.101915 | Stargard1 disease 3 (autosomal dominant) | 5.94 | 5.15  |
|    | 407788 | BE514982  | Hs.38991  | S100 calcium-binding protein A2          | 5.71 | 5.83  |
|    | 439706 | AW872527  | Hs.59761  | ESTs, Weakly similar to DAP1_HUMAN DEATH | 5.69 | 4.49  |
| 65 | 428666 | AL080190  | Hs.189242 | Homo sapiens mRNA; cDNA DKFp434A202 (fr  | 5.65 | 5.16  |
|    | 410541 | AA065003  | Hs.64179  | syntenin-2 protein                       | 5.62 | 5.84  |
|    | 431926 | AW972724  |           | gb:EST384816 MAGE resequences, MAGL Homo | 5.61 | 5.75  |
|    | 430332 | R51790    | Hs.239483 | Human clone 23933 mRNA sequence          | 5.60 | 5.76  |
|    | 444946 | AW139205  | Hs.156457 | hypothetical protein FLJ22408            | 5.53 | 9.25  |
| 70 | 430714 | AA484757  | Hs.287601 | Homo sapiens cDNA FLJ13830 fis, clone TH | 5.48 | 5.38  |
|    | 435538 | AB011540  | Hs.4930   | low density lipoprotein receptor-related | 5.46 | 3.19  |
|    | 414407 | AA147026  | Hs.76704  | ESTs                                     | 5.43 | 5.29  |
|    | 417035 | AA192455  | Hs.22968  | Homo sapiens clone IMAGE:451939, mRNA se | 5.40 | 5.40  |
|    | 442315 | AA173992  | Hs.7956   | ESTs, Moderately similar to ZN91_HUMAN Z | 5.40 | 3.87  |
| 75 | 416931 | D45371    | Hs.80485  | adipose most abundant gene transcript 1  | 5.39 | 9.12  |
|    | 431048 | R50253    | Hs.249129 | cell death-inducing DFFA-like effector a | 5.39 | 6.06  |
|    | 436090 | AI640635  | Hs.332879 | EST                                      | 5.37 | 5.33  |
|    | 411274 | NM_002776 | Hs.69423  | kallikrein 10                            | 5.37 | 5.97  |
|    | 418394 | AF132818  | Hs.84728  | Kruppel-like factor 5 (intestinal)       | 5.36 | 9.35  |
| 80 | 406706 | X03740    | Hs.231581 | myosin, heavy polypeptide 1, skeletal mu | 5.34 | 4.08  |
|    | 430171 | AF086289  | Hs.234766 | skin-specific protein                    | 5.32 | 10.40 |
|    | 452747 | BE153855  | Hs.61460  | Ig superfamily receptor LNIR             | 5.31 | 6.01  |
|    | 426451 | AI908165  | Hs.169946 | GATA-binding protein 3 (T-cell receptor  | 5.31 | 3.81  |
|    | 414602 | AW630088  | Hs.76550  | Homo sapiens mRNA; cDNA DKFp564B1264 (f  | 5.26 | 5.92  |
|    | 424399 | AI905687  |           | AI905687:IL-BT095-190199-019 BT095 Homo  | 5.25 | 16.94 |
|    | 430071 | AA355986  | Hs.232068 | transcription factor 8 (represses interl | 5.20 | 5.01  |
|    | 431416 | AA532718  | Hs.178604 | ESTs                                     | 5.18 | 5.38  |

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|    |        |           |           |  |      |       |
|----|--------|-----------|-----------|--|------|-------|
|    | 420039 | NM_004605 | Hs.94581  | sulfotransferase family, cytosolic, 2B,  | 5.17 | 5.72  |
|    | 446082 | AI274139  | Hs.156452 | ESTs                                     | 5.16 | 5.14  |
|    | 430699 | AW969847  | Hs.292718 | ESTs, Weakly similar to RET2_HUMAN RETIN | 5.14 | 4.97  |
|    | 434625 | W01370    | Hs.46824  | ESTs                                     | 5.12 | 6.18  |
| 5  | 426101 | AL049987  |           | Homo sapiens mRNA; cDNA DKFZp564F112 (fr | 5.11 | 3.79  |
|    | 419548 | T73661    | Hs.91877  | thyroid hormone responsive SPOT14 (rat)  | 5.08 | 13.64 |
|    | 438962 | BE046594  |           | gb:hn41c11.x1 NCL_CGAP_RDF2 Homo sapiens | 5.08 | 4.09  |
|    | 419912 | AF249745  | Hs.6066   | Rho guanine nucleotide exchange factor ( | 5.08 | 4.77  |
|    | 420583 | H77859    | Hs.65450  | reticulin 4                              | 5.06 | 5.56  |
| 10 | 432125 | AW972657  | Hs.183006 | Homo sapiens cDNA FLJ12300 fis, clone MA | 5.05 | 6.32  |
|    | 445263 | H57646    | Hs.42586  | KIAA1560 protein                         | 5.03 | 5.22  |
|    | 407839 | AA045144  | Hs.161566 | ESTs                                     | 5.03 | 5.27  |
|    | 434293 | NM_004445 | Hs.3796   | EphB6                                    | 5.03 | 4.91  |
|    | 427850 | AA416756  | Hs.161051 | ESTs, Moderately similar to ALU6_HUMAN A | 4.99 | 16.04 |
| 15 | 414657 | AA424074  | Hs.76780  | protein phosphatase 1, regulatory (inhib | 4.94 | 8.14  |
|    | 445493 | AI915771  |           | metallothionein 1E (functional)          | 4.93 | 4.33  |
|    | 429365 | AA451798  | Hs.99249  | ESTs                                     | 4.90 | 5.19  |
|    | 412633 | AF001691  | Hs.74304  | periplakin                               | 4.90 | 11.71 |
|    | 448490 | AI523897  | Hs.271692 | ESTs, Weakly similar to I38022 hypotheti | 4.85 | 4.88  |
| 20 | 408491 | AI088063  | Hs.7882   | ESTs                                     | 4.80 | 4.39  |
|    | 430168 | AW968343  | Hs.145582 | DKFZP434I1735 protein                    | 4.80 | 6.05  |
|    | 407102 | AA007629  |           | glycerol-3-phosphate dehydrogenase 1 (so | 4.78 | 7.23  |
|    | 421998 | R74441    |           | poly(A)-binding protein, nuclear 1       | 4.77 | 4.78  |
| 25 | 422633 | X56832    | Hs.118804 | enolase 3, (beta, muscle)                | 4.72 | 6.24  |
|    | 444930 | BE185536  | Hs.301183 | molecule possessing ankyrin repeats indu | 4.71 | 3.72  |
|    | 439652 | W67826    | Hs.55412  | ESTs, Weakly similar to K1CJ_HUMAN KERAT | 4.70 | 3.60  |
|    | 450626 | AW190989  | Hs.1508   | insulin-degrading enzyme                 | 4.68 | 5.14  |
|    | 456898 | NM_001928 | Hs.155597 | D component of complement (adipsin)      | 4.68 | 15.83 |
|    | 408239 | AA053401  |           | ESTs, Moderately similar to ALU7_HUMAN A | 4.67 | 6.17  |
| 30 | 415192 | D17793    | Hs.78183  | aldo-keto reductase family 1, member C3  | 4.64 | 4.48  |
|    | 443827 | AI087867  | Hs.134667 | ESTs                                     | 4.63 | 5.06  |
|    | 431441 | U81961    | Hs.2794   | sodium channel, nonvoltage-gated 1 alpha | 4.63 | 8.48  |
|    | 408741 | M73720    | Hs.646    | carboxypeptidase A3 (mast cell)          | 4.63 | 3.19  |
| 35 | 427318 | AF186081  | Hs.175783 | zinc transporter                         | 4.62 | 3.57  |
|    | 453767 | AB011792  | Hs.35094  | extracellular matrix protein 2, female o | 4.62 | 5.14  |
|    | 424046 | AF027866  | Hs.138202 | serine (or cysteine) proteinase inhibito | 4.61 | 6.80  |
|    | 437233 | D81448    | Hs.339352 | Homo sapiens brother of CDO (BOC) mRNA,  | 4.60 | 6.19  |
|    | 446525 | AW967069  | Hs.211556 | hypothetical protein MGC5487             | 4.59 | 2.45  |
| 40 | 402294 |           |           | Target Exon                              | 4.57 | 5.47  |
|    | 424098 | AF077374  | Hs.139322 | small proline-rich protein 3             | 4.57 | 5.12  |
|    | 420798 | W93774    | Hs.99936  | keratin 10 (epidermolytic hyperkeratosis | 4.57 | 4.76  |
|    | 418021 | M15881    | Hs.1137   | uromodulin (uromucoid, Tamm-Horsfall gly | 4.54 | 4.49  |
|    | 422068 | AI807519  | Hs.104520 | Homo sapiens cDNA FLJ13694 fis, clone PL | 4.54 | 4.32  |
| 45 | 414798 | AI286323  | Hs.97411  | hypothetical protein MGC12335            | 4.53 | 3.04  |
|    | 410132 | NM_003480 | Hs.300946 | Microfibril-associated glycoprotein-2    | 4.53 | 2.91  |
|    | 400109 |           |           | Eos Control                              | 4.52 | 3.94  |
|    | 407242 | M18728    |           | gb:Human nonspecific crossreacting antig | 4.51 | 4.07  |
|    | 431901 | AW295050  | Hs.272023 | transforming, acidic coiled-coil contain | 4.50 | 4.16  |
| 50 | 435992 | AI033259  | Hs.118317 | Homo sapiens cDNA FLJ12088 fis, clone HE | 4.50 | 4.77  |
|    | 447365 | BE383676  | Hs.334    | Rho guanine nucleotide exchange factor ( | 4.50 | 3.99  |
|    | 449785 | AI225235  | Hs.288300 | hypothetical protein FLJ23231            | 4.49 | 4.02  |
|    | 424620 | AA101043  | Hs.151254 | kallikrein 7 (chymotryptic, stratum com  | 4.47 | 5.43  |
|    | 432559 | AW452948  | Hs.257631 | ESTs                                     | 4.47 | 3.10  |
| 55 | 459290 | NM_001546 | Hs.34853  | inhibitor of DNA binding 4, dominant neg | 4.45 | 3.17  |
|    | 422313 | AF045941  | Hs.115166 | scellin                                  | 4.45 | 5.07  |
|    | 416305 | AU076628  | Hs.79187  | coxsackie virus and adenovirus receptor  | 4.44 | 5.25  |
|    | 432314 | AA533447  | Hs.312989 | ESTs                                     | 4.44 | 3.52  |
|    | 441633 | AW958544  | Hs.112242 | normal mucosa of esophagus specific 1    | 4.43 | 2.64  |
| 60 | 424670 | W61215    | Hs.116651 | epithelial V-like antigen 1              | 4.42 | 4.27  |
|    | 414489 | AI620677  | Hs.73105  | ESTs                                     | 4.41 | 3.77  |
|    | 413040 | AA193338  | Hs.12321  | sodium calcium exchanger                 | 4.36 | 4.58  |
|    | 426974 | AB002298  | Hs.173035 | KIAA0300 protein                         | 4.35 | 4.97  |
|    | 448249 | AW855331  | Hs.337124 | ESTs                                     | 4.35 | 4.49  |
| 65 | 451743 | AW074266  | Hs.23071  | ESTs                                     | 4.34 | 4.52  |
|    | 427919 | AA173942  | Hs.326416 | Homo sapiens mRNA; cDNA DKFZp564H1916 (f | 4.33 | 3.94  |
|    | 422305 | AI928242  | Hs.293438 | ESTs, Highly similar to AF198488 1 trans | 4.32 | 7.20  |
|    | 408104 | AW972927  | Hs.293968 | ESTs                                     | 4.31 | 3.53  |
|    | 447945 | AI922838  | Hs.9670   | ESTs, Weakly similar to ALU1_HUMAN ALU S | 4.30 | 3.72  |
| 70 | 439349 | AI660898  | Hs.6834   | ESTs                                     | 4.29 | 4.16  |
|    | 433339 | AF019226  | Hs.8036   | glioblastoma overexpressed               | 4.29 | 3.94  |
|    | 427074 | AA527435  | Hs.178589 | hepatocellular carcinoma antigen gene 52 | 4.28 | 4.97  |
|    | 453574 | AI767947  | Hs.50841  | ESTs                                     | 4.25 | 3.66  |
|    | 410677 | NM_003278 | Hs.65424  | tetranectin (plasminogen-binding protein | 4.25 | 17.64 |
| 75 | 424833 | NM_003894 | Hs.153405 | period (Drosophila) homolog 2            | 4.22 | 3.13  |
|    | 426248 | T18988    | Hs.293668 | ESTs                                     | 4.21 | 4.09  |
|    | 410480 | R97457    | Hs.63984  | cadherin 13, H-cadherin (heart)          | 4.19 | 2.76  |
|    | 406805 | AI686003  | Hs.296031 | ESTs                                     | 4.19 | 3.87  |
|    | 438533 | AI440266  | Hs.170673 | ESTs, Weakly similar to T24832 hypotheti | 4.18 | 5.93  |
|    | 451831 | NM_001674 | Hs.460    | activating transcription factor 3        | 4.18 | 4.74  |
| 80 | 431211 | M86849    | Hs.323733 | gap junction protein, beta 2, 26kD (conn | 4.17 | 2.83  |
|    | 434936 | AI285970  | Hs.183817 | ESTs                                     | 4.17 | 4.39  |
|    | 430361 | AI033965  | Hs.239926 | sterol-C4-methyl oxidase-like            | 4.17 | 2.38  |
|    | 448429 | D17408    | Hs.21223  | calponin 1, basic, smooth muscle         | 4.16 | 5.15  |

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|    |        |           |           |   |      |       |
|----|--------|-----------|-----------|---|------|-------|
|    | 421978 | AJ243662  | Hs.110196 | NICE-1 protein                            | 4.15 | 8.07  |
|    | 437135 | AL038624  | Hs.208752 | ESTs, Weakly similar to ALU8_HUMAN ALU S  | 4.14 | 4.92  |
|    | 442554 | AW467376  | Hs.129640 | ESTs                                      | 4.12 | 4.00  |
| 5  | 451814 | AA847992  | Hs.137003 | ESTs                                      | 4.11 | 4.58  |
|    | 410023 | AB017169  | Hs.57929  | slit (Drosophila) homolog 3               | 4.10 | 3.92  |
|    | 457121 | A1743770  | Hs.180513 | ESTs, Weakly similar to KIAA0822 protein  | 4.09 | 3.19  |
|    | 426539 | AB011155  | Hs.170290 | discs, large (Drosophila) homolog 5       | 4.09 | 3.69  |
|    | 430191 | A1149880  | Hs.188809 | ESTs                                      | 4.07 | 4.49  |
| 10 | 430433 | AA478883  | Hs.273766 | ESTs                                      | 4.07 | 3.74  |
|    | 425992 | AA367069  | Hs.100636 | ESTs                                      | 4.06 | 4.37  |
|    | 428931 | AA994979  | Hs.98967  | ATPase, H(-)-transporting, lysosomal, non | 4.05 | 4.15  |
|    | 452392 | L20815    | Hs.507    | comeodesmosin                             | 4.04 | 11.00 |
|    | 402845 |           |           | ENSP00000246267:KIAA0444 PROTEIN (FRAGME  | 4.03 | 4.18  |
| 15 | 439873 | BE159253  | Hs.300638 | ESTs                                      | 4.03 | 3.86  |
|    | 432305 | M62402    | Hs.274313 | insulin-like growth factor binding prote  | 4.02 | 8.79  |
|    | 420789 | A1670057  | Hs.199882 | ESTs                                      | 4.02 | 4.34  |
|    | 453560 | AA348626  | Hs.5890   | hypothetical protein FLJ23306             | 4.02 | 5.13  |
|    | 428957 | NM_003881 | Hs.194679 | WNT1 inducible signaling pathway protein  | 4.01 | 4.29  |
| 20 | 429556 | AW139399  | Hs.98988  | ESTs                                      | 4.01 | 4.59  |
|    | 448585 | AB020676  | Hs.21543  | KIAA0869 protein                          | 4.01 | 4.52  |
|    | 403710 |           |           | C4000160:gi12735793[ref]XP_011928.1  pr   | 4.00 | 3.31  |
|    | 423634 | AW959908  | Hs.1690   | heparin-binding growth factor binding pr  | 3.98 | 6.61  |
|    | 421485 | AA243499  | Hs.104800 | hypothetical protein FLJ10134             | 3.98 | 3.79  |
| 25 | 437611 | AA897108  |           | gb:am08a06.s1 Soares_NFL_T_GBC_S1 Homo s  | 3.97 | 4.24  |
|    | 426500 | NM_014638 | Hs.170156 | KIAA0450 gene product                     | 3.96 | 4.93  |
|    | 448710 | T62926    | Hs.304184 | ESTs                                      | 3.96 | 4.54  |
|    | 408199 | AA132637  | Hs.15396  | Homo sapiens, clone IMAGE:3948909, mRNA,  | 3.95 | 5.57  |
|    | 428340 | AF261088  | Hs.154721 | acornitase 1, soluble                     | 3.94 | 3.24  |
| 30 | 410197 | NM_005518 | Hs.59889  | 3-hydroxy-3-methylglutaryl-Coenzyme A sy  | 3.94 | 9.16  |
|    | 456972 | A1054347  | Hs.2017   | ribosomal protein L38                     | 3.93 | 4.37  |
|    | 418381 | AA682393  | Hs.119237 | ESTs                                      | 3.93 | 3.45  |
|    | 444781 | NM_014400 | Hs.11950  | GPI-anchored metastasis-associated prote  | 3.92 | 15.00 |
|    | 456332 | AA228357  |           | gb:nc39d05.r1 NCI_CGAP_Pr2 Homo sapiens   | 3.91 | 4.88  |
| 35 | 445607 | AA488107  | Hs.30156  | ESTs, Weakly similar to unnamed protein   | 3.91 | 3.19  |
|    | 426411 | AK000708  | Hs.169764 | hypothetical protein FLJ20701             | 3.90 | 4.50  |
|    | 446733 | AA863360  | Hs.26040  | ESTs, Weakly similar to fatty acid omega  | 3.90 | 3.89  |
|    | 442498 | U54617    | Hs.8364   | Homo sapiens pyruvate dehydrogenase kina  | 3.89 | 5.11  |
|    | 452894 | A1598065  | Hs.61558  | ESTs                                      | 3.88 | 3.73  |
| 40 | 430570 | A1417881  | Hs.292464 | ESTs                                      | 3.87 | 4.47  |
|    | 439625 | AF086453  | Hs.58611  | ESTs                                      | 3.86 | 4.81  |
|    | 418793 | AW382987  | Hs.88474  | prostaglandin-endoperoxide synthase 1 (p  | 3.85 | 3.01  |
|    | 431247 | AL021578  | Hs.278489 | matrilin 4                                | 3.85 | 3.35  |
|    | 426350 | NM_003245 | Hs.2022   | transglutaminase 3 (E polypeptide, prote  | 3.85 | 5.15  |
| 45 | 441319 | A1354869  | Hs.133081 | ESTs, Weakly similar to T08700 hypotheti  | 3.84 | 5.03  |
|    | 452877 | A1250789  | Hs.32478  | ESTs                                      | 3.84 | 3.26  |
|    | 444252 | R21135    | Hs.54985  | ESTs                                      | 3.83 | 5.58  |
|    | 416265 | AA177088  | Hs.190065 | ESTs                                      | 3.82 | 3.87  |
|    | 418875 | W19971    | Hs.233459 | ESTs                                      | 3.80 | 2.92  |
| 50 | 440509 | BE410132  | Hs.134202 | ESTs, Weakly similar to T17279 hypotheti  | 3.80 | 4.36  |
|    | 442503 | AF147078  | Hs.150853 | p53-responsive gene 5                     | 3.80 | 7.53  |
|    | 427081 | A1474533  | Hs.170528 | ESTs, Moderately similar to ALUC_HUMAN !  | 3.77 | 4.81  |
|    | 458222 | AW139592  |           | hypothetical protein DKFZp434K1421        | 3.77 | 3.56  |
|    | 445107 | A1208121  | Hs.147313 | ESTs, Weakly similar to I38022 hypotheti  | 3.77 | 3.20  |
| 55 | 436283 | A1480319  | Hs.120058 | ESTs                                      | 3.76 | 3.76  |
|    | 436557 | W15573    | Hs.5027   | ESTs, Weakly similar to A47582 B-cell gr  | 3.76 | 2.65  |
|    | 448988 | Y09763    | Hs.22785  | gamma-aminobutyric acid (GABA) A recepto  | 3.75 | 7.59  |
|    | 434206 | AW136973  |           | ESTs, Weakly similar to S69890 mitogen i  | 3.72 | 3.96  |
|    | 424824 | A1217440  | Hs.143873 | ESTs                                      | 3.72 | 3.52  |
| 60 | 457411 | AW085961  | Hs.130093 | iroquois-class homeobox protein IRX2      | 3.71 | 3.05  |
|    | 452241 | AL050204  | Hs.28540  | Homo sapiens mRNA, cDNA DKFZp586F1223 (f  | 3.70 | 4.84  |
|    | 421845 | AW021631  | Hs.16515  | ESTs                                      | 3.69 | 3.59  |
|    | 413922 | A1535895  | Hs.221024 | ESTs                                      | 3.68 | 4.22  |
|    | 422746 | NM_004484 | Hs.119651 | glypican 3                                | 3.68 | 4.29  |
| 65 | 433934 | AW273261  | Hs.216292 | ESTs                                      | 3.68 | 4.39  |
|    | 452547 | AA335295  | Hs.74120  | adipose specific 2                        | 3.66 | 12.23 |
|    | 400295 | W72838    |           | A1905687:IL-BT095-190199-019 BT095 Homo   | 3.66 | 9.25  |
|    | 419098 | AA234041  | Hs.87271  | ESTs                                      | 3.66 | 4.94  |
|    | 417054 | AF017060  |           | aldehyde oxidase 1                        | 3.65 | 4.51  |
| 70 | 423974 | AL118754  |           | gb:DKFZp761P1910_r1 761 (synonym: hamy2)  | 3.65 | 4.32  |
|    | 431362 | A1874223  | Hs.293560 | ESTs                                      | 3.65 | 3.73  |
|    | 420506 | AW977779  | Hs.194613 | ESTs                                      | 3.65 | 3.25  |
|    | 448065 | A1459177  | Hs.172759 | ESTs, Moderately similar to ALU7_HUMAN A  | 3.64 | 4.62  |
|    | 437457 | AA757900  | Hs.270823 | ESTs, Weakly similar to S65657 alpha-1C-  | 3.64 | 4.54  |
| 75 | 451951 | AW082870  | Hs.210954 | ESTs                                      | 3.64 | 3.69  |
|    | 436679 | A1127483  | Hs.120451 | ESTs, Weakly similar to unnamed protein   | 3.64 | 3.39  |
|    | 412676 | NM_000165 | Hs.74471  | gap junction protein, alpha 1, 43kD (con  | 3.62 | 3.62  |
|    | 412668 | AA456195  |           | hypothetical protein FLJ14621             | 3.62 | 4.22  |
|    | 413899 | AF083892  | Hs.75608  | tight junction protein 2 (zona occludens  | 3.62 | 3.06  |
| 80 | 444726 | NM_006147 |           | interferon regulatory factor 6            | 3.59 | 10.65 |
|    | 428722 | U76456    | Hs.190787 | tissue inhibitor of metalloproteinase 4   | 3.59 | 3.31  |
|    | 429973 | A1423317  | Hs.164680 | ESTs                                      | 3.59 | 3.71  |
|    | 452413 | AW082633  | Hs.215030 | ESTs                                      | 3.58 | 4.66  |
|    | 416157 | NM_003243 | Hs.342874 | transforming growth factor, beta recepto  | 3.58 | 4.44  |

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|    |        |           |           |  |      |       |
|----|--------|-----------|-----------|--|------|-------|
|    | 430397 | AI924533  | Hs.105607 | bicarbonate transporter related protein  | 3.57 | 3.74  |
|    | 411939 | AI365585  | Hs.146246 | ESTs                                     | 3.57 | 12.42 |
|    | 450353 | AI244661  | Hs.103296 | ESTs, Weakly similar to S65657 alpha-1C- | 3.57 | 4.11  |
|    | 432406 | AI340571  | Hs.343666 | KIAA0969 protein                         | 3.57 | 2.84  |
| 5  | 439609 | AW971945  | Hs.293236 | ESTs                                     | 3.56 | 3.14  |
|    | 435381 | AW136397  | Hs.175382 | ESTs                                     | 3.56 | 3.48  |
|    | 410173 | AA706017  | Hs.119944 | ESTs                                     | 3.56 | 3.37  |
|    | 414002 | NM_006732 | Hs.75678  | FBJ murine osteosarcoma viral oncogene h | 3.56 | 9.93  |
| 10 | 413305 | NM_000426 | Hs.323511 | Homo sapiens cDNA: FLJ23176 fis, clone L | 3.55 | 4.24  |
|    | 434360 | AW015415  | Hs.127780 | ESTs                                     | 3.55 | 4.77  |
|    | 423973 | AF038461  | Hs.136574 | arachidonate 12-lipoxygenase, 12R type   | 3.53 | 5.65  |
|    | 425681 | AB018297  | Hs.159183 | KIAA0754 protein                         | 3.52 | 4.79  |
|    | 428382 | AF007132  | Hs.184019 | Homo sapiens clone 23551 mRNA sequence   | 3.51 | 4.46  |
|    | 451184 | T87943    |           | transcription factor 7-like 2 (T-cell sp | 3.51 | 3.63  |
| 15 | 448496 | BE379077  | Hs.130849 | ESTs, Weakly similar to I38022 hypotheti | 3.51 | 3.30  |
|    | 425831 | U46689    | Hs.159608 | aldehyde dehydrogenase 3 family, member  | 3.48 | 8.66  |
|    | 428232 | BE272452  | Hs.183109 | monoamine oxidase A                      | 3.48 | 9.54  |
|    | 425483 | AF231022  | Hs.158159 | FAT tumor suppressor (Drosophila) homolo | 3.48 | 6.05  |
|    | 401760 |           |           | Target Exon                              | 3.48 | 7.86  |
| 20 | 427899 | AA829286  | Hs.332053 | serum amyloid A1                         | 3.47 | 3.67  |
|    | 451767 | AI625014  | Hs.187328 | ESTs                                     | 3.46 | 3.85  |
|    | 452849 | AF044924  | Hs.30792  | hook2 protein                            | 3.45 | 5.66  |
|    | 427408 | AA583206  | Hs.2156   | RAR-related orphan receptor A            | 3.45 | 5.02  |
|    | 447165 | AL042400  | Hs.75668  | Homo sapiens, Similar to RIKEN cDNA 1700 | 3.45 | 3.61  |
| 25 | 422083 | NM_001141 | Hs.111256 | arachidonate 15-lipoxygenase, second typ | 3.45 | 7.71  |
|    | 420876 | AA918425  | Hs.177744 | ESTs                                     | 3.44 | 8.46  |
|    | 421114 | AW975051  | Hs.293156 | ESTs, Weakly similar to I78885 serine/th | 3.44 | 4.47  |
|    | 426233 | AA372796  | Hs.269339 | ESTs, Weakly similar to AF161356 1 HSPC0 | 3.44 | 3.96  |
|    | 428221 | U96781    | Hs.183075 | ATPase, Ca transporting, cardiac muscle, | 3.42 | 4.32  |
| 30 | 403593 |           |           | Target Exon                              | 3.42 | 6.35  |
|    | 423467 | AK000214  | Hs.129014 | hypothetical protein FLJ20207            | 3.42 | 3.34  |
|    | 447731 | AA373527  | Hs.19385  | CGI-58 protein                           | 3.41 | 2.44  |
|    | 456327 | H68741    | Hs.38774  | ESTs                                     | 3.40 | 3.46  |
| 35 | 413880 | AI660842  | Hs.110915 | interleukin 22 receptor                  | 3.37 | 3.61  |
|    | 429501 | AI700588  | Hs.293388 | ESTs, Weakly similar to A34612 zinc fing | 3.37 | 3.44  |
|    | 437575 | AW954355  | Hs.36529  | hypothetical protein MGC11242            | 3.36 | 4.87  |
|    | 420231 | R06866    | Hs.19813  | ESTs                                     | 3.36 | 8.60  |
|    | 424010 | AL080188  | Hs.137556 | Homo sapiens mRNA; cDNA DKFZp434A132 (fr | 3.36 | 6.20  |
| 40 | 426789 | F06596    | Hs.23837  | Homo sapiens cDNA FLJ11812 fis, clone HE | 3.34 | 3.40  |
|    | 434274 | AA628539  | Hs.116252 | ESTs, Moderately similar to ALU1_HUMAN A | 3.34 | 3.35  |
|    | 420693 | NM_001972 | Hs.99863  | elastase 2, neutrophil                   | 3.34 | 4.06  |
|    | 418318 | U47732    | Hs.84072  | transmembrane 4 superfamily member 3     | 3.33 | 4.36  |
|    | 413163 | Y00815    | Hs.75216  | protein tyrosine phosphatase, receptor t | 3.32 | 9.47  |
| 45 | 428496 | AA769986  | Hs.185802 | ESTs                                     | 3.32 | 3.88  |
|    | 416349 | X69089    | Hs.79227  | myomesin (M-protein) 2 (165kD)           | 3.31 | 4.01  |
|    | 409095 | AW337272  | Hs.293656 | ESTs, Moderately similar to S72481 proba | 3.31 | 3.31  |
|    | 443072 | AI937532  |           | gb:wp78d02.x1 NCI_CGAP_Bm25 Homo sapien  | 3.31 | 4.40  |
|    | 437596 | AA761490  |           | ESTs, Moderately similar to S65657 alpha | 3.30 | 5.31  |
| 50 | 444094 | AI695764  | Hs.202394 | ESTs                                     | 3.29 | 3.47  |
|    | 437150 | R51407    | Hs.77910  | 3-hydroxy-3-methylglutaryl-Coenzyme A sy | 3.29 | 3.76  |
|    | 407334 | AA494411  | Hs.296031 | ESTs                                     | 3.28 | 4.30  |
|    | 423017 | AW178761  | Hs.227948 | serine (or cysteine) proteinase inhibito | 3.28 | 3.78  |
|    | 447875 | R32029    | Hs.13905  | ESTs                                     | 3.28 | 3.44  |
| 55 | 418969 | W33191    | Hs.28907  | hypothetical protein FLJ20258            | 3.27 | 3.71  |
|    | 411962 | AA099050  |           | gb:zk85d12.r1 Soares_pregnant_uterus_NbH | 3.27 | 4.28  |
|    | 424395 | AA165082  | Hs.146388 | microtubule-associated protein 7         | 3.27 | 3.82  |
|    | 400494 |           |           | ENSP00000238970:CIG30 (Fragment).        | 3.27 | 2.60  |
|    | 430418 | R98852    | Hs.36029  | heart and neural crest derivatives expre | 3.26 | 6.19  |
| 60 | 409231 | AA446644  | Hs.692    | GA733-2 antigen: epithelial glycoprotein | 3.26 | 4.24  |
|    | 434952 | T10269    | Hs.4285   | Homo sapiens cDNA: FLJ22505 fis, clone H | 3.26 | 5.17  |
|    | 445234 | AW137636  | Hs.146059 | ESTs                                     | 3.25 | 5.59  |
|    | 426150 | NM_003658 | Hs.167218 | BarH-like homeobox 2                     | 3.25 | 5.21  |
|    | 400076 |           |           | Eos Control                              | 3.25 | 3.60  |
| 65 | 421462 | AF016495  | Hs.104624 | aquaporin 9                              | 3.25 | 3.93  |
|    | 420677 | AW086215  | Hs.246096 | ESTs                                     | 3.25 | 3.53  |
|    | 424125 | M31669    | Hs.1735   | inhibin, beta B (activin AB beta polypep | 3.24 | 3.88  |
|    | 443672 | AA323362  | Hs.9667   | butyrobetaine (gamma), 2-oxoglutarate di | 3.24 | 5.64  |
|    | 420682 | AI380552  | Hs.88602  | ESTs                                     | 3.24 | 4.13  |
| 70 | 423725 | AJ403108  | Hs.132127 | hypothetical protein LOC57822            | 3.23 | 4.90  |
|    | 431157 | AI823969  | Hs.132678 | ESTs                                     | 3.23 | 3.97  |
|    | 440469 | AA886068  |           | gb:ny40e07.s1 NCI_CGAP_Pr12 Homo sapiens | 3.23 | 3.39  |
|    | 449961 | AW265634  | Hs.133100 | ESTs                                     | 3.21 | 5.36  |
|    | 407948 | AW085161  | Hs.56279  | ICEBERG caspase-1 inhibitor              | 3.21 | 4.61  |
| 75 | 400835 |           |           | chromosome 2 open reading frame 2        | 3.21 | 3.62  |
|    | 413329 | AI056885  | Hs.133539 | ESTs                                     | 3.21 | 3.43  |
|    | 414825 | X06370    | Hs.77432  | epidermal growth factor receptor (avian  | 3.21 | 3.72  |
|    | 450860 | AA021007  |           | integrin, beta 8                         | 3.20 | 5.89  |
|    | 444816 | Z48633    | Hs.283742 | H.sapiens mRNA for retrotransposon       | 3.19 | 6.84  |
|    | 453855 | AA039576  | Hs.37858  | ESTs, Weakly similar to ALUB_HUMAN !!!!  | 3.19 | 3.59  |
| 80 | 432278 | AL137506  | Hs.274256 | hypothetical protein FLJ23563            | 3.19 | 3.51  |
|    | 420074 | AA253425  | Hs.190074 | ESTs                                     | 3.18 | 5.50  |
|    | 418481 | M81945    |           | CD34 antigen                             | 3.18 | 3.65  |
|    | 408522 | AI541214  | Hs.46320  | Small proline-rich protein SPRK (human,  | 3.18 | 7.43  |



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|    |        |           |           |  |      |       |
|----|--------|-----------|-----------|--|------|-------|
| 5  | 435337 | AI078307  | Hs.134317 | ESTs, Weakly similar to PC4259 femitin   | 3.17 | 3.51  |
|    | 445502 | AW379160  | Hs.12813  | DKFZP434J214 protein                     | 3.17 | 3.62  |
|    | 412477 | AA150864  |           | microsomal glutathione S-transferase 1   | 3.17 | 5.39  |
|    | 421757 | Z20897    | Hs.296259 | paraoxonase 3                            | 3.16 | 3.60  |
|    | 413835 | AI272727  | Hs.249163 | fatty acid hydroxylase                   | 3.16 | 5.56  |
| 10 | 420309 | AW043637  | Hs.21766  | ESTs, Weakly similar to ALU5_HUMAN ALU S | 3.15 | 1.99  |
|    | 444895 | AI674383  | Hs.22891  | solute carrier family 7 (cationic amino  | 3.15 | 4.45  |
|    | 414869 | AA157291  | Hs.21479  | ubiquitin 1                              | 3.13 | 4.40  |
|    | 412947 | AA122277  |           | gb:zk97e09.s1 Soares_pregnant_uterus_Nbh | 3.13 | 3.30  |
|    | 443265 | AI916207  | Hs.9167   | SH3 domain binding glutamic acid-rich pr | 3.12 | 4.62  |
| 15 | 421335 | X99977    | Hs.103505 | ARS component B                          | 3.11 | 11.54 |
|    | 401905 |           |           | ENSP0000025232*:Sterol regulatory eleme  | 3.10 | 2.85  |
|    | 443514 | BE464268  | Hs.141937 | ESTs                                     | 3.09 | 3.66  |
|    | 418817 | AA913229  | Hs.19339  | ESTs                                     | 3.08 | 3.88  |
|    | 434727 | H43374    | Hs.7890   | Homo sapiens mRNA for KIAA1671 protein,  | 3.08 | 4.18  |
| 20 | 435858 | AF254260  | Hs.283009 | tuffelin 1                               | 3.08 | 3.96  |
|    | 430285 | AI917602  | Hs.106440 | ESTs                                     | 3.07 | 3.30  |
|    | 448106 | AI800470  | Hs.171941 | ESTs                                     | 3.07 | 5.19  |
|    | 432908 | AI861896  |           | ESTs                                     | 3.07 | 3.85  |
|    | 450086 | AW016343  | Hs.233301 | ESTs                                     | 3.07 | 3.38  |
| 25 | 451529 | AI917901  | Hs.208641 | ESTs                                     | 3.07 | 3.29  |
|    | 418443 | NM_005239 | Hs.85146  | v-ets avian erythroblastosis virus E26 o | 3.06 | 4.12  |
|    | 426848 | H72531    | Hs.36190  | ESTs                                     | 3.05 | 4.34  |
|    | 429506 | D49835    | Hs.171942 | ras responsive element binding protein 1 | 3.05 | 3.97  |
|    | 425955 | T96509    | Hs.248549 | ESTs, Moderately similar to S65657 alpha | 3.05 | 3.29  |
| 30 | 413822 | R08950    | Hs.272044 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 3.05 | 3.89  |
|    | 434230 | AA551569  |           | hypothetical protein PRO2822             | 3.04 | 3.63  |
|    | 453655 | AW960427  | Hs.342874 | transforming growth factor, beta recepto | 3.04 | 8.09  |
|    | 415696 | AI821552  | Hs.188682 | ESTs                                     | 3.03 | 3.43  |
|    | 449618 | AI076459  | Hs.15978  | KIAA1272 protein                         | 3.01 | 3.29  |
| 35 | 414665 | AA160873  |           | serum amyloid A1                         | 3.01 | 9.22  |
|    | 446682 | AW205632  | Hs.211198 | ESTs                                     | 3.00 | 3.30  |
|    | 443801 | AW206942  | Hs.253594 | intron of: trichorhinophalangeal syndro  | 2.99 | 3.74  |
|    | 412446 | AI768015  |           | ESTs                                     | 2.99 | 4.47  |
|    | 449271 | AW338067  | Hs.7869   | Homo sapiens cDNA FLJ11946 fis, clone HE | 2.99 | 4.35  |
| 40 | 435702 | AI033647  | Hs.121001 | Homo sapiens, clone IMAGE:3460280, mRNA  | 2.98 | 3.49  |
|    | 403180 |           |           | Target Exon                              | 2.98 | 3.92  |
|    | 434442 | AA737415  |           | ESTs                                     | 2.98 | 3.61  |
|    | 439593 | BE073597  | Hs.124863 | ESTs                                     | 2.98 | 3.86  |
|    | 410453 | AW749036  |           | gb:RC2-BT0318-241199-011-f10 BT0318 Homo | 2.98 | 3.49  |
| 45 | 414766 | AW293452  | Hs.16228  | ESTs                                     | 2.97 | 3.63  |
|    | 432566 | AW439330  | Hs.256889 | ESTs, Weakly similar to 2109260A B cell  | 2.97 | 3.99  |
|    | 451541 | BE279383  | Hs.26557  | plakophilin 3                            | 2.97 | 6.90  |
|    | 452195 | AA994712  | Hs.116878 | ESTs                                     | 2.97 | 3.30  |
|    | 401747 |           |           | Homo sapiens keratin 17 (KRT17)          | 2.97 | 4.10  |
| 50 | 431316 | AA502663  | Hs.145037 | ESTs                                     | 2.96 | 3.05  |
|    | 445437 | AI224165  | Hs.148725 | ESTs                                     | 2.95 | 7.12  |
|    | 421690 | AW162667  | Hs.106857 | calbindin 2, (29kD, calretinin)          | 2.95 | 5.68  |
|    | 456371 | S76825    | Hs.89695  | insulin receptor                         | 2.94 | 4.59  |
|    | 449543 | AF070632  | Hs.23729  | Homo sapiens clone 24405 mRNA sequence   | 2.94 | 4.12  |
| 55 | 436664 | AW197887  | Hs.253353 | ESTs                                     | 2.93 | 3.57  |
|    | 406962 | M13485    |           | gb:Human metallothionein I-B gene, exon  | 2.93 | 2.66  |
|    | 422158 | L10343    | Hs.112341 | protease inhibitor 3, skin-derived (SKAL | 2.92 | 7.48  |
|    | 428769 | AW207175  | Hs.106771 | ESTs                                     | 2.92 | 3.28  |
|    | 414629 | AA345824  | Hs.76688  | carboxylesterase 1 (monocyte/macrophage  | 2.92 | 3.48  |
| 60 | 444204 | AI129194  | Hs.143040 | ESTs                                     | 2.92 | 3.92  |
|    | 421407 | T82331    | Hs.182278 | ESTs, Weakly similar to CGHU6C collagen  | 2.91 | 6.55  |
|    | 453180 | N46243    | Hs.110373 | ESTs, Highly similar to T42626 secreted  | 2.90 | 3.92  |
|    | 429538 | BE182592  | Hs.139322 | small proline-rich protein 2A            | 2.88 | 4.75  |
|    | 452554 | AW452434  | Hs.58006  | ESTs, Weakly similar to ALU5_HUMAN ALU S | 2.88 | 6.74  |
| 65 | 417184 | N52510    | Hs.268597 | Homo sapiens cDNA: FLJ21498 fis, clone C | 2.87 | 3.97  |
|    | 412093 | BE242691  | Hs.14947  | ESTs                                     | 2.86 | 3.48  |
|    | 424135 | AW994455  | Hs.140978 | Homo sapiens mRNA; cDNA DKFZp762H106 (fr | 2.86 | 3.32  |
|    | 437167 | AL050184  | Hs.21610  | DKFZP434B203 protein                     | 2.86 | 3.87  |
|    | 454065 | BE394588  |           | gb:601311808F1 NIH_MGC_44 Homo sapiens c | 2.86 | 3.43  |
| 70 | 420230 | AL034344  | Hs.284186 | forkhead box C1                          | 2.85 | 3.67  |
|    | 403108 |           |           | ENSP00000241415*:Hypothetical 67.7 kDa p | 2.85 | 2.62  |
|    | 434433 | AW629759  |           | gb:hh70e05.y1 NCI_CGAP_GU1 Homo sapiens  | 2.84 | 3.35  |
|    | 420544 | AA677577  | Hs.98732  | Homo sapiens Chromosome 16 BAC clone CIT | 2.83 | 2.66  |
|    | 429429 | AA829725  | Hs.334437 | hypothetical protein MGC4248             | 2.83 | 3.59  |
| 75 | 451721 | NM_006946 | Hs.26915  | spectrin, beta, non-erythrocytic 2       | 2.83 | 3.36  |
|    | 424982 | U94777    |           | phosphorylase, glycogen; muscle (McArdle | 2.83 | 4.50  |
|    | 429259 | AA420450  | Hs.292911 | Plakophilin                              | 2.81 | 4.81  |
|    | 423523 | AW299828  | Hs.193580 | ESTs                                     | 2.80 | 7.08  |
|    | 433637 | AW024214  | Hs.102307 | ESTs                                     | 2.80 | 3.39  |
| 80 | 452089 | T97294    | Hs.271492 | ESTs, Weakly similar to PC4211 hepatocel | 2.80 | 3.62  |
|    | 441187 | AW195237  | Hs.7734   | hypothetical protein FLJ22174            | 2.80 | 3.52  |
|    | 421965 | AA301100  | Hs.346482 | gb:EST14128 Testis tumor Homo sapiens cD | 2.79 | 3.49  |
|    | 432098 | AF252297  | Hs.91546  | cytochrome P450 retinoid metabolizing pr | 2.79 | 2.31  |
|    | 429128 | AA446869  | Hs.119316 | ESTs                                     | 2.78 | 4.17  |
|    | 438913 | AI380429  | Hs.172445 | ESTs                                     | 2.77 | 3.65  |
|    | 445029 | AF196481  |           | midline 2                                | 2.76 | 3.79  |
|    | 419923 | AW081455  | Hs.120219 | ESTs                                     | 2.76 | 3.00  |

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|    |        |               |           |   |      |       |
|----|--------|---------------|-----------|---|------|-------|
| 5  | 416508 | R39769        | Hs.56406  | ESTs, Moderately similar to ALU8_HUMAN A  | 2.76 | 3.59  |
|    | 412507 | L36645        | Hs.73964  | EphA4                                     | 2.76 | 3.90  |
|    | 446339 | AL046962      | Hs.14845  | forkhead box O3A                          | 2.75 | 3.50  |
|    | 433710 | AI341867      | Hs.188920 | ESTs                                      | 2.75 | 3.33  |
|    | 432375 | BE536069      | Hs.2962   | S100 calcium-binding protein P            | 2.74 | 5.77  |
| 10 | 409213 | U61412        | Hs.51133  | PTK6 protein tyrosine kinase 6            | 2.74 | 3.76  |
|    | 426653 | AA530892      | Hs.171695 | dual specificity phosphatase 1            | 2.74 | 8.19  |
|    | 408839 | AW277084      |           | gb:xp61h09.x1 NCI_CGAP_Ov39 Homo sapiens  | 2.73 | 3.93  |
|    | 433091 | Y12642        | Hs.3185   | lymphocyte antigen 6 complex, locus D     | 2.73 | 11.46 |
|    | 444026 | AA205759      | Hs.10119  | hypothetical protein FLJ14957             | 2.73 | 6.17  |
| 15 | 433713 | AW976511      | Hs.112592 | ESTs                                      | 2.72 | 3.42  |
|    | 453317 | NM_002277     | Hs.41696  | keratin, hair, acidic,1                   | 2.72 | 4.76  |
|    | 408493 | BE206854      | Hs.46039  | phosphoglycerate mutase 2 (muscle)        | 2.72 | 3.74  |
|    | 432947 | AA507010      | Hs.270998 | ESTs, Weakly similar to I38022 hypothei   | 2.72 | 3.44  |
|    | 421428 | U26726        | Hs.1376   | hydroxysteroid (11-beta) dehydrogenase 2  | 2.72 | 4.95  |
| 20 | 423217 | NM_000094     | Hs.1640   | collagen, type VII, alpha 1 (epidermolys  | 2.72 | 4.29  |
|    | 435016 | AI284219      | Hs.130749 | ESTs, Weakly similar to I38022 hypothei   | 2.71 | 4.45  |
|    | 449667 | AB023227      | Hs.23860  | KIAA1010 protein                          | 2.71 | 3.72  |
|    | 407112 | AA070801      | Hs.51615  | ESTs, Weakly similar to ALU7_HUMAN ALU S  | 2.70 | 3.82  |
|    | 433848 | AF095719      | Hs.93764  | carboxypeptidase A4                       | 2.70 | 2.76  |
| 25 | 430152 | AB001325      | Hs.234642 | aquaporin 3                               | 2.69 | 4.26  |
|    | 456063 | NM_006744     | Hs.76461  | retinol-binding protein 4, interstitial   | 2.69 | 6.72  |
|    | 424471 | AA341329      | Hs.311524 | ESTs                                      | 2.68 | 4.57  |
|    | 453201 | AI432195      | Hs.135098 | ESTs                                      | 2.68 | 3.69  |
|    | 450912 | AW939251      | Hs.25647  | v-fos, FBJ murine osteosarcoma viral onco | 2.68 | 4.25  |
| 30 | 404996 |               |           | Target Exon                               | 2.67 | 4.28  |
|    | 409453 | AI885516      | Hs.95612  | ESTs                                      | 2.65 | 6.51  |
|    | 430937 | X53463        | Hs.2704   | glutathione peroxidase 2 (gastrointestin  | 2.65 | 3.78  |
|    | 452887 | AI702223      | Hs.107253 | hypothetical protein DKFZp761F241         | 2.64 | 6.38  |
|    | 444169 | AV648170      | Hs.58756  | ESTs                                      | 2.64 | 3.40  |
| 35 | 428500 | AI815395      | Hs.184641 | fatty acid desaturase 2                   | 2.64 | 3.47  |
|    | 408395 | BE072425      | Hs.44579  | hypothetical protein FLJ20199             | 2.64 | 4.01  |
|    | 432093 | H28383        |           | gb:yl52c03.r1 Soares breast 3NbHBst Homo  | 2.63 | 4.08  |
|    | 451621 | AI879148      | Hs.26770  | fatty acid binding protein 7, brain       | 2.62 | 2.51  |
|    | 447335 | BE617695      | Hs.286192 | hypothetical protein FLJ20940             | 2.61 | 3.62  |
| 40 | 429343 | AK000785      | Hs.199480 | Homo sapiens, Similar to epsin 3, clone   | 2.61 | 3.68  |
|    | 431166 | AW971186      | Hs.293839 | ESTs                                      | 2.61 | 3.33  |
|    | 440659 | AF134160      | Hs.7327   | claudin 1                                 | 2.61 | 3.53  |
|    | 413542 | BE295928      | Hs.75424  | inhibitor of DNA binding 1, dominant neg  | 2.61 | 4.48  |
|    | 413956 | AI821351      | Hs.193133 | ESTs, Weakly similar to ALU7_HUMAN ALU S  | 2.60 | 3.51  |
| 45 | 407299 | AA460205      | Hs.289770 | ESTs, Weakly similar to I38022 hypothei   | 2.59 | 3.82  |
|    | 449539 | W80363        | Hs.58446  | ESTs                                      | 2.58 | 4.05  |
|    | 413884 | AI668892      | Hs.239758 | hypothetical protein FLJ12389 similar to  | 2.58 | 4.19  |
|    | 445620 | AI245225      | Hs.17441  | ESTs                                      | 2.57 | 3.44  |
|    | 433688 | AA628467      | Hs.112572 | Homo sapiens cDNA FLJ14130 fis, clone MA  | 2.56 | 3.57  |
| 50 | 424834 | AK001432      | Hs.153408 | Homo sapiens cDNA FLJ10570 fis, clone NT  | 2.56 | 3.47  |
|    | 407083 | Z48511        |           | H.sapiens XG mRNA (clone PEP11)           | 2.55 | 3.61  |
|    | 406790 | AA293303      |           | ribosomal protein L27a                    | 2.54 | 4.36  |
|    | 450472 | AI190071      | Hs.55278  | ESTs                                      | 2.54 | 4.30  |
|    | 410310 | J02931        | Hs.62192  | coagulation factor III (thromboplasin,    | 2.54 | 3.82  |
| 55 | 454034 | NM_000691     | Hs.575    | aldehyde dehydrogenase 3 family, member   | 2.54 | 3.44  |
|    | 430821 | AA487264      | Hs.154974 | Homo sapiens mRNA; cDNA DKFZp667N064 (fr  | 2.54 | 4.55  |
|    | 402575 |               |           | Rho GTPase activating protein 1           | 2.53 | 5.47  |
|    | 429554 | NM_012275     | Hs.207224 | interleukin 1, delta                      | 2.53 | 2.40  |
|    | 431631 | AA548906      | Hs.122244 | ESTs                                      | 2.52 | 3.79  |
| 60 | 408806 | AW847814      | Hs.75608  | Homo sapiens cDNA: FLJ21532 fis, clone C  | 2.52 | 4.51  |
|    | 420235 | AA256756      | Hs.31178  | ESTs                                      | 2.51 | 4.21  |
|    | 436314 | AI983409      |           | ESTs                                      | 2.51 | 3.11  |
|    | 432906 | BE265489      | Hs.3123   | lethal giant larvae (Drosophila) homolog  | 2.50 | 5.62  |
|    | 429547 | AW009166      | Hs.99376  | FGENESH predicted novel secreted protein  | 2.49 | 2.60  |
| 65 | 410532 | T53088        | Hs.155376 | hemoglobin, beta                          | 2.49 | 4.73  |
|    | 413475 | AW021488      | Hs.26981  | ESTs                                      | 2.49 | 3.90  |
|    | 429325 | AW088739      | Hs.243770 | ESTs                                      | 2.48 | 3.71  |
|    | 424604 | AW865388      | Hs.151076 | KIAA1243 protein                          | 2.48 | 4.16  |
|    | 414320 | U13616        | Hs.75893  | ankyrin 3, node of Ranvier (ankyrin G)    | 2.48 | 3.80  |
| 70 | 423929 | M69136        | Hs.135626 | chymase 1, mast cell                      | 2.48 | 3.47  |
|    | 410275 | U85658        | Hs.61796  | transcription factor AP-2 gamma (activat  | 2.47 | 2.09  |
|    | 444935 | AA262449      | Hs.223569 | ESTs                                      | 2.47 | 5.96  |
|    | 445389 | NM_016831     | Hs.12592  | period (Drosophila) homolog 3             | 2.47 | 3.41  |
|    | 437897 | AA770561      | Hs.146170 | hypothetical protein FLJ22969             | 2.47 | 6.80  |
| 75 | 446292 | AF081497      | Hs.279682 | Rh type C glycoprotein                    | 2.46 | 7.37  |
|    | 409178 | BE393948      | Hs.50915  | kalikrein 5                               | 2.46 | 5.59  |
|    | 452865 | AI924046      | Hs.119567 | ESTs, Weakly similar to A47582 B-cell gr  | 2.46 | 6.03  |
|    | 447179 | AW015633      | Hs.157299 | ESTs                                      | 2.46 | 3.23  |
|    | 414459 | Y11525        | Hs.76171  | CCAAT/enhancer binding protein (C/EBP),   | 2.46 | 3.95  |
| 80 | 428188 | M98447        | Hs.22     | transglutaminase 1 (K polypeptide epider  | 2.45 | 3.94  |
|    | 428593 | AW207440      | Hs.185973 | degenerative spermatocyte (homolog Droso  | 2.44 | 2.17  |
|    | 436009 | H57130        | Hs.120925 | ESTs                                      | 2.44 | 2.94  |
|    | 412810 | M21574        | Hs.74615  | platelet-derived growth factor receptor,  | 2.43 | 3.61  |
|    | 416749 | AW068550.comp | Hs.79732  | fibulin 1                                 | 2.43 | 4.46  |
|    | 444672 | Z95636        | Hs.11669  | laminin, alpha 5                          | 2.42 | 6.39  |
|    | 433143 | BE552155      | Hs.294035 | ESTs, Weakly similar to ALU5_HUMAN ALU S  | 2.42 | 3.45  |
|    | 406997 | U07807        |           | metallothionein IV                        | 2.42 | 3.92  |

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|----|--------|-----------|-----------|---|------|-------|
| 5  | 423184 | NM_004428 | Hs.1624   | ephrin-A1                                 | 2.41 | 4.34  |
|    | 421321 | NM_005309 | Hs.103502 | glutamic-pyruvate transaminase (alanine   | 2.41 | 5.08  |
|    | 456826 | AJ871742  | Hs.302428 | wingless-type MMTV integration site fami  | 2.41 | 3.92  |
|    | 428897 | AJ245719  | Hs.194385 | hypothetical protein FLJ20234             | 2.41 | 5.18  |
|    | 400232 |           |           | NM_001895*.Homo sapiens casein kinase 2,  | 2.41 | 3.82  |
| 10 | 421481 | AW391972  | Hs.104696 | KIAA1324 protein                          | 2.40 | 4.03  |
|    | 442083 | RS0192    | Hs.165062 | ESTs                                      | 2.39 | 4.21  |
|    | 422287 | F16365    | Hs.114346 | cytochrome c oxidase subunit VIIa polype  | 2.39 | 8.60  |
|    | 418004 | U37519    | Hs.87539  | aldehyde dehydrogenase 3 family, member   | 2.39 | 2.57  |
|    | 457008 | AA410446  | Hs.112011 | ESTs, Weakly similar to unknown [H.sapie  | 2.39 | 3.85  |
| 15 | 418355 | L42563    | Hs.1165   | ATPase, H7 transporting, nongastric, alp  | 2.38 | 3.84  |
|    | 431179 | AI338644  | Hs.195432 | aldehyde dehydrogenase 2 family (mitocho  | 2.37 | 7.89  |
|    | 432563 | NM_013261 | Hs.198468 | peroxisome proliferative activated recep  | 2.37 | 3.77  |
|    | 402338 |           |           | Target Exon                               | 2.37 | 3.46  |
|    | 443725 | AW245680  | Hs.9701   | growth arrest and DNA-damage-inducible,   | 2.37 | 4.57  |
| 20 | 436723 | AW975895  | Hs.307486 | ESTs                                      | 2.37 | 6.39  |
|    | 452669 | AA216363  | Hs.262958 | hypothetical protein DKFZp434B044         | 2.37 | 3.92  |
|    | 409212 | AI082423  | Hs.141892 | ESTs                                      | 2.36 | 3.79  |
|    | 451323 | AI903313  | Hs.34579  | ESTs, Moderately similar to ALU6_HUMAN A  | 2.35 | 3.29  |
|    | 400307 | AF005081  |           | Homo sapiens skin-specific protein (xp32  | 2.35 | 9.96  |
| 25 | 421993 | R22497    | Hs.110571 | growth arrest and DNA-damage-inducible,   | 2.35 | 5.16  |
|    | 451092 | AI207256  | Hs.13766  | Homo sapiens mRNA for FLJ00074 protein,   | 2.34 | 5.24  |
|    | 446948 | BE409053  | Hs.299629 | peroxisomal long-chain acyl-coA thioeste  | 2.34 | 3.77  |
|    | 424425 | AB031480  | Hs.146824 | SPR1 protein                              | 2.34 | 4.43  |
|    | 426050 | AF017307  | Hs.166096 | E74-like factor 3 (ets domain transcript  | 2.34 | 5.64  |
| 30 | 425190 | U00115    | Hs.155024 | B-cell CLL/lymphoma 6 (zinc finger prote  | 2.33 | 3.51  |
|    | 422106 | D84239    | Hs.111732 | Fc fragment of IgG binding protein        | 2.33 | 6.95  |
|    | 423503 | M92843    | Hs.343586 | zinc finger protein homologous to Zfp-36  | 2.33 | 5.57  |
|    | 453999 | BE328153  | Hs.240087 | ESTs                                      | 2.32 | 3.40  |
|    | 419358 | T78763    | Hs.90063  | neurocalcin delta                         | 2.32 | 6.72  |
| 35 | 430468 | NM_004673 | Hs.241519 | angiopoietin-like 1                       | 2.32 | 3.90  |
|    | 456876 | AL044870  | Hs.208780 | ESTs, Weakly similar to T29647 hypotheti  | 2.32 | 3.27  |
|    | 454947 | AW846590  |           | gb:QV0-CT0180-011099-025-d07 CT0180 Homo  | 2.32 | 4.43  |
|    | 429211 | AF052693  | Hs.198249 | gap junction protein, beta 5 (connexin 3  | 2.31 | 7.22  |
|    | 436282 | BE268288  | Hs.195432 | aldehyde dehydrogenase 2 family (mitocho  | 2.31 | 3.34  |
| 40 | 420202 | AL036557  | Hs.95910  | putative lymphocyte G0/G1 switch gene     | 2.31 | 8.47  |
|    | 419245 | AI732742  | Hs.87440  | ESTs                                      | 2.31 | 3.39  |
|    | 444920 | AW450957  | Hs.235240 | ESTs                                      | 2.30 | 3.30  |
|    | 417314 | N68168    |           | gb:za11c01.s1 Soares fetal liver spleen   | 2.30 | 3.12  |
|    | 409586 | AL050214  | Hs.55044  | DKFZP566H2123 protein                     | 2.30 | 3.52  |
| 45 | 433652 | W07162    | Hs.150826 | RAB25 RAB25, member RAS oncogene family   | 2.29 | 6.11  |
|    | 451176 | AA046457  | Hs.60677  | ESTs                                      | 2.29 | 6.59  |
|    | 410531 | AW752953  |           | gb:QV0-CT0224-261099-035-g02 CT0224 Homo  | 2.29 | 3.29  |
|    | 425982 | R05327    | Hs.189726 | ESTs                                      | 2.29 | 3.37  |
|    | 435584 | NM_001290 | Hs.4980   | LIM domain binding 2                      | 2.29 | 4.54  |
| 50 | 453003 | AA808466  | Hs.103395 | hypothetical protein FLJ14146             | 2.28 | 3.70  |
|    | 434411 | AA632649  | Hs.201372 | ESTs                                      | 2.28 | 4.40  |
|    | 407394 | AF005081  |           | gb:Homo sapiens skin-specific protein (x  | 2.28 | 10.57 |
|    | 411579 | AC005258  | Hs.70830  | U6 snRNA-associated Sm-like protein LSM7  | 2.28 | 4.06  |
|    | 401205 |           |           | Target Exon                               | 2.27 | 2.71  |
| 55 | 443102 | AI247472  | Hs.132965 | ESTs                                      | 2.27 | 5.66  |
|    | 422109 | S73265    | Hs.1473   | gastrin-releasing peptide                 | 2.26 | 3.94  |
|    | 434987 | AW975114  |           | ESTs                                      | 2.26 | 3.72  |
|    | 415477 | NM_002228 | Hs.78465  | v-jun avian sarcoma virus 17 oncogene ho  | 2.26 | 3.42  |
|    | 423515 | AA327017  | Hs.176594 | ESTs                                      | 2.25 | 6.21  |
| 60 | 434903 | AF161369  | Hs.187763 | Homo sapiens HSPC106 mRNA, partial cds    | 2.25 | 3.62  |
|    | 443049 | AI028513  | Hs.132343 | ESTs                                      | 2.25 | 3.13  |
|    | 444637 | T19101    | Hs.11494  | fibulin 5                                 | 2.24 | 6.43  |
|    | 410026 | AI912061  | Hs.55016  | hypothetical protein FLJ21935             | 2.23 | 3.31  |
|    | 418629 | BE247550  | Hs.86859  | growth factor receptor-bound protein 7    | 2.23 | 4.17  |
| 65 | 429587 | AA283969  | Hs.334706 | Homo sapiens cDNA FLJ11801 fis, clone HE  | 2.23 | 3.79  |
|    | 431986 | AA536130  | Hs.149018 | Novel human gene mapping to chromosome 20 | 2.22 | 3.54  |
|    | 409571 | AA504249  | Hs.187585 | ESTs                                      | 2.22 | 3.87  |
|    | 446051 | BE048061  | Hs.37054  | ephrin-A3                                 | 2.22 | 4.57  |
|    | 422418 | AK001383  | Hs.116385 | hypothetical protein FLJ10521             | 2.21 | 4.25  |
| 70 | 453023 | AW028733  | Hs.31439  | serine protease inhibitor, Kunitz type,   | 2.21 | 5.07  |
|    | 435748 | AA699756  | Hs.117335 | ESTs                                      | 2.20 | 3.35  |
|    | 420105 | AW015571  | Hs.32244  | ESTs, Weakly similar to FMO2_HUMAN FIBRO  | 2.19 | 6.55  |
|    | 444922 | AI921750  | Hs.144871 | Homo sapiens cDNA FLJ13752 fis, clone PL  | 2.19 | 3.51  |
|    | 433052 | AW971983  | Hs.293003 | ESTs, Weakly similar to PC4259 ferritin   | 2.19 | 3.32  |
| 75 | 430310 | U60115    | Hs.239069 | four and a half LIM domains 1             | 2.19 | 3.83  |
|    | 447205 | BE617015  | Hs.11006  | ESTs, Moderately similar to T17372 plasm  | 2.19 | 15.65 |
|    | 449967 | R40978    | Hs.271498 | ESTs, Moderately similar to ALU1_HUMAN A  | 2.18 | 3.54  |
|    | 452689 | F33868    | Hs.284176 | transferrin                               | 2.18 | 3.30  |
|    | 417061 | AI675944  | Hs.188691 | Homo sapiens cDNA FLJ12033 fis, clone HE  | 2.18 | 3.77  |
| 80 | 432647 | AI807481  | Hs.278581 | fibroblast growth factor receptor 2 (bac  | 2.18 | 5.64  |
|    | 401192 |           |           | Target Exon                               | 2.17 | 3.33  |
|    | 421752 | AK001521  | Hs.107882 | hypothetical protein FLJ10659             | 2.16 | 3.44  |
|    | 456646 | AJ243662  | Hs.110196 | NICE-1 protein                            | 2.16 | 2.39  |
|    | 421263 | AB020638  | Hs.103000 | KIAA0831 protein                          | 2.16 | 3.37  |
|    | 445656 | W22050    | Hs.21299  | ESTs, Weakly similar to AF151840 1 CGI-8  | 2.16 | 5.17  |
|    | 450624 | AL043983  | Hs.125063 | Homo sapiens cDNA FLJ13825 fis, clone TH  | 2.15 | 3.87  |
|    | 429350 | AI754634  | Hs.131987 | ESTs                                      | 2.15 | 3.90  |

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|    |        |           |           |  |      |      |
|----|--------|-----------|-----------|--|------|------|
|    | 448144 | AW169230  |           | ESTs, Moderately similar to PC4259 ferri | 2.14 | 3.28 |
|    | 429002 | AW248439  | Hs.2340   | junction plakoglobin                     | 2.14 | 5.05 |
|    | 429297 | X82494    | Hs.198862 | fibulin 2                                | 2.14 | 4.32 |
| 5  | 452093 | AA447453  | Hs.27860  | Homo sapiens mRNA; cDNA DKFZp586M0723 (f | 2.14 | 3.99 |
|    | 428848 | NM_000230 | Hs.194236 | leptin (murine obesity homolog)          | 2.14 | 3.39 |
|    | 407584 | W25945    | Hs.8173   | hypothetical protein FLJ10803            | 2.14 | 3.38 |
|    | 453155 | AF052126  | Hs.552    | steroid-5-alpha-reductase, alpha polypep | 2.14 | 2.51 |
|    | 453283 | AA694386  | Hs.290914 | ESTs                                     | 2.13 | 3.28 |
| 10 | 456906 | AF117646  | Hs.156637 | Cas-Br-M (murine) ectropic retroviral tr | 2.13 | 3.76 |
|    | 414815 | AW292140  | Hs.130286 | ESTs                                     | 2.13 | 4.16 |
|    | 417155 | T75125    | Hs.299148 | hypothetical protein FLJ21801            | 2.13 | 3.57 |
|    | 416673 | T77052    | Hs.14039  | ESTs                                     | 2.13 | 3.43 |
|    | 452208 | AA024792  | Hs.31895  | hypothetical protein MGC4093             | 2.12 | 5.67 |
|    | 413966 | AA133935  | Hs.173704 | ESTs, Moderately similar to A53959 throm | 2.12 | 4.76 |
| 15 | 430967 | H16791    | Hs.100895 | ESTs                                     | 2.12 | 2.64 |
|    | 429015 | BE168484  | Hs.194737 | KIAA0453 protein                         | 2.12 | 3.30 |
|    | 439518 | W76326    |           | gb:zd60d04.r1 Soares_fetal_heart_NbHH19W | 2.11 | 2.59 |
|    | 426468 | AA379306  | Hs.117558 | ESTs                                     | 2.10 | 3.56 |
| 20 | 407555 | Z48511    |           | gb:H.sapiens XG mRNA (clone PEP11),      | 2.10 | 3.66 |
|    | 418226 | AA424202  | Hs.83834  | cytochrome b-5                           | 2.10 | 5.14 |
|    | 423441 | R68649    | Hs.278359 | absent in melanoma 1 like                | 2.10 | 3.64 |
|    | 436961 | AW375974  | Hs.156704 | ESTs                                     | 2.10 | 3.21 |
|    | 432633 | AI796390  | Hs.210667 | ESTs                                     | 2.10 | 2.58 |
| 25 | 426102 | AF200496  | Hs.166371 | interleukin 1, zeta                      | 2.09 | 3.77 |
|    | 445467 | AI239832  | Hs.15617  | ESTs, Weakly similar to ALU4_HUMAN ALU S | 2.09 | 3.85 |
|    | 437124 | AA554458  |           | KIAA0666 protein                         | 2.09 | 3.35 |
|    | 407757 | BE048414  | Hs.165215 | hypothetical protein MGC5395             | 2.08 | 4.41 |
|    | 407815 | AW373860  | Hs.183860 | hypothetical protein FLJ20277            | 2.08 | 5.01 |
| 30 | 443906 | AA348031  | Hs.7913   | ESTs                                     | 2.08 | 3.40 |
|    | 423887 | AL080207  | Hs.134585 | DKFZP434G232 protein                     | 2.08 | 3.92 |
|    | 406400 |           |           | kallikrein 8 (neuropsin/ovasin) (KLK8)   | 2.08 | 4.19 |
|    | 437704 | AA766142  | Hs.131810 | ESTs, Moderately similar to ALU1_HUMAN A | 2.07 | 3.30 |
|    | 412533 | AA679863  | Hs.69606  | ESTs                                     | 2.07 | 3.39 |
| 35 | 426310 | NM_000909 | Hs.169266 | neuropeptide Y receptor Y1               | 2.06 | 3.55 |
|    | 411821 | BE299339  | Hs.72249  | three-PDZ containing protein similar to  | 2.06 | 4.98 |
|    | 442599 | AF078037  | Hs.324051 | RelA-associated inhibitor                | 2.06 | 7.23 |
|    | 432212 | AW137742  |           | ESTs                                     | 2.04 | 3.52 |
|    | 453469 | AB014533  | Hs.33010  | KIAA0633 protein                         | 2.04 | 4.01 |
| 40 | 443652 | AI080692  | Hs.134229 | ESTs, Weakly similar to I54401 hypertens | 2.04 | 3.36 |
|    | 452955 | AW390282  | Hs.31130  | transmembrane 7 superfamily member 2     | 2.03 | 3.64 |
|    | 424464 | R68537    | Hs.17962  | ESTs                                     | 2.03 | 4.36 |
|    | 408702 | AW959893  | Hs.27099  | hypothetical protein FLJ23293 similar to | 2.03 | 3.31 |
|    | 439908 | AI168031  | Hs.155507 | ESTs                                     | 2.03 | 3.83 |
| 45 | 412825 | AW167439  | Hs.190651 | Homo sapiens cDNA FLJ13625 fis, clone PL | 2.02 | 5.56 |
|    | 406784 | AI144297  | Hs.169401 | apolipoprotein E                         | 2.02 | 3.40 |
|    | 427309 | NM_005714 | Hs.175218 | potassium channel, subfamily K, member 7 | 2.02 | 4.58 |
|    | 453195 | BE241876  | Hs.32352  | hypothetical protein DKFZp434K1210       | 2.02 | 3.57 |
|    | 404246 |           |           | Target Exon                              | 2.01 | 7.30 |
| 50 | 443679 | AK001810  | Hs.9670   | hypothetical protein FLJ10948            | 2.01 | 5.81 |
|    | 410669 | AW805749  |           | superoxide dismutase 2, mitochondrial    | 2.01 | 3.05 |
|    | 446193 | AI279390  | Hs.144658 | ESTs, Weakly similar to T17257 hypotheli | 2.01 | 2.32 |
|    | 449228 | AJ403107  | Hs.148590 | protein related with psoriasis           | 2.00 | 5.10 |
|    | 434346 | AA630445  |           | ESTs                                     | 2.00 | 3.51 |
| 55 | 456098 | AW747800  | Hs.55016  | hypothetical protein FLJ21935            | 2.00 | 4.96 |
|    | 452467 | AW500815  |           | ESTs                                     | 2.00 | 4.66 |
|    | 442866 | AI743317  | Hs.283622 | ESTs, Weakly similar to ALU5_HUMAN ALU S | 1.98 | 3.72 |
|    | 434699 | AA643687  | Hs.149425 | Homo sapiens cDNA FLJ11980 fis, clone HE | 1.98 | 3.11 |
|    | 417553 | L09190    |           | trichohyalin                             | 1.98 | 2.09 |
| 60 | 449142 | R15913    | Hs.194987 | ESTs                                     | 1.98 | 3.50 |
|    | 407597 | AA043925  | Hs.339352 | Homo sapiens brother of CDO (BOC) mRNA,  | 1.98 | 6.25 |
|    | 429299 | AI620463  | Hs.347408 | hypothetical protein MGC13102            | 1.97 | 3.77 |
|    | 423031 | AI278995  |           | ESTs                                     | 1.97 | 3.62 |
|    | 433495 | AW373784  | Hs.71     | alpha-2-glycoprotein 1, zinc             | 1.96 | 4.57 |
| 65 | 430420 | AW140027  | Hs.26373  | Homo sapiens cDNA: FLJ23449 fis, clone H | 1.96 | 6.09 |
|    | 420139 | NM_005357 | Hs.95351  | lipase, hormone-sensitive                | 1.95 | 5.77 |
|    | 418462 | BE001596  | Hs.85266  | integrin, beta 4                         | 1.95 | 6.09 |
|    | 447261 | NM_006691 | Hs.17917  | extracellular link domain-containing 1   | 1.95 | 3.33 |
|    | 437220 | AL117542  | Hs.334305 | GS1999full                               | 1.94 | 3.45 |
| 70 | 407601 | AC002300  | Hs.37129  | sodium channel, nonvoltage-gated 1, beta | 1.94 | 5.46 |
|    | 443595 | AF169312  | Hs.9613   | PPAR(gamma) angiotensin related protein  | 1.94 | 4.67 |
|    | 409007 | AL122107  | Hs.49599  | Homo sapiens mRNA; cDNA DKFZp434G0827 (f | 1.94 | 3.59 |
|    | 408717 | AF045458  | Hs.47061  | unc-51 (C. elegans)-like kinase 1        | 1.94 | 4.29 |
|    | 420055 | NM_001487 | Hs.94672  | GCN5 (general control of amino-acid synt | 1.94 | 3.38 |
| 75 | 430392 | NM_000627 | Hs.241257 | latent transforming growth factor beta b | 1.93 | 3.75 |
|    | 425078 | NM_002599 | Hs.154437 | phosphodiesterase 2A, cGMP-stimulated    | 1.93 | 4.06 |
|    | 423527 | AI206965  | Hs.105861 | hypothetical protein FLJ13824            | 1.93 | 4.70 |
|    | 447151 | AI022813  | Hs.92679  | Homo sapiens clone CDABP0014 mRNA sequen | 1.91 | 3.77 |
|    | 422101 | AW404176  | Hs.111611 | ribosomal protein L27                    | 1.91 | 3.18 |
| 80 | 456653 | AI807519  | Hs.104520 | Homo sapiens cDNA FLJ13694 fis, clone PL | 1.91 | 3.41 |
|    | 443444 | AW952619  | Hs.17235  | Homo sapiens clone TCCCA00176 mRNA sequ  | 1.91 | 3.52 |
|    | 420924 | R01026    | Hs.245321 | ESTs                                     | 1.91 | 3.22 |
|    | 426048 | AI768853  | Hs.134478 | ESTs                                     | 1.90 | 3.56 |
|    | 414092 | Z14244    | Hs.75752  | cytochrome c oxidase subunit VIIb        | 1.90 | 4.15 |

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|    |        |           |           |   |      |      |
|----|--------|-----------|-----------|---|------|------|
| 5  | 415274 | AF001548  | Hs.78344  | myosin, heavy polypeptide 11, smooth mus  | 1.90 | 5.88 |
|    | 428368 | BE440042  | Hs.83326  | matrix metalloproteinase 3 (stromelysin   | 1.90 | 2.28 |
|    | 418418 | R61527    | Hs.237517 | ESTs                                      | 1.90 | 3.56 |
|    | 449372 | AA001266  | Hs.133521 | ESTs                                      | 1.89 | 3.90 |
|    | 438752 | AW238673  | Hs.146038 | ESTs                                      | 1.89 | 5.24 |
| 10 | 428193 | NM_004235 |           | Kruppel-like factor 4 (gut)               | 1.89 | 5.21 |
|    | 433251 | AB040955  | Hs.322735 | KIAA1522 protein                          | 1.89 | 5.00 |
|    | 430560 | Z28942    | Hs.243960 | N-myc downstream-regulated gene 2         | 1.89 | 7.09 |
|    | 427795 | BE268268  | Hs.180842 | ribosomal protein L13                     | 1.89 | 4.51 |
|    | 410209 | AI583661  | Hs.60548  | hypothetical protein PRO1635              | 1.89 | 3.35 |
| 15 | 449243 | AW295031  | Hs.198671 | ESTs                                      | 1.89 | 4.26 |
|    | 420225 | AW243046  | Hs.282076 | Homo sapiens mRNA for KIAA1650 protein,   | 1.88 | 6.20 |
|    | 443932 | AW888222  | Hs.9973   | tensin                                    | 1.88 | 9.28 |
|    | 427929 | BE613835  | Hs.181159 | Homo sapiens mRNA; cDNA DKFZp434F0217 (f  | 1.87 | 4.25 |
|    | 400078 |           |           | Eos Control                               | 1.87 | 6.73 |
| 20 | 422639 | AI929377  | Hs.173724 | creatine kinase, brain                    | 1.87 | 5.51 |
|    | 447374 | AF263462  | Hs.18376  | KIAA1319 protein                          | 1.87 | 3.42 |
|    | 430346 | AK000331  | Hs.297641 | KIAA0462 protein                          | 1.87 | 4.15 |
|    | 428223 | AA424313  | Hs.98402  | ESTs                                      | 1.87 | 3.70 |
|    | 408792 | L29433    | Hs.47913  | coagulation factor X                      | 1.87 | 4.08 |
| 25 | 433855 | AA834082  | Hs.307559 | ESTs                                      | 1.87 | 4.16 |
|    | 451583 | AI653797  | Hs.24133  | ESTs                                      | 1.87 | 3.81 |
|    | 426377 | AK001921  | Hs.169575 | hypothetical protein MGC2550              | 1.86 | 5.55 |
|    | 431647 | AL138578  | Hs.266738 | hypothetical protein dJ796117.1           | 1.86 | 3.74 |
|    | 422055 | NM_014320 | Hs.111029 | putative heme-binding protein             | 1.86 | 4.68 |
| 30 | 422750 | AL050276  | Hs.42400  | zinc finger protein 288                   | 1.86 | 4.04 |
|    | 422491 | AA338548  | Hs.117546 | neurotatin                                | 1.86 | 4.37 |
|    | 438942 | AW875398  | Hs.6451   | PRO0659 protein                           | 1.85 | 5.06 |
|    | 400198 |           |           | Eos Control                               | 1.85 | 5.22 |
|    | 427136 | AL117415  | Hs.173716 | a disintegrin and metalloproteinase doma  | 1.85 | 3.41 |
| 35 | 427605 | NM_000997 | Hs.337445 | ribosomal protein L37                     | 1.85 | 4.73 |
|    | 418253 | AA215539  | Hs.283643 | Homo sapiens cDNA FLJ11606 fis, clone HE  | 1.84 | 5.94 |
|    | 441912 | AA971484  | Hs.159938 | ESTs                                      | 1.84 | 3.73 |
|    | 421632 | AA825426  | Hs.334689 | ESTs, Weakly similar to ALU1_HUMAN ALU S  | 1.83 | 3.62 |
|    | 440602 | AI743491  | Hs.292692 | ESTs                                      | 1.83 | 2.39 |
| 40 | 431882 | NM_001426 | Hs.271977 | engrailed homolog 1                       | 1.83 | 3.30 |
|    | 420772 | AW752656  | Hs.222707 | KIAA1718 protein                          | 1.83 | 3.73 |
|    | 429197 | H24471    | Hs.26930  | ESTs, Weakly similar to T20272 hypotheti  | 1.82 | 3.41 |
|    | 450796 | NM_001988 | Hs.25482  | envoplakin                                | 1.82 | 7.73 |
|    | 426928 | AF037062  | Hs.172914 | retinol dehydrogenase 5 (11-cis and 9-ci  | 1.82 | 3.38 |
| 45 | 415409 | AW993701  |           | NS1-associated protein 1                  | 1.82 | 3.60 |
|    | 401131 |           |           | NM_001651*:Homo sapiens aquaporin 5 (AQP  | 1.82 | 5.53 |
|    | 421324 | BE257515  | Hs.103503 | deoxyribonuclease I-like 2                | 1.81 | 5.53 |
|    | 400079 |           |           | Eos Control                               | 1.81 | 6.79 |
|    | 430513 | AJ012008  | Hs.241586 | G6C protein                               | 1.81 | 7.49 |
| 50 | 426508 | W23184    | Hs.170171 | glutamate-ammonia ligase (glutamine synt  | 1.81 | 3.55 |
|    | 425883 | AL137708  | Hs.161031 | Homo sapiens mRNA; cDNA DKF Zp434K0322 (f | 1.80 | 5.43 |
|    | 429191 | AF065215  | Hs.198161 | phospholipase A2, group IVB (cytosolic)   | 1.79 | 5.90 |
|    | 432417 | AL040360  | Hs.162203 | ESTs, Weakly similar to alternatively sp  | 1.79 | 3.63 |
|    | 406467 |           |           | Target Exon                               | 1.79 | 4.16 |
| 55 | 444135 | AK000374  | Hs.10346  | hypothetical protein FLJ20154             | 1.79 | 3.32 |
|    | 426402 | BE387327  | Hs.80475  | polymerase (RNA) II (DNA directed) polyp  | 1.78 | 3.51 |
|    | 412524 | AA417813  | Hs.44208  | hypothetical protein FLJ23153             | 1.78 | 3.72 |
|    | 425880 | X01630    | Hs.160786 | argininosuccinate synthetase              | 1.78 | 3.29 |
|    | 400300 | X03363    |           | HER2 receptor tyrosine kinase (c-erb-b2,  | 1.78 | 3.44 |
| 60 | 451304 | M92642    | Hs.26208  | collagen, type XVI, alpha 1               | 1.78 | 3.57 |
|    | 400082 |           |           | Eos Control                               | 1.78 | 3.82 |
|    | 446603 | NM_014835 | Hs.15519  | oxysterol-binding protein-related protei  | 1.77 | 3.48 |
|    | 425415 | M13903    | Hs.157091 | involucrin                                | 1.77 | 4.64 |
|    | 400083 |           |           | Eos Control                               | 1.77 | 6.31 |
| 65 | 427620 | NM_003705 | Hs.179866 | solute carrier family 25 (mitochondrial   | 1.76 | 3.47 |
|    | 446971 | AI652143  | Hs.288382 | hypothetical protein FLJ13111             | 1.76 | 4.21 |
|    | 429807 | AK002138  | Hs.306227 | Homo sapiens cDNA FLJ11275 fis, clone PL  | 1.76 | 2.63 |
|    | 446560 | AK001567  | Hs.311002 | Homo sapiens cDNA FLJ10705 fis, clone NT  | 1.76 | 3.82 |
|    | 412824 | AW958075  | Hs.11261  | small proline-rich protein 2A             | 1.76 | 4.31 |
| 70 | 439927 | AA854650  | Hs.124597 | ESTs                                      | 1.75 | 3.63 |
|    | 410223 | S73775    | Hs.60708  | calsequestrin 1 (fast-twitch, skeletal m  | 1.75 | 3.79 |
|    | 414500 | W24087    | Hs.76285  | DKFZP564B167 protein                      | 1.75 | 3.55 |
|    | 448182 | AF244137  | Hs.20597  | host cell factor homolog                  | 1.75 | 3.40 |
|    | 439651 | AF086480  | Hs.56255  | ESTs                                      | 1.75 | 2.55 |
| 75 | 430486 | BE062109  | Hs.241551 | chloride channel, calcium activated, fam  | 1.75 | 3.54 |
|    | 424389 | AA339786  |           | lymphocyte-specific protein 1             | 1.75 | 4.48 |
|    | 450837 | D58463    | Hs.85969  | hypothetical protein FLJ12270             | 1.74 | 3.40 |
|    | 425920 | AL049977  | Hs.162209 | claudin 8                                 | 1.74 | 3.33 |
|    | 435680 | H50946    | Hs.284183 | Homo sapiens galectin-related inhibitor   | 1.74 | 3.47 |
| 80 | 439639 | AA370045  | Hs.6607   | AXIN1 up-regulated                        | 1.73 | 5.22 |
|    | 416950 | AL049798  | Hs.80552  | dermalopontin                             | 1.73 | 4.99 |
|    | 400199 |           |           | Eos Control                               | 1.73 | 6.25 |
|    | 409737 | AB011539  | Hs.56186  | EGF-like-domain, multiple 3               | 1.73 | 4.28 |
|    | 424420 | BE614743  | Hs.146588 | prostaglandin E synthase                  | 1.72 | 3.42 |
|    | 421545 | AA292810  | Hs.90034  | hypothetical protein FLJ21916             | 1.72 | 2.12 |
|    | 414323 | NM_014759 | Hs.334688 | KIAA0273 gene product                     | 1.71 | 4.82 |
|    | 407228 | M25079    | Hs.155376 | hemoglobin, beta                          | 1.70 | 7.02 |

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|    |        |           |           |   |      |      |
|----|--------|-----------|-----------|---|------|------|
| 5  | 406643 | N77976    | Hs.347939 | hemoglobin, alpha 2                             | 1.70 | 3.60 |
|    | 447299 | AF043897  | Hs.18075  | chromosome 9 open reading frame 3               | 1.70 | 5.10 |
|    | 439733 | AL365412  | Hs.107203 | hypothetical protein from EUROIMAGE 1759        | 1.69 | 2.92 |
|    | 415512 | Y16270    | Hs.78482  | paralemmin                                      | 1.69 | 4.92 |
|    | 407100 | R29657    |           | gb:F1-1179D 22 week old human fetal live        | 1.69 | 3.96 |
| 10 | 425503 | W92517    | Hs.158203 | actin binding LIM protein 1                     | 1.68 | 5.97 |
|    | 433738 | AI684802  |           | ESTs  | 1.68 | 2.88 |
|    | 406791 | AI220684  | Hs.347939 | hemoglobin, alpha 2                             | 1.68 | 3.44 |
|    | 428975 | NM_004672 | Hs.194694 | mitogen-activated protein kinase kinase         | 1.68 | 2.74 |
|    | 435661 | AF220263  | Hs.193920 | MOST2 protein                                   | 1.67 | 3.56 |
| 15 | 459317 | BRCA1b    |           | Eos Control                                     | 1.67 | 3.34 |
|    | 426923 | AF112977  | Hs.172887 | phytanoyl-CoA hydroxylase (Refsum disease)      | 1.67 | 4.53 |
|    | 426682 | AV660038  | Hs.2056   | UDP glycosyltransferase 1 family, polypeptide   | 1.67 | 3.36 |
|    | 417029 | AW952192  | Hs.273385 | guanine nucleotide binding protein (G protein)  | 1.67 | 5.22 |
|    | 437201 | F29279    | Hs.171625 | hypothetical protein MGC14697                   | 1.67 | 5.75 |
| 20 | 454478 | AW805749  |           | superoxide dismutase 2, mitochondrial           | 1.67 | 4.55 |
|    | 406710 | AI708347  | Hs.184014 | ribosomal protein L31                           | 1.66 | 3.80 |
|    | 431593 | NM_002108 | Hs.276590 | ESTs  | 1.66 | 2.45 |
|    | 457820 | AA341497  | Hs.31408  | RAR (RAS like GTPASE)                           | 1.66 | 2.44 |
|    | 441899 | AI372588  | Hs.8022   | TU3A protein                                    | 1.66 | 4.06 |
| 25 | 414186 | U33446    | Hs.75799  | protease, serine, 8 (prostatic)                 | 1.65 | 6.52 |
|    | 418116 | AA252457  | Hs.86543  | ESTs, Moderately similar to T00256 hypothetical | 1.65 | 3.44 |
|    | 403105 |           |           | Target Exon                                     | 1.64 | 4.12 |
|    | 450014 | N41322    | Hs.18441  | ESTs  | 1.64 | 2.90 |
|    | 436685 | W28661    | Hs.5288   | Homo sapiens mRNA; cDNA DKFZp434M245 (fr        | 1.64 | 4.49 |
| 30 | 401429 |           |           | C14001067:gi 4126465 dbj BAA36581.1  (AB        | 1.64 | 3.82 |
|    | 420983 | W95228    | Hs.100764 | cathepsin G                                     | 1.64 | 3.64 |
|    | 433126 | AB021262  | Hs.99816  | beta-calenin-interacting protein ICAT           | 1.63 | 3.29 |
|    | 428150 | AW950547  | Hs.70312  | cytochrome c oxidase subunit VIIa polypeptide   | 1.63 | 7.05 |
|    | 412295 | AW088826  |           | poly(A)-binding protein, nuclear 1              | 1.63 | 4.01 |
| 35 | 430831 | AA703239  | Hs.269804 | ESTs, Weakly similar to ALU1_HUMAN ALU S        | 1.63 | 3.60 |
|    | 429348 | AJ242859  | Hs.199731 | Langerhans cell specific c-type lectin          | 1.62 | 2.64 |
|    | 407082 | Z47055    |           | gb:Human partial cDNA sequence, farnesyl        | 1.62 | 2.13 |
|    | 452556 | H78517    | Hs.33905  | ESTs  | 1.62 | 4.64 |
|    | 415688 | AA166963  |           | gb:zo86d01.s1 Stratagene ovarian cancer         | 1.62 | 3.33 |
| 40 | 446515 | AL048875  |           | hypothetical protein DKFZp566I33                | 1.62 | 3.66 |
|    | 445919 | T53519    | Hs.334692 | hypothetical protein MGC14141                   | 1.62 | 5.65 |
|    | 447330 | BE279949  | Hs.18141  | ladinin 1                                       | 1.61 | 5.61 |
|    | 412374 | X01388    | Hs.73849  | apolipoprotein C-III                            | 1.61 | 5.18 |
|    | 400229 |           |           | NM_021724*:Homo sapiens nuclear receptor        | 1.61 | 3.57 |
| 45 | 414814 | D14697    | Hs.77393  | farnesyl diphosphate synthase (farnesyl         | 1.61 | 2.08 |
|    | 424397 | AI950320  |           | gb:wp08d10.x1 NCI_CGAP_Kid12 Homo sapiens       | 1.60 | 3.59 |
|    | 451335 | AB023192  | Hs.26285  | imidazole receptor candidate                    | 1.60 | 5.54 |
|    | 426156 | BE244537  | Hs.167382 | neuropeptide receptor A/guanylate               | 1.60 | 4.79 |
|    | 456267 | AI127958  | Hs.83393  | cystatin E/M                                    | 1.60 | 2.50 |
| 50 | 436950 | L05779    | Hs.113    | epoxide hydrolase 2, cytoplasmic                | 1.60 | 3.98 |
|    | 421397 | S67368    | Hs.103998 | gamma-aminobutyric acid (GABA) A receptor       | 1.60 | 3.28 |
|    | 419092 | J05581    | Hs.89603  | mucin 1, transmembrane                          | 1.60 | 3.69 |
|    | 440160 | BE560269  | Hs.7010   | NPD002 protein                                  | 1.59 | 2.49 |
|    | 417481 | AA203281  | Hs.6191   | ESTs  | 1.59 | 3.60 |
| 55 | 406778 | H06273    | Hs.101651 | Homo sapiens mRNA; cDNA DKFZp434C107 (fr        | 1.58 | 3.98 |
|    | 402991 |           |           | Target Exon                                     | 1.58 | 3.36 |
|    | 425169 | AW292500  | Hs.128514 | ESTs  | 1.58 | 4.00 |
|    | 446429 | AI681807  | Hs.201391 | ESTs  | 1.58 | 3.20 |
|    | 426445 | AA378739  | Hs.187711 | ESTs  | 1.57 | 3.63 |
| 60 | 425196 | AL037915  | Hs.155097 | carbonic anhydrase II                           | 1.57 | 3.44 |
|    | 422581 | NM_016339 | Hs.118562 | Link guanine nucleotide exchange factor         | 1.57 | 3.55 |
|    | 440054 | AW661947  | Hs.6891   | splicing factor, arginine/serine-rich 6         | 1.56 | 3.39 |
|    | 415988 | BE407713  | Hs.78943  | bleomycin hydrolase                             | 1.56 | 2.43 |
|    | 441860 | AW451330  | Hs.348198 | hypothetical protein FLJ20262                   | 1.55 | 3.38 |
| 65 | 428462 | AI571485  | Hs.30258  | ESTs  | 1.55 | 3.65 |
|    | 449518 | BE395253  | Hs.30861  | ESTs  | 1.55 | 3.80 |
|    | 420075 | AF142482  | Hs.203846 | TEA domain family member 3                      | 1.55 | 3.81 |
|    | 406799 | AA908548  |           | gb:og83g12.s1 NCI_CGAP_Ov8 Homo sapiens         | 1.54 | 3.87 |
|    | 450787 | AB006190  | Hs.25475  | aquaporin 7                                     | 1.54 | 4.06 |
| 70 | 419659 | AB023206  | Hs.92186  | Leman coiled-coil protein                       | 1.54 | 3.82 |
|    | 408543 | N78098    | Hs.44289  | ESTs  | 1.54 | 3.10 |
|    | 410169 | AI373741  | Hs.59384  | hypothetical protein MGC3047                    | 1.54 | 4.73 |
|    | 426068 | AF029778  | Hs.166154 | jagged 2  | 1.54 | 4.82 |
|    | 432191 | AA043193  | Hs.273186 | hypothetical protein, clone Telethon/Ita        | 1.54 | 5.83 |
| 75 | 415166 | NM_003652 | Hs.78068  | carboxypeptidase Z                              | 1.54 | 4.58 |
|    | 410048 | W76467    | Hs.343874 | proline oxidase homolog                         | 1.54 | 4.66 |
|    | 430502 | AI123657  | Hs.127264 | ESTs, Weakly similar to JC5314 CDC28/cdc        | 1.53 | 3.41 |
|    | 433640 | AW390125  | Hs.240443 | Homo sapiens cDNA: FLJ23538 fis, clone L        | 1.53 | 4.57 |
|    | 413353 | AW293542  | Hs.75309  | eukaryotic translation elongation factor        | 1.53 | 3.59 |
| 80 | 431021 | AI869664  |           | thiosulfate sulfurtransferase (rhodanese)       | 1.53 | 3.73 |
|    | 431243 | U46455    | Hs.252189 | syndecan 4 (amphiglycan, ryudocan)              | 1.52 | 6.09 |
|    | 433019 | AI208513  | Hs.279915 | translocase of inner mitochondrial membrane     | 1.52 | 4.49 |
|    | 406801 | AW242054  | Hs.190813 | ribosomal protein L9                            | 1.51 | 5.56 |
|    | 427461 | AA531527  | Hs.332040 | hypothetical protein MGC13010                   | 1.51 | 3.77 |
|    | 432894 | AW167668  | Hs.279772 | brain specific protein                          | 1.51 | 6.72 |
|    | 415550 | L13720    | Hs.78501  | growth arrest-specific 6                        | 1.50 | 4.02 |
|    | 424707 | BE061914  | Hs.10844  | Homo sapiens cDNA FLJ14476 fis, clone MA        | 1.49 | 4.21 |

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|    |        |           |           |   |      |      |
|----|--------|-----------|-----------|---|------|------|
| 5  | 445624 | AW140103  | Hs.78880  | ivb (bacterial acetolactate synthase)-I   | 1.48 | 3.61 |
|    | 445071 | AI280246  | Hs.149504 | ESTs                                      | 1.48 | 3.39 |
|    | 440763 | AB028988  | Hs.7407   | KIAA1065 protein                          | 1.48 | 4.03 |
|    | 451988 | AF263928  | Hs.27410  | papillomavirus regulatory factor PRF-1    | 1.47 | 3.58 |
|    | 427841 | AW883367  |           | hypothetical protein MGC5306              | 1.47 | 3.61 |
| 10 | 426335 | AI054347  | Hs.2017   | ribosomal protein L38                     | 1.47 | 3.76 |
|    | 454098 | W27953    | Hs.292911 | Plakophilin                               | 1.46 | 2.95 |
|    | 456766 | R87310    | Hs.7740   | oxysterol binding protein-like 1          | 1.46 | 3.40 |
|    | 440526 | AI832243  |           | ESTs                                      | 1.46 | 3.38 |
|    | 452586 | AW958479  | Hs.289043 | spindlin                                  | 1.45 | 3.48 |
| 15 | 433399 | N46406    | Hs.84700  | similar to phosphatidylcholine transfer   | 1.45 | 3.44 |
|    | 430238 | N72519    | Hs.236545 | hydroxyacid oxidase 2 (long chain)        | 1.45 | 4.00 |
|    | 425456 | T70445    | Hs.157850 | ribosomal protein L9                      | 1.45 | 4.79 |
|    | 411085 | AF022991  | Hs.68398  | period (Drosophila) homolog 1             | 1.45 | 4.43 |
|    | 433638 | AW672507  | Hs.3462   | cytochrome c oxidase subunit VIic         | 1.44 | 3.89 |
| 20 | 445156 | N89367    | Hs.12373  | adenylate cyclase 6                       | 1.44 | 3.60 |
|    | 446576 | AI659477  |           | dystroglycan 1 (dystrophin-associated gl  | 1.44 | 3.07 |
|    | 440433 | AA252452  | Hs.7187   | hypothetical protein FLJ10707             | 1.43 | 3.67 |
|    | 434536 | H14486    | Hs.3903   | Cdc42 effector protein 4; binder of Rho   | 1.42 | 3.35 |
|    | 423513 | AF035960  | Hs.129719 | transglutaminase 5                        | 1.42 | 3.18 |
| 25 | 418681 | AA287786  | Hs.23449  | insulin receptor tyrosine kinase substra  | 1.42 | 3.38 |
|    | 421935 | AA131632  | Hs.109672 | CMP-NeuAC.(beta)-N-acetyl-galactosaminide | 1.41 | 4.04 |
|    | 406712 | M31212    | Hs.77385  | myosin, light polypeptide 6, alkali, smo  | 1.41 | 4.27 |
|    | 413944 | AW001579  | Hs.9645   | Homo sapiens mRNA for KIAA1741 protein,   | 1.41 | 3.80 |
|    | 435879 | AW084463  | Hs.30002  | SH3-containing protein SH3GLB2; KIAA1848  | 1.41 | 3.55 |
| 30 | 417967 | BE244373  | Hs.1119   | nuclear receptor subfamily 4, group A, m  | 1.40 | 4.07 |
|    | 412669 | AW880841  | Hs.96908  | p53-induced protein                       | 1.40 | 3.59 |
|    | 415523 | AI042003  | Hs.295847 | cell matrix adhesion regulator            | 1.40 | 4.38 |
|    | 406713 | U02629    | Hs.77385  | myosin, light polypeptide 6, alkali, smo  | 1.39 | 4.03 |
|    | 439606 | W79123    | Hs.58561  | G protein-coupled receptor 87             | 1.39 | 3.65 |
| 35 | 430135 | NM_000035 | Hs.234234 | aldolase B, fructose-bisphosphate         | 1.37 | 3.99 |
|    | 422682 | W05238    | Hs.94316  | ESTs, Weakly similar to T31613 hypotheti  | 1.36 | 3.30 |
|    | 408198 | AA131111  |           | gb:z016b06.r1 Stratagene colon (937204)   | 1.36 | 3.33 |
|    | 419600 | AA448958  | Hs.91481  | NEU1 protein                              | 1.35 | 3.49 |
|    | 437141 | BE304917  | Hs.31097  | hypothetical protein FLJ21478             | 1.34 | 3.47 |
| 40 | 408250 | R92918    | Hs.19597  | KIAA1694 protein                          | 1.34 | 3.89 |
|    | 430012 | NM_015373 | Hs.227637 | chromosome 22 open reading frame 2        | 1.32 | 4.24 |
|    | 425183 | W76098    | Hs.19223  | HCCA2 protein                             | 1.32 | 3.52 |
|    | 427706 | AW971225  | Hs.293800 | ESTs, Weakly similar to ALU1_HUMAN ALU S  | 1.32 | 3.50 |
|    | 438303 | AB028998  | Hs.6147   | KIAA1075 protein                          | 1.32 | 3.71 |
| 45 | 406800 | AA505535  |           | gb:nh84h10.s1 NCI_CGAP_Br1.1 Homo sapien  | 1.32 | 3.65 |
|    | 442533 | AA161224  | Hs.8372   | ubiquinol-cytochrome c reductase (6.4kD)  | 1.32 | 4.14 |
|    | 428475 | AF172940  | Hs.184542 | CGI-127 protein                           | 1.31 | 3.43 |
|    | 406742 | AI468091  | Hs.279860 | tumor protein, translationally-controlle  | 1.30 | 3.34 |
|    | 432295 | BE091049  | Hs.343665 | ribosomal protein S15a                    | 1.30 | 3.29 |
| 50 | 422959 | AV647015  |           | paired immunoglobulin-like receptor beta  | 1.28 | 3.53 |
|    | 402956 |           |           | ENSP00000244002; KIAA1335 protein (Fragm  | 1.24 | 3.38 |
|    | 406743 | AA911568  | Hs.279860 | tumor protein, translationally-controlle  | 1.24 | 3.70 |
|    | 437142 | AI791617  | Hs.145068 | ESTs, Moderately similar to A46010 X-in   | 1.23 | 3.48 |
|    | 424372 | AW952803  | Hs.21732  | Homo sapiens cDNA FLJ11780 fis, clone HE  | 1.18 | 2.44 |
| 55 | 414716 | AF199598  | Hs.97044  | Kv channel-interacting protein 2          | 1.18 | 3.43 |
|    | 431931 | AB035302  | Hs.272212 | cadherin 9, type 2 (T1-cadherin)          | 1.15 | 2.49 |
|    | 406587 |           |           | C15000544; gij5454148[re]NP_006368.1] U   | 1.06 | 2.25 |
|    | 409574 | AW419080  | Hs.250645 | ESTs                                      | 1.00 | 3.60 |
|    | 417435 | NM_005181 | Hs.82129  | carbonic anhydrase III, muscle specific   | 1.00 | 3.44 |
| 60 | 402075 |           |           | ENSP00000251056; Plasma membrane calcium  | 1.00 | 3.37 |
|    | 422330 | D30783    | Hs.115263 | epiregulin                                | 1.00 | 3.35 |
|    | 418986 | AI123555  | Hs.81796  | ESTs                                      | 1.00 | 3.28 |
|    | 404175 |           |           | Target Exon                               | 1.00 | 3.08 |
|    | 452640 | AA027115  | Hs.100206 | ESTs, Weakly similar to A53856 aryl-acyl  | 1.00 | 2.82 |
| 65 | 443564 | AI921685  | Hs.199713 | ESTs                                      | 1.00 | 2.51 |

TABLE 64B:

Pkey: Unique Eos probeset identifier number  
CAT number: Gene cluster number  
Accession: Genbank accession numbers

|    |        |            |   |
|----|--------|------------|---|
| 70 | Pkey   | CAT Number | Accession   |
|    | 412636 | 1438_1     | M77830 NM_004415 AF139065 BG681115 BG740377 B1712964 BG000656 AA128470 BI438324 H27408 BE931630 BE167165 AW370827 AW370813 J05211 BG698865 BG740734 BG680618 BG739778 BI765807 BM353403 BM353248 AW177784 AW205789 AW951576 AW848592 BE182164 BF149266 BE940187 BI060445 BI060444 BF350983 BE720095 BE720069 BE715154 BE082584 BE082576 BE004047 AA857316 BI039774 BE713818 BE713548 AW170253 BE160433 BI039775 AW886475 BM462504 BE931734 BF149264 AA340777 BF381183 BG621737 AU127260 AW364859 BF993352 BG223489 BE819009 BF381184 BE715956 R58704 AA852212 AW366566 BI090358 BF087707 BE819046 BE819005 AA377127 BE073467 BE819069 BE819048 BI036306 BG990973 BI040954 BF919911 AU140155 AI951766 AI434518 AW804674 BF752969 BE837009 BE925826 BF149265 AW995615 BE814264 BI039782 AU140407 BE144243 BE709863 BF985642 BE001923 BF933510 AW265328 BG436319 BE182166 AW365175 AW847688 BE818280 AW177933 BF873679 AW178000 BE082526 BF476866 BF086994 BF592276 BE082507 BE082514 BE082505 BF873693 AW068840 AW847678 BF804153 AW365157 BE813930 BE002030 AW365153 BE184941 BF749421 BE184920 BF839562 BE184933 BF842254 BE698470 BE931048 BF999889 BF368816 BE184924 BE159646 BE714632 BE184948 BG986845 AA131128 AA099891 W39488 CQ4715 BF096124 BE865341 AW799304 AL603116 BE149760 BE705967 BE705966 BE705968 AW848723 AW376699 AW376817 AW376697 BG005097 BF751115 BE696084 AW848371 AW376782 AW848789 AW849074 AW361413 BF927725 BF094211 AW997139 BE865474 BE185187 BE156621 BE715089 BE713297 BE713298 BE179915 AW799309 BF872345 BF088676 BE705939 AW752599 BG005197 BF350086 BE715196 BE715155 BF752396 BF093817 BF831190 BF752409 BE006561 BG959922 BF094833 BF094748 BF094583 AW377699 AW607238 BE082519 AW377700 BF349467 AI190590 AI554403 AI392926 AU158477 BI467252 AU159919 AI760816 BF082516 AI439101 AA451923 AI340326 AI590975 BI791553 AI700963 |

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BE838913 A1552065 AV697118 BF736873 BG957211 AW175784 A1904229 AW17530 R70549 AW175762 A1904242 BG289938 A1376867 AA481939  
AA446628 A1076724 AW841882 AA985406 BE830620 BE074596 AL552189 A1907227 BE179717 BG998658 BF179931 AW175631 AV689870  
AV691022 AA025156 A124297 AW071132 BG951486 A1907206 BF348688 A1904222 BG954414 A1590133 AW080151 AA480116 BF360696 A1689419  
N15837 AW373844 BF991704 BG222449 B1030443 BE698057 BG954850 A1905836 BF984111 AU123871 BF834727 A1904283 A1909847 BF757857  
BF923905 BG283493 AA299475 R0150 BG987145 BF837559 BG469759 AA496412 BF758339 BG957192 AW373869 BG952345 BF229957  
BE697472 BE697475 AA011005 BG005000 T65558 AA908196 AA716585

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|    |        |           |  |
|----|--------|-----------|--|
| 5  | 424389 | 1059_4    | BG190759 AW961118 W77994 AA339877 AW845121 AW845129 BG181820 BE716719 AI125483 AI161017 W73951 AI250771 AA912611 AA339786 BE838286 BE838282 BE716636 AA777158 W94063 BE716628 BE716625 BE838371 BF371044 BE716631 BE716402 |
|    | 433738 | 593682_1  | AL037666 AW607643 AI280025 AL037665 AW291619 AI280142 AA765506 AI684802 AW085941 AI688062  |
|    | 454478 | 4273_16   | AW796921 AW798102 AW805749 AW805872 BF985060 AW794380 BF380449 AW794466 AW794538   |
| 10 | 412295 | 133592_1  | BI757233 BG911321 BF351759 AW244016 AW026834 AW024260 AI420138 AA779354 AI093360 AI934858 AW151292 AI373133 AI335587 AI969728  |
|    |        |           | AA101632 BE218525 AI802114 AI783721 AA845265 AW088826 AI832852 F03967 AI611148 AI720358 AW293764 N91161 R79192 W85852  |
|    |        |           | AW771263 BG820263 BG012864 R74441 R86080 W04256 BE707244 BF899452 BE327552 BE669500 AI492388 AI241532 BF448184 AI209012  |
| 15 |        |           | AA886528 N70309 AW582776 BF110563 BF448329 BE326537 AW770471 BF444526 BE674147 AI793266 AI991774 AI807726 AI218667 AA301750 R44328   |
|    | 415688 | 1235745_1 | AW971218 AA493942 AA166963   |
|    | 446515 | 11382_1   | BE178766 AI909166 W79619 AA346208 N54022 R98542 AA005419 AA890703 AW510832 BM126988 BF528760 AA858017 BM126698 AI423291  |
| 20 |        |           | AW173383 AA742205 AI693060 AA746651 AA490661 AW241710 AI635076 AI073737 AA875841 AA907556 N50889 AW438573 AW273496 AA633604  |
|    |        |           | AW303990 AI685291 AI076127 AW470084 AI022394 AI298624 AA253418 W79538 AA719820 AA253398 AI400823 AW294450 AI022396 AA907775  |
|    |        |           | BF445607 AA699324 AA025643 AW573103 AI167444 AA580002 AW103144 AI640654 AA857115 AA923021 AI066439 AI358865 AA843287 AI824604  |
| 25 |        |           | AA732370 AW002202 AI219540 AA621697 AI950639 AA904277 AI867527 BF437695 AA808593 AI784144 AI648539 AV752557 AV752603 AA025642  |
|    |        |           | AA764744 AW149075 N30700 H92303 W79523 AI762795 AA282784 H78923 AA252879 H98107 R23754 AA005152 N99239 N74632 H80133 H24710  |
|    |        |           | R38907 R66368 R42466 R52648 H11010 R98493  |
| 30 | 400229 | 462_3     | NM_021724 M24898 X72631 BE550221 BF436030 F18898 AL567477 BG033127 BG747927 BF823716 AA371902 AL137978 AI577786 BI490529   |
|    |        |           | AA021622 AA151679 AA745053 AA454168 R85506 AA016015  |
|    | 424397 | 893246_1  | AI950320 AA340023  |
| 35 | 406799 | 0_0       | AA908548   |
|    | 431021 | 10409_1   | NM_003312 BC010148 AK000862 D87292 BG709214 BF972766 BG740474 BI771592 BI159859 BI820468 BI523933 AI869664 AA314620 BF724353   |
|    |        |           | BG194276 BG195282 BI524679 BF435589 AI300546 AA481682 AW780207 AI800832 AI380540 BE222877 AW300707 AA481445 AW015893 AI381541  |
| 40 |        |           | AA768558 AI138798 AA432063 AA948713 AI869485 AI307419 AI336589 AI301672 BF055581 AI312785 AI521208 AI927918 AI989759 M78015  |
|    |        |           | BF718621 AI927654 AI795909 AI335381 BF334524 AW007444 AA706797 AA975178 AA884739 AA443837 AA933897 AI826464 AI271737 AA053419  |
|    |        |           | H79704 AI984483 BG952614 BF345358 AW083336 AA643660 AI478232 AA603071 BE714413 AW078660 AW070418 R02364 BG925951 AI568823  |
| 45 | 427841 | 12616_8   | AA053459 AA446748 BG954446 BF760569  |
|    | 440526 | 1078274_1 | W74622 BF055071 AW135949 AI184884 AI393557 AI830476 AA416697 AI400728 AW183266 T83655 AW883367 AI963037 BF964042   |
|    | 446576 | 629517_1  | AI832243 AI742643 AW839701 AA888497  |
| 50 | 408198 | 102854_1  | BI517686 T89902 BI518252 AI659477 T89628 H22349  |
|    | 406800 | 0_0       | AA132859 AA131111 AA053057   |
|    | 422959 | MH905_3   | AA050535   |
| 55 |        |           | AJ400845 AI954159 AL041618 AI028269 AA769325 AW780241 AW129462 AI271476 BF798303 AA836991 AW273346 AI436321 AI375545 AL040967  |
|    |        |           | AA889495 AI922524 AA598667 AA423804 AL040910 N80292 AI954063 AI923968 AI400578 AA748499 BE677845 AW020788 AA860230 AW519209  |
|    |        |           | AA767391 AI860419 AA476935 AW452389 AI017695 AA806940 BI497005 AI051533 AI650706 AI811516 AA609569 AI439198 BF430946 AA749268  |
| 60 |        |           | AI624860 AI794422 BI491753 AI206880 BE671796 AI431957 AI187038 AI678429 AI273421 AA897667 AA586499 BE241923 AF161081 NM_013440   |
|    |        |           | BE073169 AI700673 AV699081 AV684786 AV688081 AV689220 AV689216 AA132636 BF086186 BF917106 AV762653 BI064033 BE168145 AA778650  |
|    |        |           | AI984255 W69468 AA132452 N53166 AI949278 AW168519 F28686 AA908333 F37181 BI002729  |

|    |              |   |
|----|--------------|---|
| 40 | TABLE 64C:   |   |
|    | Pkey:        | Unique number corresponding to an Eos probeset  |
|    | Ref:         | Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495. |
|    | Strand:      | Indicates DNA strand from which exons were predicted.   |
| 45 | NI_position: | Indicates nucleotide positions of predicted exons.  |

|    | Pkey   | Ref     | Strand | NI_position                              |
|----|--------|---------|--------|--|
| 50 | 401781 | 7249190 | Minus  | 83215-83435,83531-83656,83740-83901,8423 |
|    | 401780 | 7249190 | Minus  | 28397-28617,28920-29045,29135-29296,2941 |
|    | 401203 | 9743387 | Minus  | 172961-173056,173868-173928              |
| 55 | 401785 | 7249190 | Minus  | 165776-165996,166189-166314,166408-16656 |
|    | 402294 | 2282012 | Minus  | 2575-3000                                |
|    | 402845 | 9369286 | Plus   | 160451-160617,160788-161009              |
| 60 | 403710 | 6437516 | Plus   | 27413-28978                              |
|    | 401760 | 9929699 | Plus   | 83126-83250,85320-85540,94719-95287      |
|    | 403593 | 6862650 | Minus  | 62554-62712,69449-69602                  |
| 65 | 400494 | 9714719 | Plus   | 169845-170272                            |
|    | 400835 | 8954121 | Plus   | 89366-89622                              |
|    | 401905 | 8671966 | Plus   | 153965-154441,156599-156819              |
| 70 | 403180 | 7523976 | Minus  | 63603-63759                              |
|    | 401747 | 9789672 | Minus  | 118596-118816,119119-119244,119609-11976 |
|    | 403108 | 8980955 | Plus   | 93253-93667                              |
| 75 | 404996 | 6007890 | Plus   | 37999-38145,38652-38998,39727-39872,4055 |
|    | 402575 | 9884830 | Minus  | 109742-109883                            |
|    | 402338 | 6957691 | Minus  | 36915-37250                              |
| 80 | 401205 | 9743388 | Plus   | 167373-167433,167936-168031              |
|    | 401192 | 9719502 | Minus  | 69559-70101                              |
|    | 406400 | 9256298 | Plus   | 1553-1712,1878-2140,4252-4385,5922-6077  |
| 75 | 404246 | 7406725 | Plus   | 82477-82628,82721-82817,82910-83071,8314 |
|    | 401131 | 8699812 | Minus  | 94802-94987,95804-95887,96323-96487,9759 |
|    | 406467 | 9795551 | Plus   | 182212-182958                            |
| 75 | 403105 | 8980016 | Minus  | 145287-145744                            |
|    | 401429 | 8217890 | Minus  | 86946-87579                              |
|    | 402991 | 7631064 | Minus  | 161294-161579                            |
| 80 | 402956 | 9408727 | Minus  | 135901-136035                            |
|    | 406587 | 8189273 | Minus  | 120577-120718                            |
|    | 402075 | 8117407 | Plus   | 121907-122035,122804-122921,124019-12416 |
|    | 404175 | 9931117 | Minus  | 107420-107547,109625-109796              |

TABLE 65A: ABOUT 838 GENES DOWNREGULATED IN BENIGN NEVI RELATIVE TO NORMAL SKIN

Table 65A lists about 838 genes downregulated in benign nevi relative to normal skin. Genes were selected from 59680 probesets on the Eos/Affymetrix Hu03 Genechip array. Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

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Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 5 R1: 90th percentile of normal skin AIs divided by the average of benign nevi AIs  
 R2: 90th percentile of normal skin AIs divided by the average of benign nevi AIs, where the 15th percentile of normal tissue AIs was subtracted from both the numerator and denominator

|    | Pkey   | ExAccn    | UnigenelD | Unigene Title                            | R1    | R2    |
|----|--------|-----------|-----------|--|-------|-------|
| 10 | 420813 | X51501    | Hs.99949  | protactin-induced protein                | 27.72 | 28.59 |
|    | 408591 | AF015224  | Hs.46452  | mammaglobin 1                            | 26.40 | 28.34 |
|    | 422166 | W72424    | Hs.112405 | S100 calcium-binding protein A9 (calgran | 21.33 | 21.57 |
|    | 418026 | BE379727  | Hs.83213  | fatty acid binding protein 4, adipocyte  | 18.06 | 18.96 |
|    | 429441 | AJ224172  | Hs.204096 | lipophilin B (uteroglobin family member) | 16.61 | 18.05 |
| 15 | 428087 | AA100573  | Hs.182421 | troponin C2, fast                        | 14.70 | 14.60 |
|    | 407245 | X90568    | Hs.172004 | titin                                    | 13.08 | 13.84 |
|    | 428824 | W23624    | Hs.173059 | ESTs                                     | 12.89 | 13.36 |
|    | 428330 | L22524    | Hs.2256   | matrix metalloproteinase 7 (matrilysin,  | 12.78 | 13.98 |
|    | 444816 | Z48633    | Hs.283742 | H.sapiens mRNA for retrotransposon       | 12.26 | 9.86  |
| 20 | 453309 | AI791809  | Hs.32949  | defensin, beta 1                         | 12.02 | 10.62 |
|    | 423024 | AA593731  | Hs.325823 | ESTs, Moderately similar to ALU5_HUMAN A | 11.90 | 10.86 |
|    | 446227 | AI281459  | Hs.270114 | ESTs                                     | 11.79 | 12.32 |
|    | 413902 | AU076743  | Hs.75613  | CD36 antigen (collagen type I receptor,  | 11.19 | 10.82 |
|    | 432877 | AW974111  | Hs.292477 | ESTs                                     | 11.18 | 11.30 |
| 25 | 426752 | X69490    | Hs.172004 | titin                                    | 10.97 | 12.63 |
|    | 427899 | AA829286  | Hs.332053 | serum amyloid A1                         | 10.85 | 13.85 |
|    | 407230 | AA157857  | Hs.182265 | keratin 19                               | 10.79 | 11.40 |
|    | 451029 | AA852097  | Hs.25829  | ras-related protein                      | 10.78 | 10.35 |
|    | 421296 | NM_002666 | Hs.103253 | perilipin                                | 10.73 | 11.25 |
| 30 | 431211 | M86849    | Hs.323733 | gap junction protein, beta 2, 26kD (conn | 10.66 | 7.24  |
|    | 422633 | X56832    | Hs.118804 | enolase 3, (beta, muscle)                | 10.57 | 9.92  |
|    | 405121 |           |           | mitogen-activated protein kinase 8 inter | 10.41 | 10.54 |
|    | 450912 | AW939251  | Hs.25647  | v-fos FBJ murine osteosarcoma viral onco | 10.26 | 23.20 |
|    | 420859 | AW468397  | Hs.100000 | S100 calcium-binding protein A8 (calgran | 10.25 | 9.45  |
| 35 | 410850 | AW362867  | Hs.302738 | Homo sapiens cDNA: FLJ21425 fis, clone C | 10.15 | 9.88  |
|    | 416931 | D45371    | Hs.80485  | adipose most abundant gene transcript 1  | 10.13 | 11.58 |
|    | 447966 | AA340605  | Hs.105887 | ESTs, Weakly similar to Homolog of rat Z | 10.09 | 5.51  |
|    | 401203 |           |           | Target Exon                              | 9.95  | 10.74 |
| 40 | 425545 | N98529    | Hs.158295 | Homo sapiens, clone MGC:12401, mRNA, com | 9.94  | 11.47 |
|    | 425580 | L11144    | Hs.1907   | galanin                                  | 9.66  | 6.60  |
|    | 414092 | Z14244    | Hs.75752  | cytochrome c oxidase subunit VIIb        | 9.45  | 6.44  |
|    | 420919 | M57892    | Hs.100322 | carbonic anhydrase VI                    | 9.41  | 10.49 |
|    | 443162 | T49951    | Hs.9029   | DKFZP434G032 protein                     | 9.36  | 10.58 |
| 45 | 430154 | AW583058  | Hs.234726 | serine (or cysteine) proteinase inhibito | 8.91  | 10.27 |
|    | 452322 | BE566343  | Hs.28988  | glutaredoxin (thioltransferase)          | 8.90  | 7.26  |
|    | 430071 | AA355986  | Hs.232068 | transcription factor 8 (represses interl | 8.86  | 8.94  |
|    | 417240 | N57568    | Hs.48028  | EST                                      | 8.81  | 18.90 |
|    | 415477 | NM_002228 | Hs.78465  | v-jun avian sarcoma virus 17 oncogene ho | 8.72  | 6.86  |
|    | 430130 | AL137311  | Hs.234074 | Homo sapiens mRNA: cDNA DKFZp761G02121 { | 8.39  | 10.26 |
| 50 | 408491 | AI088063  | Hs.7882   | ESTs                                     | 8.00  | 8.20  |
|    | 414657 | AA424074  | Hs.76780  | protein phosphatase 1, regulatory (inhib | 7.99  | 8.14  |
|    | 409738 | BE222975  | Hs.56205  | insulin induced gene 1                   | 7.95  | 7.75  |
|    | 428221 | U96781    | Hs.183075 | ATPase, Ca transporting, cardiac muscle, | 7.89  | 8.86  |
| 55 | 451831 | NM_001674 | Hs.460    | activating transcription factor 3        | 7.79  | 7.51  |
|    | 410867 | X63556    | Hs.750    | fibrillin 1 (Marfan syndrome)            | 7.76  | 7.55  |
|    | 444984 | H15474    | Hs.132898 | fatty acid desaturase 1                  | 7.75  | 5.64  |
|    | 413076 | U10564    | Hs.75188  | wee1 (S. pombe) homolog                  | 7.68  | 5.65  |
|    | 410532 | T53088    | Hs.155376 | hemoglobin, beta                         | 7.64  | 4.73  |
| 60 | 442757 | AI739528  | Hs.28345  | ESTs                                     | 7.62  | 7.66  |
|    | 412047 | AA934589  | Hs.49696  | ESTs                                     | 7.61  | 7.48  |
|    | 410052 | AA525225  | Hs.334630 | Homo sapiens cDNA FLJ14462 fis, clone MA | 7.52  | 7.28  |
|    | 439394 | AA149250  | Hs.56105  | ESTs                                     | 7.52  | 6.72  |
|    | 442941 | AU076728  | Hs.8867   | cysteine-rich, angiogenic inducer, 61    | 7.51  | 6.27  |
| 65 | 450680 | AF131784  | Hs.25318  | Homo sapiens clone 25194 mRNA sequence   | 7.51  | 4.10  |
|    | 456525 | AW468397  | Hs.100000 | S100 calcium-binding protein A8 (calgran | 7.49  | 8.08  |
|    | 407334 | AA494411  | Hs.296031 | ESTs                                     | 7.48  | 6.78  |
|    | 414449 | AA557660  | Hs.76152  | decorin                                  | 7.39  | 8.30  |
|    | 432305 | M62402    | Hs.274313 | insulin-like growth factor binding prote | 7.38  | 8.79  |
| 70 | 407328 | AA508857  |           | ESTs, Weakly similar to ALU1_HUMAN ALU S | 7.35  | 7.20  |
|    | 431842 | NM_005764 | Hs.271473 | epithelial protein up-regulated in carci | 7.06  | 6.93  |
|    | 426488 | X03350    | Hs.4      | alcohol dehydrogenase 1B (class I), beta | 7.03  | 7.85  |
|    | 445502 | AW379160  | Hs.12813  | DKFZP434J214 protein                     | 7.01  | 6.63  |
|    | 419285 | D31887    | Hs.89868  | KIAA0062 protein                         | 7.01  | 5.82  |
| 75 | 409024 | AW883529  | Hs.173830 | ESTs, Weakly similar to ALU7_HUMAN ALU S | 6.99  | 4.58  |
|    | 422963 | M79141    | Hs.13234  | ESTs                                     | 6.99  | 4.08  |
|    | 447918 | AI129320  | Hs.115175 | ESTs, Highly similar to JC5818 gamma-act | 6.98  | 6.49  |
|    | 410530 | M25809    | Hs.64173  | ATPase, H transporting, lysosomal (vacuo | 6.96  | 7.04  |
|    | 444381 | BE387335  | Hs.283713 | ESTs, Weakly similar to S64054 hypotheti | 6.95  | 8.08  |
| 80 | 417993 | AW963705  | Hs.301183 | molecule possessing ankyrin repeats indu | 6.94  | 7.12  |
|    | 443060 | D78874    | Hs.8944   | procollagen C-endopeptidase enhancer 2   | 6.94  | 6.79  |
|    | 427890 | AA435761  |           | ESTs                                     | 6.94  | 6.68  |
|    | 444207 | AI565004  |           | cathepsin D (lysosomal aspartyl protease | 6.93  | 4.66  |
|    | 442083 | R50192    | Hs.165062 | ESTs                                     | 6.92  | 6.92  |

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|    |        |           |           |  |      |       |
|----|--------|-----------|-----------|--|------|-------|
| 5  | 441633 | AW958544  | Hs.112242 | normal mucosa of esophagus specific 1    | 6.87 | 5.07  |
|    | 407722 | BE252241  | Hs.38041  | pyridoxal (pyridoxine, vitamin B6) kinas | 6.87 | 4.99  |
|    | 444051 | N48373    | Hs.10247  | activated leucocyte cell adhesion molecu | 6.84 | 5.33  |
|    | 414841 | H55601    | Hs.77490  | glutathione S-transferase theta 1        | 6.84 | 3.47  |
|    | 430314 | AA369601  | Hs.239138 | pre-B-cell colony-enhancing factor       | 6.79 | 7.14  |
| 10 | 427704 | AW971063  | Hs.292882 | ESTs                                     | 6.72 | 7.30  |
|    | 431713 | AK000388  | Hs.267997 | EHM2 gene                                | 6.72 | 7.10  |
|    | 451253 | H48299    | Hs.26126  | claudin 10                               | 6.71 | 7.20  |
|    | 453187 | AI161383  | Hs.34549  | ESTs, Highly similar to S94541 1 clone 4 | 6.68 | 3.02  |
|    | 400304 | AF005082  | Hs.113261 | Homo sapiens skin-specific protein (xp33 | 6.64 | 6.08  |
| 15 | 434625 | W01370    | Hs.46824  | ESTs                                     | 6.61 | 6.92  |
|    | 408063 | BE086548  | Hs.42346  | calcineurin-binding protein calsarcin-1  | 6.60 | 7.29  |
|    | 425280 | U31519    | Hs.1872   | phosphoenolpyruvate carboxykinase 1 (sol | 6.55 | 6.79  |
|    | 411388 | X72925    | Hs.69752  | desmocollin 1                            | 6.55 | 3.44  |
|    | 413731 | BE243845  | Hs.75511  | connective tissue growth factor          | 6.52 | 4.86  |
| 20 | 455863 | AA907305  | Hs.36475  | ESTs                                     | 6.50 | 4.24  |
|    | 412247 | AF022375  | Hs.73793  | vascular endothelial growth factor       | 6.49 | 4.56  |
|    | 407102 | AA007629  |           | glycerol-3-phosphate dehydrogenase 1 (so | 6.47 | 7.23  |
|    | 421407 | T82331    | Hs.182278 | ESTs, Weakly similar to CGHU6C collagen  | 6.47 | 6.55  |
|    | 406867 | AA157857  | Hs.182265 | keratin 19                               | 6.44 | 6.23  |
| 25 | 429504 | X99133    | Hs.204238 | lipocalin 2 (oncogene 24p3) (NGAL)       | 6.43 | 6.79  |
|    | 446945 | AI193115  | Hs.16611  | tumor protein D52-like 1                 | 6.43 | 5.66  |
|    | 413172 | M38180    | Hs.38586  | hydroxy-delta-5-steroid dehydrogenase, 3 | 6.39 | 7.09  |
|    | 407395 | AF005082  |           | gb:Homo sapiens skin-specific protein (x | 6.39 | 4.76  |
|    | 450626 | AW190989  | Hs.1508   | insulin-degrading enzyme                 | 6.37 | 6.22  |
| 30 | 450713 | AL133611  | Hs.25362  | Homo sapiens mRNA; cDNA DKFZp434O1317 (f | 6.37 | 4.91  |
|    | 437596 | AA761490  |           | ESTs, Moderately similar to S65657 alpha | 6.35 | 5.31  |
|    | 430191 | AI149880  | Hs.188809 | ESTs                                     | 6.34 | 6.15  |
|    | 433713 | AW976511  | Hs.112592 | ESTs                                     | 6.34 | 5.67  |
|    | 420107 | AL043980  | Hs.7886   | pellino (Drosophila) homolog 1           | 6.33 | 6.39  |
| 35 | 422069 | AJ010063  | Hs.343603 | titin-cap (teletthonin)                  | 6.33 | 5.77  |
|    | 437176 | AW176909  | Hs.42346  | calcineurin-binding protein calsarcin-1  | 6.30 | 5.45  |
|    | 433412 | AV653729  | Hs.8185   | CGI-44 protein; sulfide dehydrogenase li | 6.29 | 6.68  |
|    | 447335 | BE617695  | Hs.286192 | hypothetical protein FLJ20940            | 6.28 | 10.35 |
|    | 413063 | AL035737  | Hs.75184  | chitinase 3-like 1 (cartilage glycoprote | 6.21 | 5.98  |
| 40 | 440116 | AI798851  |           | hemoglobin, gamma G                      | 6.18 | 6.86  |
|    | 454229 | AW957744  | Hs.278469 | lacrimal proline rich protein            | 6.17 | 6.54  |
|    | 441188 | AW292830  | Hs.255609 | ESTs                                     | 6.12 | 6.68  |
|    | 451144 | AW956103  | Hs.61712  | pyruvate dehydrogenase kinase, isoenzyme | 6.12 | 5.79  |
|    | 431319 | AA873350  | Hs.302232 | ESTs                                     | 6.11 | 7.91  |
| 45 | 442498 | U54517    | Hs.8364   | Homo sapiens pyruvate dehydrogenase kina | 6.10 | 5.63  |
|    | 414555 | N98569    | Hs.76422  | phospholipase A2, group IIA (platelets,  | 6.08 | 6.96  |
|    | 418321 | D63477    | Hs.84087  | KIAA0143 protein                         | 6.08 | 4.71  |
|    | 443072 | AI937532  |           | gb:wp78d02.x1 NCI_CGAP_Bm25 Homo sapien  | 6.07 | 5.48  |
|    | 423712 | W46802    | Hs.81988  | disabled (Drosophila) homolog 2 (mitogen | 6.04 | 5.81  |
| 50 | 442679 | R53718    |           | hypothetical protein FLJ10659            | 6.03 | 5.67  |
|    | 424824 | AI217440  | Hs.143873 | ESTs                                     | 6.02 | 5.46  |
|    | 413719 | BE439580  | Hs.75498  | small inducible cytokine subfamily A (Cy | 6.01 | 7.05  |
|    | 428358 | AA993222  | Hs.101915 | Stargardt disease 3 (autosomal dominant) | 5.94 | 7.17  |
|    | 430821 | AA487264  | Hs.154974 | Homo sapiens mRNA; cDNA DKFZp667N064 (fr | 5.92 | 5.79  |
| 55 | 424670 | W61215    | Hs.116651 | epithelial V-like antigen 1              | 5.92 | 5.63  |
|    | 424673 | AA345051  | Hs.294092 | ESTs, Weakly similar to I38022 hypotheti | 5.91 | 6.81  |
|    | 418205 | L21715    | Hs.83760  | troponin I, skeletal, fast               | 5.91 | 6.95  |
|    | 400440 | X83957    | Hs.83870  | nebulin                                  | 5.89 | 7.01  |
|    | 444239 | R57988    | Hs.10706  | epithelial protein lost in neoplasm beta | 5.89 | 5.49  |
| 60 | 419517 | AF052107  | Hs.90797  | Homo sapiens clone 23620 mRNA sequence   | 5.86 | 5.88  |
|    | 432626 | AA471098  | Hs.278544 | acetyl-Coenzyme A acetyltransferase 2 (a | 5.86 | 5.58  |
|    | 407584 | W25945    | Hs.8173   | hypothetical protein FLJ10803            | 5.81 | 5.09  |
|    | 449335 | AW150717  | Hs.345728 | STAT induced STAT inhibitor 3            | 5.79 | 6.33  |
|    | 445607 | AA488107  | Hs.30156  | ESTs, Weakly similar to unnamed protein  | 5.78 | 5.91  |
| 65 | 424571 | BE379766  |           | polymerase (RNA) II (DNA directed) polyp | 5.78 | 3.74  |
|    | 412630 | AA738437  | Hs.26226  | Homo sapiens cDNA: FLJ21286 fis, clone C | 5.76 | 4.21  |
|    | 408819 | AW163483  | Hs.48320  | double ring-finger protein, Dofin        | 5.71 | 4.59  |
|    | 433027 | AF191018  | Hs.279923 | putative nucleotide binding protein, est | 5.70 | 4.71  |
|    | 406704 | M21665    | Hs.929    | myosin, heavy polypeptide 7, cardiac mus | 5.68 | 6.12  |
| 70 | 408515 | AI269507  | Hs.299883 | hypothetical protein FLJ23399            | 5.67 | 4.81  |
|    | 443827 | AI087867  | Hs.134667 | ESTs                                     | 5.67 | 5.54  |
|    | 429693 | BE254962  | Hs.211612 | SEC24 (S. cerevisiae) related gene famil | 5.67 | 4.12  |
|    | 427373 | AB007972  | Hs.130760 | myosin phosphatase, target subunit 2     | 5.66 | 4.27  |
|    | 428666 | AL080190  | Hs.189242 | Homo sapiens mRNA; cDNA DKFZp434A202 (fr | 5.65 | 5.16  |
| 75 | 421834 | BE543205  | Hs.288771 | DKFZP586A0522 protein                    | 5.65 | 4.52  |
|    | 427081 | AI474533  | Hs.170528 | ESTs, Moderately similar to ALUC_HUMAN ! | 5.65 | 4.81  |
|    | 419731 | S47242    | Hs.92909  | SON DNA binding protein                  | 5.64 | 3.77  |
|    | 420787 | AA564248  |           | ESTs, Weakly similar to I38022 hypotheti | 5.64 | 3.27  |
|    | 420682 | AI380552  | Hs.88602  | ESTs                                     | 5.63 | 4.13  |
| 80 | 410541 | AA065003  | Hs.64179  | syntenin-2 protein                       | 5.62 | 5.84  |
|    | 431360 | NM_000427 | Hs.251580 | loricrin                                 | 5.61 | 5.14  |
|    | 418127 | BE243982  | Hs.83532  | membrane cofactor protein (CD46, trophob | 5.61 | 4.28  |
|    | 430332 | R51790    | Hs.239483 | Human clone 23933 mRNA sequence          | 5.60 | 5.76  |
|    | 427850 | AA416756  | Hs.161051 | ESTs, Moderately similar to ALU6_HUMAN A | 5.51 | 16.04 |
|    | 429679 | NM_006290 | Hs.211500 | tumor necrosis factor, alpha-induced pro | 5.49 | 5.28  |
|    | 422082 | AA016188  | Hs.111244 | hypothetical protein                     | 5.49 | 5.23  |
|    | 419461 | AI452601  | Hs.288869 | nuclear receptor subfamily 2, group F, m | 5.49 | 4.40  |

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|    |        |           |           |  |      |       |
|----|--------|-----------|-----------|--|------|-------|
| 5  | 430714 | AA484757  | Hs.287601 | Homo sapiens cDNA FLJ13830 fis, clone TH     | 5.48 | 5.38  |
|    | 407744 | AB020629  | Hs.38095  | ATP-binding cassette, sub-family A (ABC1     | 5.46 | 5.11  |
|    | 400494 |           |           | ENSP00000238970::ClG30 (Fragment).           | 5.45 | 3.63  |
|    | 415062 | H45100    | Hs.49753  | uveal autoantigen with coiled coil domai     | 5.43 | 4.25  |
|    | 449291 | BE176893  | Hs.23440  | KIAA1105 protein                             | 5.41 | 3.82  |
| 10 | 435538 | AB011540  | Hs.4930   | low density lipoprotein receptor-related     | 5.41 | 2.62  |
|    | 417035 | AA192455  | Hs.22968  | Homo sapiens clone IMAGE:451939, mRNA se     | 5.40 | 5.40  |
|    | 434535 | AI611729  | Hs.167619 | ESTs, Moderately similar to ALUC_HUMAN !     | 5.40 | 5.20  |
|    | 408085 | N25929    | Hs.342849 | ADP-ribosylation factor-like 5               | 5.39 | 4.59  |
|    | 413778 | AA090235  | Hs.75535  | myosin, light polypeptide 2, regulatory,     | 5.37 | 14.96 |
| 15 | 436090 | AI640635  | Hs.332879 | EST  | 5.37 | 5.33  |
|    | 406805 | AI686003  | Hs.296031 | ESTs   | 5.35 | 5.49  |
|    | 426510 | AW861225  | Hs.251928 | BANP homolog, SMAR1 homolog                  | 5.35 | 6.83  |
|    | 406706 | X03740    | Hs.231581 | myosin, heavy polypeptide 1, skeletal mu     | 5.34 | 7.50  |
|    | 456332 | AA228357  |           | gb:nc39d05.r1 NCI_CGAP_P12 Homo sapiens      | 5.34 | 4.88  |
| 20 | 421999 | U50535    | Hs.110630 | Human BRCA2 region, mRNA sequence CG006      | 5.34 | 4.75  |
|    | 418479 | AA829976  |           | mannosidase, alpha, class 1A, member 2       | 5.34 | 3.59  |
|    | 417059 | AL037672  | Hs.81071  | extracellular matrix protein 1               | 5.34 | 4.71  |
|    | 424008 | R02740    | Hs.137555 | putative chemokine receptor, GTP-binding     | 5.34 | 4.75  |
|    | 415694 | AW194301  | Hs.339283 | Human DNA sequence from clone RP1-187J11     | 5.34 | 8.69  |
| 25 | 452747 | BE153855  | Hs.61460  | Ig superfamily receptor LNIR                 | 5.31 | 5.81  |
|    | 449271 | AW338067  | Hs.7869   | Homo sapiens cDNA FLJ11946 fis, clone HE     | 5.30 | 4.35  |
|    | 437135 | AL038624  | Hs.208752 | ESTs, Weakly similar to ALU8_HUMAN ALU S     | 5.29 | 4.92  |
|    | 419925 | AA159850  | Hs.53765  | lipoma HMGIC fusion partner                  | 5.29 | 5.02  |
|    | 415192 | D17793    | Hs.78183  | aldo-keto reductase family 1, member C3      | 5.28 | 5.33  |
| 30 | 453999 | BE328153  | Hs.240087 | ESTs   | 5.28 | 3.40  |
|    | 408958 | T99607    | Hs.49346  | signal recognition particle 54kD             | 5.28 | 2.84  |
|    | 452496 | AA114926  | Hs.169531 | ESTs   | 5.28 | 5.48  |
|    | 424058 | AL121516  | Hs.138617 | thyroid hormone receptor interactor 12       | 5.27 | 3.72  |
|    | 443265 | AI916207  | Hs.9167   | SH3 domain binding glutamic acid-rich pr     | 5.26 | 4.62  |
| 35 | 407013 | U35637    | Hs.83870  | gb:Human nebulin mRNA, partial cds           | 5.26 | 6.21  |
|    | 414602 | AW630088  | Hs.76550  | Homo sapiens mRNA; cDNA DKFZp564B1264 (f     | 5.26 | 4.21  |
|    | 410284 | U50939    | Hs.61828  | amyloid beta precursor protein-binding p     | 5.26 | 4.43  |
|    | 445107 | AI208121  | Hs.147313 | ESTs, Weakly similar to I38022 hypothei      | 5.25 | 5.61  |
|    | 446267 | AW450103  | Hs.151124 | ESTs   | 5.24 | 4.44  |
| 40 | 422278 | AF072873  | Hs.114218 | frizzled (Drosophila) homolog 6              | 5.23 | 3.14  |
|    | 448585 | AB020676  | Hs.21543  | KIAA0869 protein                             | 5.23 | 6.21  |
|    | 421993 | R22497    | Hs.110571 | growth arrest and DNA-damage-inducible,      | 5.22 | 6.84  |
|    | 414407 | AA147026  | Hs.76704  | ESTs   | 5.22 | 5.29  |
|    | 423720 | AL044191  | Hs.23388  | hypothetical protein DKFZp434F0318           | 5.22 | 5.85  |
| 45 | 415997 | NM_003590 | Hs.78946  | cullin 3                                     | 5.21 | 3.66  |
|    | 411531 | AB014511  | Hs.70604  | ATPase, Class II, type 9A                    | 5.21 | 3.95  |
|    | 441619 | NM_014056 | Hs.7917   | DKFZP564K247 protein                         | 5.20 | 4.38  |
|    | 435232 | NM_001262 | Hs.4854   | cyclin-dependent kinase inhibitor 2C (p1     | 5.19 | 4.52  |
|    | 415167 | AA160784  | Hs.26410  | ESTs   | 5.19 | 3.13  |
| 50 | 431416 | AA532718  | Hs.178604 | ESTs   | 5.18 | 5.38  |
|    | 439995 | AL137480  | Hs.6834   | KIAA1014 protein                             | 5.17 | 3.14  |
|    | 416784 | AA334592  | Hs.79914  | lumican                                      | 5.17 | 6.18  |
|    | 446082 | AI274139  | Hs.156452 | ESTs   | 5.16 | 5.14  |
|    | 400196 |           |           | Ecs Control                                  | 5.16 | 5.05  |
| 55 | 414525 | C14904    | Hs.45184  | Homo sapiens cDNA FLJ12284 fis, clone MA     | 5.16 | 4.31  |
|    | 414242 | AA749230  | Hs.25433  | dolichyl-phosphate (UDP-N-acetylglucosam     | 5.15 | 4.89  |
|    | 430699 | AW969847  | Hs.292718 | ESTs, Weakly similar to RET2_HUMAN RETIN     | 5.14 | 5.22  |
|    | 440383 | AA884208  | Hs.30484  | ESTs   | 5.13 | 5.09  |
|    | 431628 | AF146277  |           | CD2-associated protein                       | 5.13 | 5.03  |
| 60 | 407047 | X65965    |           | gb:H.sapiens SOD-2 gene for manganese su     | 5.13 | 4.31  |
|    | 433688 | AA628467  | Hs.112572 | Homo sapiens cDNA FLJ14130 fis, clone MA     | 5.12 | 3.57  |
|    | 437704 | AA766142  | Hs.131810 | ESTs, Moderately similar to ALU1_HUMAN ALU S | 5.12 | 3.30  |
|    | 426101 | AL049987  |           | Homo sapiens mRNA; cDNA DKFZp564F112 (fr     | 5.11 | 6.08  |
|    | 428297 | AA236291  | Hs.183583 | serine (or cysteine) proteinase inhibito     | 5.10 | 4.31  |
| 65 | 415382 | D86985    | Hs.79276  | KIAA0232 gene product                        | 5.10 | 3.79  |
|    | 437150 | R51407    | Hs.77910  | 3-hydroxy-3-methylglutaryl-Coenzyme A sy     | 5.10 | 6.58  |
|    | 454947 | AW846590  |           | gb:QV0-CT0180-011099-025-d07 CT0180 Homo     | 5.09 | 4.82  |
|    | 434647 | W74158    | Hs.103189 | lipopolysaccharide specific response-68      | 5.09 | 4.90  |
|    | 418730 | AA091027  | Hs.325625 | Homo sapiens clone 23938 mRNA sequence       | 5.09 | 3.46  |
| 70 | 449338 | H73444    | Hs.394    | adrenomedullin                               | 5.09 | 6.26  |
|    | 438962 | BE046594  |           | gb:hn41c11.x1 NCI_CGAP_RDF2 Homo sapiens     | 5.08 | 5.60  |
|    | 431693 | AI459519  |           | serine (or cysteine) proteinase inhibito     | 5.07 | 2.83  |
|    | 420583 | H77859    | Hs.65450  | reticulon 4                                  | 5.06 | 6.71  |
|    | 431048 | R50253    | Hs.249129 | cell death-inducing DFFA-like effector a     | 5.06 | 6.06  |
| 75 | 432125 | AW972667  | Hs.183006 | Homo sapiens cDNA FLJ12300 fis, clone MA     | 5.05 | 6.32  |
|    | 447945 | AI922838  | Hs.9670   | ESTs, Weakly similar to ALU1_HUMAN ALU S     | 5.05 | 3.72  |
|    | 442547 | AA306997  | Hs.217484 | ESTs, Weakly similar to ALU1_HUMAN ALU S     | 5.05 | 2.86  |
|    | 414176 | BE140638  | Hs.75794  | EDG-2 (endothelial differentiation, lys      | 5.03 | 4.43  |
|    | 445263 | H57646    | Hs.42586  | KIAA1560 protein                             | 5.03 | 6.67  |
| 80 | 448490 | AI523897  | Hs.271692 | ESTs, Weakly similar to I38022 hypothei      | 5.03 | 4.88  |
|    | 450515 | AW304226  |           | biphenyl hydrolase-like (serine hydrolas     | 5.03 | 4.36  |
|    | 440624 | AF017987  | Hs.7306   | secreted frizzled-related protein 1          | 5.01 | 5.48  |
|    | 417165 | R80137    | Hs.302738 | Homo sapiens cDNA: FLJ21425 fis, clone C     | 5.01 | 5.61  |
|    | 417640 | D30857    | Hs.82353  | protein C receptor, endothelial (EPCR)       | 5.01 | 5.32  |
|    | 413475 | AW021488  | Hs.26981  | ESTs   | 5.01 | 3.90  |
|    | 414792 | BE314949  | Hs.87128  | hypothetical protein FLJ23309                | 5.00 | 4.54  |
|    | 424074 | AI902456  | Hs.210761 | ESTs, Weakly similar to I38022 hypothei      | 5.00 | 3.19  |

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|    |        |           |           |  |      |       |
|----|--------|-----------|-----------|--|------|-------|
| 5  | 424620 | AA101043  | Hs.151254 | kalikrein 7 (chymotryptic, stratum com   | 4.99 | 6.25  |
|    | 439039 | AI656707  | Hs.48713  | ESTs                                     | 4.99 | 6.60  |
|    | 422305 | AI928242  | Hs.293438 | ESTs, Highly similar to AF198488 1 trans | 4.98 | 9.59  |
|    | 410579 | AK001628  | Hs.64691  | KIAA0483 protein                         | 4.98 | 4.52  |
|    | 449710 | AA002207  | Hs.17385  | Homo sapiens clone IMAGE:119716, mRNA se | 4.98 | 3.84  |
| 10 | 434230 | AA551569  |           | hypothetical protein PRO2822             | 4.98 | 3.63  |
|    | 426468 | AA379306  | Hs.117558 | ESTs                                     | 4.98 | 3.56  |
|    | 421690 | AW162667  | Hs.106857 | calbindin 2, (29kD, calretinin)          | 4.96 | 6.41  |
|    | 448144 | AW169230  |           | ESTs, Moderately similar to PC4259 ferri | 4.96 | 3.28  |
|    | 412129 | M21984    | Hs.73454  | troponin T3, skeletal, fast              | 4.96 | 5.75  |
| 15 | 450071 | AA018283  | Hs.24359  | Homo sapiens cDNA FLJ11174 fis, clone PL | 4.96 | 3.21  |
|    | 433934 | AW273261  | Hs.216292 | ESTs                                     | 4.95 | 4.39  |
|    | 446320 | AF126245  | Hs.14791  | acyl-Coenzyme A dehydrogenase family, me | 4.95 | 4.01  |
|    | 446161 | AA628206  | Hs.14125  | p53 regulated PA26 nuclear protein       | 4.94 | 4.54  |
|    | 453225 | BE258769  |           | acetyl-Coenzyme A acyltransferase 2 (mit | 4.94 | 4.49  |
| 20 | 444476 | AF020038  | Hs.11223  | isocitrate dehydrogenase 1 (NADP), solub | 4.94 | 4.19  |
|    | 445493 | AI915771  |           | metallothionein 1E (functional)          | 4.93 | 5.68  |
|    | 422292 | AI815733  | Hs.114360 | transforming growth factor beta-stimulat | 4.93 | 5.47  |
|    | 417054 | AF017060  |           | aldehyde oxidase 1                       | 4.93 | 4.51  |
|    | 425917 | W28517    | Hs.117167 | Homo sapiens cDNA: FLJ23067 fis, clone L | 4.93 | 3.34  |
| 25 | 408681 | AW953853  | Hs.281462 | ESTs, Weakly similar to I38022 hypothei  | 4.93 | 5.61  |
|    | 451267 | AI033894  | Hs.117865 | solute carrier family 17 (anion/sugar tr | 4.92 | 3.27  |
|    | 447137 | AW970192  | Hs.171942 | ras responsive element binding protein 1 | 4.91 | 4.26  |
|    | 427451 | AI690916  | Hs.178137 | transducer of ERBB2, 1                   | 4.90 | 6.00  |
|    | 432314 | AA533447  | Hs.312989 | ESTs                                     | 4.90 | 3.79  |
| 30 | 440692 | AL031591  | Hs.7370   | phosphatidylinositol transfer protein, b | 4.89 | 3.71  |
|    | 428594 | BE387236  | Hs.75415  | beta-2-microglobulin                     | 4.89 | 3.27  |
|    | 437802 | AI475995  | Hs.122910 | ESTs                                     | 4.87 | 4.06  |
|    | 437974 | T74445    | Hs.5957   | Homo sapiens clone 24416 mRNA sequence   | 4.86 | 6.54  |
|    | 427156 | BE621719  | Hs.173802 | KIAA0603 gene product                    | 4.86 | 5.15  |
| 35 | 433179 | AW362945  | Hs.162459 | ESTs                                     | 4.86 | 5.50  |
|    | 428957 | NM_003881 | Hs.194679 | WNT1 inducible signaling pathway protein | 4.85 | 5.29  |
|    | 453855 | AA039576  | Hs.37858  | ESTs, Weakly similar to ALUB_HUMAN !!!   | 4.85 | 3.59  |
|    | 433143 | BE552155  | Hs.294035 | ESTs, Weakly similar to ALU5_HUMAN ALU S | 4.85 | 3.45  |
|    | 429279 | AB018271  | Hs.198689 | KIAA0728 protein                         | 4.83 | 3.80  |
| 40 | 445773 | H73456    | Hs.13299  | Homo sapiens mRNA; cDNA DKFZp761M0111 (f | 4.82 | 4.20  |
|    | 416349 | X69089    | Hs.79227  | myomesin (M-protein) 2 (165kD)           | 4.82 | 4.01  |
|    | 408138 | AA535740  |           | tumor protein p53-binding protein, 1     | 4.81 | 4.19  |
|    | 432566 | AW439330  | Hs.256889 | ESTs, Weakly similar to 2109260A B cell  | 4.80 | 3.99  |
|    | 444677 | AL110212  | Hs.301005 | purine-rich element binding protein B    | 4.80 | 3.50  |
| 45 | 422658 | AF231981  | Hs.250175 | homolog of yeast long chain polyunsatura | 4.80 | 10.20 |
|    | 431926 | AW972724  |           | gb:EST384816 MAGE resequences, MAGL Homo | 4.79 | 4.39  |
|    | 407839 | AA045144  | Hs.161566 | ESTs                                     | 4.79 | 2.98  |
|    | 421998 | R74441    |           | poly(A)-binding protein, nuclear 1       | 4.77 | 4.78  |
|    | 416987 | D86957    | Hs.80712  | KIAA0202 protein                         | 4.76 | 3.99  |
| 50 | 448988 | Y09763    | Hs.22785  | gamma-aminobutyric acid (GABA) A recepto | 4.76 | 7.59  |
|    | 440494 | BE618768  | Hs.7232   | acetyl-Coenzyme A carboxylase alpha      | 4.75 | 4.38  |
|    | 453180 | N46243    | Hs.110373 | ESTs, Highly similar to T42626 secreted  | 4.75 | 3.92  |
|    | 413276 | Z24725    | Hs.75260  | mitogen inducible 2                      | 4.75 | 5.68  |
|    | 437239 | AW503395  | Hs.5541   | ATPase, Ca transporting, ubiquitous      | 4.74 | 5.57  |
| 55 | 414622 | AI752666  | Hs.76669  | nicotinamide N-methyltransferase         | 4.74 | 11.58 |
|    | 429587 | AA283969  | Hs.334706 | Homo sapiens cDNA FLJ11801 fis, clone HE | 4.74 | 3.79  |
|    | 407242 | M18728    |           | gb:Human nonspecific crossreacting antig | 4.73 | 4.88  |
|    | 445229 | BE276013  | Hs.172364 | Homo sapiens mRNA for FLJ00086 protein,  | 4.73 | 4.79  |
|    | 447429 | AB007920  | Hs.18586  | KIAA0451 gene product                    | 4.72 | 2.38  |
| 60 | 444930 | BE185536  | Hs.301183 | molecule possessing ankyrin repeats indu | 4.71 | 5.10  |
|    | 414848 | AI803447  | Hs.77496  | small nuclear ribonucleoprotein polypept | 4.71 | 2.51  |
|    | 439652 | W67826    | Hs.55412  | ESTs, Weakly similar to K1CJ_HUMAN KERAT | 4.70 | 6.13  |
|    | 453145 | R63438    | Hs.183454 | Homo sapiens cDNA FLJ14883 fis, clone PL | 4.70 | 3.06  |
|    | 421302 | T34462    | Hs.103291 | neuritin                                 | 4.69 | 4.96  |
| 65 | 425118 | ALJ076611 | Hs.154672 | methylene tetrahydrofolate dehydrogenase | 4.68 | 5.01  |
|    | 448079 | R76981    |           | thyroid hormone receptor-associated prot | 4.68 | 3.97  |
|    | 434558 | AW264102  | Hs.39168  | ESTs                                     | 4.67 | 3.42  |
|    | 408239 | AA053401  |           | ESTs, Moderately similar to ALU7_HUMAN A | 4.67 | 6.17  |
|    | 454416 | AI912097  | Hs.163208 | ESTs                                     | 4.66 | 3.97  |
| 70 | 427215 | AW246148  | Hs.268371 | hypothetical protein FLJ20274            | 4.66 | 3.37  |
|    | 451583 | AI653797  | Hs.24133  | ESTs                                     | 4.65 | 3.81  |
|    | 446525 | AW967069  | Hs.211556 | hypothetical protein MGC5487             | 4.65 | 6.14  |
|    | 436176 | AL121422  | Hs.54900  | serologically defined colon cancer antig | 4.65 | 3.65  |
|    | 450528 | NM_014072 | Hs.25063  | PRO0461 protein                          | 4.64 | 2.99  |
| 75 | 417259 | AW903838  | Hs.81800  | chondroitin sulfate proteoglycan 2 (vers | 4.64 | 4.72  |
|    | 408741 | M73720    | Hs.646    | carboxypeptidase A3 (mast cell)          | 4.63 | 5.55  |
|    | 417733 | AL048678  | Hs.82503  | H.sapiens mRNA for 3'UTR of unknown prot | 4.63 | 5.04  |
|    | 436280 | AI690734  |           | Homo sapiens cDNA: FLJ22562 fis, clone H | 4.63 | 3.55  |
|    | 428744 | BE267033  | Hs.192853 | ubiquitin-conjugating enzyme E2G 2 (homo | 4.63 | 2.85  |
| 80 | 427007 | NM_006283 | Hs.173159 | transforming, acidic coiled-coil contain | 4.63 | 3.00  |
|    | 453797 | AB011792  | Hs.35094  | extracellular matrix protein 2, female o | 4.62 | 5.14  |
|    | 449971 | AA807346  | Hs.288581 | Homo sapiens cDNA FLJ14296 fis, clone PL | 4.62 | 4.49  |
|    | 409598 | NM_014018 | Hs.55097  | mitochondrial ribosomal protein S28      | 4.62 | 3.56  |
|    | 413305 | NM_000426 | Hs.323511 | Homo sapiens cDNA: FLJ23176 fis, clone L | 4.62 | 4.24  |
|    | 412577 | Z22968    | Hs.74076  | CD163 antigen                            | 4.61 | 8.03  |
|    | 424046 | AF027866  | Hs.138202 | serine (or cysteine) proteinase inhibito | 4.61 | 6.86  |
|    | 452289 | BE568205  | Hs.28827  | mitogen-activated protein kinase kinase  | 4.61 | 4.33  |

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|    |        |           |           |  |      |       |
|----|--------|-----------|-----------|--|------|-------|
| 5  | 458971 | AL119206  | Hs.101874 | ESTs, Weakly similar to ALU1_HUMAN ALU S | 4.61 | 4.16  |
|    | 433256 | AW604447  | Hs.339408 | ESTs, Weakly similar to S26689 hypothe   | 4.61 | 3.58  |
|    | 440596 | H13032    | Hs.103378 | hypothetical protein MGC11034            | 4.61 | 3.22  |
|    | 427919 | AA173942  | Hs.326416 | Homo sapiens mRNA; cDNA DKFZp564H1916 (f | 4.60 | 4.74  |
|    | 424651 | AI93206   | Hs.32425  | ESTs                                     | 4.60 | 4.11  |
| 10 | 436701 | AW959032  |           | ESTs, Moderately similar to I78885 serin | 4.60 | 2.34  |
|    | 413691 | AB023173  | Hs.75478  | ATPase, Class VI, type 11B               | 4.59 | 4.36  |
|    | 448625 | AW970786  | Hs.178470 | hypothetical protein FLJ22662            | 4.59 | 4.00  |
|    | 436283 | AI480319  | Hs.120058 | ESTs                                     | 4.59 | 3.76  |
|    | 451710 | AW867467  | Hs.278712 | eukaryotic translation initiation factor | 4.59 | 3.51  |
| 15 | 436086 | Z43133    | Hs.9961   | Homo sapiens cDNA: FLJ21954 fis, clone H | 4.59 | 3.64  |
|    | 434697 | AL133033  | Hs.4084   | KIAA1025 protein                         | 4.58 | 5.10  |
|    | 402294 |           |           | Target Exon                              | 4.57 | 5.47  |
|    | 424098 | AF077374  | Hs.139322 | small proline-rich protein 3             | 4.57 | 5.12  |
|    | 406648 | AA563730  | Hs.277477 | major histocompatibility complex, class  | 4.57 | 4.66  |
| 20 | 428423 | AU075517  | Hs.184276 | solute carrier family 9 (sodium/hydrogen | 4.57 | 4.15  |
|    | 441566 | AA604110  | Hs.151725 | ESTs                                     | 4.57 | 3.21  |
|    | 400109 |           |           | Eos Control                              | 4.56 | 4.76  |
|    | 419740 | AB037835  | Hs.92991  | KIAA1414 protein                         | 4.56 | 3.63  |
|    | 421481 | AW391972  | Hs.104696 | KIAA1324 protein                         | 4.55 | 7.16  |
| 25 | 440266 | AA088809  | Hs.19525  | hypothetical protein FLJ22794            | 4.55 | 4.44  |
|    | 421979 | AW062518  | Hs.233150 | hypothetical protein MGC5560             | 4.55 | 4.36  |
|    | 408702 | AW959893  | Hs.27099  | hypothetical protein FLJ23293 similar to | 4.54 | 5.78  |
|    | 418021 | M15881    | Hs.1137   | uromodulin (uromucoid, Tamm-Horsfall gly | 4.54 | 4.61  |
|    | 422068 | AI807519  | Hs.104520 | Homo sapiens cDNA FLJ13694 fis, clone PL | 4.54 | 4.32  |
| 30 | 421986 | AL137432  | Hs.110454 | SEC15 (S. cerevisiae)-like               | 4.54 | 2.59  |
|    | 414798 | AI286323  | Hs.97411  | hypothetical protein MGC12335            | 4.53 | 6.18  |
|    | 410132 | NM_003480 | Hs.300946 | Microfibril-associated glycoprotein-2    | 4.53 | 5.87  |
|    | 449843 | R85337    | Hs.24030  | solute carrier family 31 (copper transpo | 4.53 | 4.87  |
|    | 424399 | AI905687  |           | AI905687:IL-BT095-190199-019 BT095 Homo  | 4.53 | 10.61 |
| 35 | 452924 | AW580939  | Hs.97199  | complement component C1q receptor        | 4.51 | 6.07  |
|    | 454000 | AA040620  | Hs.5672   | hypothetical protein AF140225            | 4.51 | 4.59  |
|    | 404730 |           |           | Target Exon                              | 4.51 | 4.30  |
|    | 449943 | AF104266  | Hs.24212  | latrophilin                              | 4.51 | 3.40  |
|    | 414217 | AI309298  | Hs.279898 | Homo sapiens cDNA: FLJ23165 fis, clone L | 4.50 | 2.97  |
| 40 | 435992 | AI033259  | Hs.118317 | Homo sapiens cDNA FLJ12088 fis, clone HE | 4.50 | 4.77  |
|    | 421311 | N71848    | Hs.283609 | hypothetical protein PRO2032             | 4.50 | 3.30  |
|    | 449785 | AI225235  | Hs.288300 | hypothetical protein FLJ23231            | 4.49 | 5.06  |
|    | 437611 | AA897108  |           | gb:am08a06.s1 Soares_NFL_T_GBC_S1 Homo s | 4.49 | 4.24  |
|    | 419612 | AI498267  | Hs.110613 | KIAA0421 protein                         | 4.49 | 4.16  |
| 45 | 414496 | W73853    |           | ESTs                                     | 4.49 | 3.15  |
|    | 450306 | AL080080  | Hs.24766  | thioredoxin domain-containing            | 4.48 | 3.38  |
|    | 444895 | AI674383  | Hs.22891  | solute carrier family 7 (cationic amino  | 4.47 | 4.45  |
|    | 432559 | AW452948  | Hs.257631 | ESTs                                     | 4.47 | 5.39  |
|    | 442554 | AW467376  | Hs.129640 | ESTs                                     | 4.47 | 4.00  |
| 50 | 421429 | NM_014922 | Hs.104305 | death effector filament-forming Ced-4-li | 4.46 | 4.47  |
|    | 422313 | AF045941  | Hs.115166 | scellin                                  | 4.45 | 5.07  |
|    | 435748 | AA699756  | Hs.117335 | ESTs                                     | 4.45 | 3.35  |
|    | 453283 | AA694386  | Hs.290914 | ESTs                                     | 4.45 | 3.28  |
|    | 441925 | R83113    |           | protein kinase C substrate 80K-H         | 4.45 | 3.28  |
| 55 | 440030 | AA932693  |           | EST                                      | 4.45 | 3.20  |
|    | 446515 | AL048875  |           | hypothetical protein DKFZp566133         | 4.44 | 3.66  |
|    | 406707 | S73840    | Hs.931    | myosin, heavy polypeptide 2, skeletal mu | 4.44 | 5.90  |
|    | 432341 | AL137662  | Hs.274401 | Homo sapiens mRNA; cDNA DKFZp434P086 (fr | 4.44 | 3.99  |
|    | 410453 | AW749036  |           | gb:RC2-BT0318-241199-011-110 BT0318 Homo | 4.44 | 3.49  |
| 60 | 450196 | AW956868  | Hs.24608  | DKFZP564D177 protein                     | 4.43 | 4.13  |
|    | 444147 | AB002306  | Hs.10351  | KIAA0308 protein                         | 4.43 | 3.95  |
|    | 427809 | M26380    | Hs.180878 | lipoprotein lipase                       | 4.42 | 3.88  |
|    | 428157 | AI738719  | Hs.198427 | hexokinase 2                             | 4.42 | 5.46  |
|    | 413299 | AA857487  | Hs.75275  | ubiquitination factor E4A (homologous to | 4.42 | 3.77  |
| 65 | 440245 | AK001913  | Hs.7100   | hypothetical protein                     | 4.42 | 3.51  |
|    | 442379 | NM_004613 | Hs.8265   | transglutaminase 2 (C polypeptide, prote | 4.42 | 1.79  |
|    | 408569 | BE066047  | Hs.86412  | chromosome 9 open reading frame 5        | 4.42 | 3.35  |
|    | 430361 | AI033965  | Hs.239926 | sterol-C4-methyl oxidase-like            | 4.41 | 5.78  |
|    | 414489 | AI620677  | Hs.73105  | ESTs                                     | 4.41 | 5.43  |
| 70 | 447731 | AA373527  | Hs.19385  | CGI-58 protein                           | 4.41 | 5.28  |
|    | 443195 | BE148235  | Hs.193063 | Homo sapiens cDNA FLJ14201 fis, clone NT | 4.41 | 4.41  |
|    | 448503 | BE243146  | Hs.21332  | BTB (POZ) domain containing 1            | 4.41 | 3.68  |
|    | 432546 | BE618778  | Hs.180638 | hypothetical protein FLJ13081            | 4.41 | 3.55  |
|    | 445620 | AI245225  | Hs.17441  | ESTs                                     | 4.41 | 3.44  |
| 75 | 454065 | BE394588  |           | gb:601311808F1 NIH_MGC_44 Homo sapiens c | 4.41 | 3.43  |
|    | 418802 | AB028989  | Hs.88500  | mitogen-activated protein kinase 8 inter | 4.40 | 2.04  |
|    | 431816 | T87431    | Hs.190738 | ESTs                                     | 4.39 | 4.26  |
|    | 429138 | AB020657  | Hs.197298 | NS1-binding protein                      | 4.39 | 4.47  |
|    | 426643 | AA857131  | Hs.171595 | HIV TAT specific factor 1                | 4.39 | 3.09  |
| 80 | 448943 | AI608810  | Hs.193288 | ESTs                                     | 4.39 | 2.63  |
|    | 414002 | NM_006732 | Hs.75678  | FBJ murine osteosarcoma viral oncogene h | 4.37 | 19.16 |
|    | 403593 |           |           | Target Exon                              | 4.37 | 6.35  |
|    | 408104 | AW972927  | Hs.293968 | ESTs                                     | 4.31 | 5.82  |
|    | 429624 | AA458648  | Hs.99476  | ESTs, Weakly similar to 1313184B alpha1  | 4.31 | 4.14  |
|    | 429538 | BE182592  | Hs.139322 | small proline-rich protein 2A            | 4.25 | 6.61  |
|    | 414505 | R45389    | Hs.23558  | ESTs, Weakly similar to A48042 lysosomal | 4.18 | 5.28  |
|    | 438533 | AI440266  | Hs.170673 | ESTs, Weakly similar to T24832 hypothe   | 4.18 | 5.81  |

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|----|--------|-----------|-----------|---|------|-------|
| 5  | 426143 | BE379836  |           | proteasome (prosome, macropain) subunit,  | 4.15 | 5.12  |
|    | 414527 | BE241739  | Hs.76359  | catalase                                  | 4.14 | 5.13  |
|    | 422287 | F16365    | Hs.114346 | cytochrome c oxidase subunit VIIa polype  | 4.13 | 8.60  |
|    | 408199 | AA132637  | Hs.15396  | Homo sapiens, clone IMAGE:3948909, mRNA,  | 4.12 | 5.94  |
|    | 412477 | AA150864  |           | microsomal glutathione S-transferase 1    | 4.10 | 10.00 |
| 10 | 411558 | AA102670  | Hs.70725  | gamma-aminobutyric acid (GABA) A recepto  | 4.09 | 5.39  |
|    | 444252 | R21135    | Hs.54985  | ESTs                                      | 4.07 | 6.01  |
|    | 400295 | W72838    |           | AI905687:IL-BT095-190199-019 BT095 Homo   | 4.06 | 13.32 |
|    | 438746 | AI885815  | Hs.184727 | Human melanoma-associated antigen p97 (m  | 4.06 | 7.57  |
|    | 429856 | AA971576  | Hs.225951 | topoisomerase-related function protein 4  | 4.05 | 6.24  |
| 15 | 422168 | AA586894  | Hs.112408 | S100 calcium-binding protein A7 (psorias  | 4.01 | 4.61  |
|    | 403710 |           |           | C4000160.gij12735793[ref]XP_011928.1 pr   | 4.00 | 4.06  |
|    | 406643 | N77976    | Hs.347939 | hemoglobin, alpha 2                       | 3.97 | 7.22  |
|    | 436372 | AW972301  | Hs.310286 | ESTs                                      | 3.96 | 5.41  |
|    | 428340 | AF261088  | Hs.154721 | aconitase 1, soluble                      | 3.94 | 5.33  |
| 20 | 424604 | AW865388  | Hs.151076 | KIAA1243 protein                          | 3.91 | 7.59  |
|    | 426653 | AA530892  | Hs.171695 | dual specificity phosphatase 1            | 3.91 | 14.81 |
|    | 410204 | AJ243425  | Hs.326035 | early growth response 1                   | 3.87 | 9.96  |
|    | 448520 | AB002367  | Hs.21355  | doublecortin and CaM kinase-like 1        | 3.87 | 5.09  |
|    | 443021 | AA368546  | Hs.8904   | Ig superfamily protein                    | 3.86 | 7.65  |
| 25 | 430418 | R98852    | Hs.36029  | heart and neural crest derivatives expre  | 3.81 | 6.19  |
|    | 447796 | AW953622  | Hs.223025 | RAB31, member RAS oncogene family         | 3.76 | 5.10  |
|    | 419407 | AW410377  | Hs.41502  | hypothetical protein FLJ21275             | 3.76 | 5.12  |
|    | 443725 | AW245680  | Hs.9701   | growth arrest and DNA-damage-inducible,   | 3.75 | 5.46  |
|    | 426281 | AK000987  | Hs.169111 | oxidation resistance 1                    | 3.74 | 5.14  |
| 30 | 423973 | AF038461  | Hs.136574 | arachidonate 12-lipoxygenase, 12R type    | 3.74 | 6.30  |
|    | 445234 | AW137636  | Hs.146059 | ESTs                                      | 3.72 | 5.59  |
|    | 457411 | AW085961  | Hs.130093 | iroquois-class homeobox protein IRX2      | 3.71 | 4.85  |
|    | 456063 | NM_006744 | Hs.76461  | retinol-binding protein 4, interstitial   | 3.71 | 6.72  |
|    | 413880 | AI660842  | Hs.110915 | interleukin 22 receptor                   | 3.71 | 4.01  |
| 35 | 422540 | M37984    | Hs.118845 | troponin C, slow,                         | 3.71 | 9.10  |
|    | 452241 | AL050204  | Hs.28540  | Homo sapiens mRNA; cDNA DKFZp586F1223 (f  | 3.70 | 3.21  |
|    | 453560 | AA348626  | Hs.5890   | hypothetical protein FLJ23306             | 3.69 | 5.13  |
|    | 410197 | NM_005518 | Hs.59889  | 3-hydroxy-3-methylglutaryl-Coenzyme A sy  | 3.69 | 7.69  |
|    | 413922 | AI535895  | Hs.221024 | ESTs                                      | 3.68 | 4.80  |
| 40 | 428698 | AA852773  | Hs.334838 | KIAA1866 protein                          | 3.64 | 5.22  |
|    | 451951 | AW082870  | Hs.210954 | ESTs                                      | 3.64 | 3.69  |
|    | 452308 | AJ167560  | Hs.61297  | ESTs                                      | 3.64 | 4.35  |
|    | 441128 | AA570256  |           | ESTs, Weakly similar to T23273 hypotheti  | 3.63 | 2.91  |
|    | 421978 | AJ243682  | Hs.110196 | NICE-1 protein                            | 3.61 | 6.05  |
| 45 | 418533 | NM_004533 | Hs.85937  | myosin-binding protein C, fast-type       | 3.61 | 6.22  |
|    | 452413 | AW082633  | Hs.215030 | ESTs                                      | 3.58 | 3.03  |
|    | 453003 | AA808466  | Hs.103395 | hypothetical protein FLJ14146             | 3.55 | 6.39  |
|    | 408522 | AI541214  | Hs.46320  | Small proline-rich protein SPRK [human,   | 3.54 | 10.68 |
|    | 423503 | M92843    | Hs.343586 | zinc finger protein homologous to Zfp-36  | 3.53 | 15.11 |
| 50 | 419879 | Z17805    | Hs.93564  | Homer, neuronal immediate early gene, 2   | 3.53 | 5.29  |
|    | 428382 | AF007132  | Hs.184019 | Homo sapiens clone 23551 mRNA sequence    | 3.51 | 4.46  |
|    | 447155 | AL042400  | Hs.75668  | Homo sapiens, Similar to RIKEN cDNA 1700  | 3.51 | 3.67  |
|    | 418067 | AI127958  | Hs.83393  | cystatin E/M                              | 3.51 | 3.74  |
|    | 420202 | AL036557  | Hs.95910  | putative lymphocyte G0/G1 switch gene     | 3.50 | 14.64 |
| 55 | 432543 | AA552690  | Hs.152423 | Homo sapiens cDNA: FLJ21274 fis, clone C  | 3.50 | 2.79  |
|    | 442321 | AF207664  | Hs.8230   | a disintegrin-like and metalloprotease (  | 3.48 | 7.91  |
|    | 450860 | AA021007  |           | integrin, beta 8                          | 3.47 | 5.89  |
|    | 414665 | AA160873  |           | serum amyloid A1                          | 3.46 | 9.22  |
|    | 413663 | BE247585  | Hs.75462  | BTG family, member 2                      | 3.46 | 5.63  |
| 60 | 427408 | AA583206  | Hs.2156   | RAR-related orphan receptor A             | 3.45 | 3.08  |
|    | 430171 | AF086289  | Hs.234766 | skin-specific protein                     | 3.45 | 4.77  |
|    | 453655 | AW960427  | Hs.342874 | transforming growth factor, beta recepto  | 3.42 | 8.09  |
|    | 450607 | AL050373  | Hs.25213  | hypothetical protein                      | 3.41 | 6.43  |
|    | 412596 | AA161219  | Hs.799    | diphtheria toxin receptor (heparin-bindi  | 3.41 | 6.10  |
| 65 | 427681 | AB018263  | Hs.180338 | tumor necrosis factor receptor superfam   | 3.39 | 6.59  |
|    | 440590 | AI863446  | Hs.266308 | mosaic serine protease                    | 3.34 | 3.09  |
|    | 452669 | AA216363  | Hs.262958 | hypothetical protein DKFZp434B044         | 3.31 | 10.06 |
|    | 422101 | AW404176  | Hs.111611 | ribosomal protein L27                     | 3.30 | 3.93  |
|    | 431986 | AA536130  | Hs.149018 | Novel human gene mapping to chromosome 20 | 3.30 | 3.54  |
| 70 | 412649 | NM_002206 | Hs.74369  | integrin, alpha 7                         | 3.28 | 6.89  |
|    | 423017 | AW178761  | Hs.227948 | serine (or cysteine) proteinase inhibito  | 3.28 | 5.44  |
|    | 425163 | D10040    | Hs.154890 | fatty-acid-Coenzyme A ligase, long-chain  | 3.28 | 5.93  |
|    | 412061 | AA833763  | Hs.330211 | ESTs                                      | 3.27 | 5.75  |
|    | 437592 | NM_003851 | Hs.5710   | cellular repressor of E1A-stimulated gen  | 3.27 | 5.83  |
| 75 | 452849 | AF044924  | Hs.30792  | hook2 protein                             | 3.26 | 5.66  |
|    | 421462 | AF016495  | Hs.104624 | aquaporin 9                               | 3.25 | 4.98  |
|    | 422083 | NM_001141 | Hs.111256 | arachidonate 15-lipoxygenase, second typ  | 3.24 | 6.56  |
|    | 444935 | AA262449  | Hs.223569 | ESTs                                      | 3.24 | 5.96  |
|    | 422057 | AI205785  | Hs.30348  | ESTs                                      | 3.22 | 5.72  |
| 80 | 410017 | AW952426  | Hs.109438 | Homo sapiens clone 24775 mRNA sequence    | 3.21 | 5.26  |
|    | 407948 | AW085161  | Hs.56279  | ICEBERG caspase-1 inhibitor               | 3.21 | 4.61  |
|    | 452089 | T97294    | Hs.271452 | ESTs, Weakly similar to PC4211 hepatocel  | 3.19 | 4.42  |
|    | 448249 | AW855331  | Hs.337124 | ESTs                                      | 3.18 | 2.97  |
|    | 430869 | D10511    | Hs.37     | acetyl-Coenzyme A acetyltransferase 1 (a  | 3.17 | 5.66  |
|    | 443623 | AA345519  | Hs.9641   | complement component 1, q subcomponent,   | 3.16 | 12.00 |
|    | 452865 | AI924046  | Hs.119567 | ESTs, Weakly similar to A47582 B-cell gr  | 3.16 | 6.03  |
|    | 452392 | L20815    | Hs.507    | comeodesmosin                             | 3.15 | 5.70  |



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|----|--------|-----------|-----------|--|------|-------|
|    | 410231 | AA314163  | Hs.61153  | proteasome (prosome, macropain) 26S subu | 3.15 | 5.87  |
|    | 420309 | AW043637  | Hs.21766  | ESTs, Weakly similar to ALU5_HUMAN ALU S | 3.15 | 4.98  |
|    | 406791 | AI220684  | Hs.347939 | hemoglobin, alpha 2                      | 3.13 | 17.37 |
| 5  | 419648 | T73661    | Hs.91877  | thyroid hormone responsive SPOT14 (rat)  | 3.12 | 4.63  |
|    | 421485 | AA243499  | Hs.104800 | hypothetical protein FLJ10134            | 3.12 | 3.02  |
|    | 432375 | BE536069  | Hs.2962   | S100 calcium-binding protein P           | 3.12 | 8.51  |
|    | 417713 | D42047    | Hs.82432  | KIAA0089 protein                         | 3.12 | 5.82  |
|    | 446948 | BE409053  | Hs.299629 | peroxisomal long-chain acyl-coA thioeste | 3.11 | 6.51  |
|    | 444195 | AB002351  | Hs.10587  | KIAA0353 protein                         | 3.11 | 5.44  |
| 10 | 415704 | NM_001677 | Hs.78629  | ATPase, Na? transporting, beta 1 polypep | 3.11 | 6.61  |
|    | 401905 |           |           | ENSP00000252232?-Sterol regulatory eleme | 3.10 | 3.52  |
|    | 443071 | AL080021  | Hs.8986   | complement component 1, q subcomponent,  | 3.10 | 5.10  |
|    | 427095 | AA316080  | Hs.173554 | ubiquinol-cytochrome c reductase core pr | 3.10 | 5.39  |
|    | 413835 | AI272727  | Hs.249163 | fatty acid hydroxylase                   | 3.08 | 5.56  |
| 15 | 448106 | AI800470  | Hs.171941 | ESTs                                     | 3.07 | 5.19  |
|    | 432908 | AI861896  |           | ESTs                                     | 3.07 | 3.47  |
|    | 422158 | L10343    | Hs.112341 | protease inhibitor 3, skin-derived (SKAL | 3.07 | 7.48  |
|    | 429506 | D49835    | Hs.171942 | ras responsive element binding protein 1 | 3.05 | 3.97  |
|    | 424998 | U58515    | Hs.154138 | chitinase 3-like 2                       | 3.02 | 6.75  |
| 20 | 419358 | T78763    | Hs.90063  | neurocalcin delta                        | 3.00 | 7.68  |
|    | 414541 | BE293116  | Hs.76392  | aldehyde dehydrogenase 1 family, member  | 2.99 | 5.44  |
|    | 426402 | BE387327  | Hs.80475  | polymerase (RNA) II (DNA directed) polyp | 2.99 | 6.84  |
|    | 450472 | AI190071  | Hs.55278  | ESTs                                     | 2.98 | 5.06  |
|    | 421335 | X99977    | Hs.103505 | ARS component B                          | 2.97 | 9.31  |
| 25 | 431316 | AA502663  | Hs.145037 | ESTs                                     | 2.96 | 4.30  |
|    | 420996 | AK001927  | Hs.100895 | hypothetical protein FLJ10462            | 2.96 | 2.97  |
|    | 451176 | AA046457  | Hs.60677  | ESTs                                     | 2.95 | 6.59  |
|    | 444204 | AI129194  | Hs.143040 | ESTs                                     | 2.93 | 3.92  |
|    | 436723 | AW975895  | Hs.307486 | ESTs                                     | 2.93 | 6.64  |
| 30 | 436664 | AW197887  | Hs.253353 | ESTs                                     | 2.93 | 3.82  |
|    | 406962 | M13485    |           | gb:Human metallothionein I-B gene, exon  | 2.93 | 3.10  |
|    | 453092 | X64838    | Hs.31638  | resin (Raed-Steinberg cell-expressed in  | 2.93 | 5.35  |
|    | 444734 | NM_001360 | Hs.11806  | 7-dehydrocholesterol reductase           | 2.91 | 9.84  |
| 35 | 430310 | U60115    | Hs.239069 | four and a half LIM domains 1            | 2.91 | 7.02  |
|    | 420876 | AA918425  | Hs.177744 | ESTs                                     | 2.91 | 5.41  |
|    | 426050 | AF017307  | Hs.166096 | E74-like factor 3 (els domain transcript | 2.91 | 5.64  |
|    | 428232 | BE272452  | Hs.183109 | monoamine oxidase A                      | 2.90 | 9.54  |
|    | 413796 | AW408094  | Hs.75545  | interleukin 4 receptor                   | 2.89 | 5.37  |
| 40 | 413884 | AI668892  | Hs.239758 | hypothetical protein FLJ12389 similar to | 2.88 | 5.34  |
|    | 411372 | AI147861  | Hs.213289 | low density lipoprotein receptor (famili | 2.86 | 6.31  |
|    | 428500 | AI815395  | Hs.184641 | fatty acid desaturase 2                  | 2.86 | 3.93  |
|    | 444135 | AK000374  | Hs.10346  | hypothetical protein FLJ20154            | 2.86 | 6.05  |
|    | 452689 | F33668    | Hs.284176 | transferrin                              | 2.85 | 6.11  |
| 45 | 403108 |           |           | ENSP00000241415?-Hypothetical 67.7 kDa p | 2.85 | 3.17  |
|    | 434433 | AW629759  |           | gb:hh70e05.y1 NCL_CGAP_GU1 Homo sapiens  | 2.84 | 3.35  |
|    | 434952 | T10269    | Hs.4285   | Homo sapiens cDNA: FLJ22505 fis, clone H | 2.83 | 4.05  |
|    | 420544 | AA677577  | Hs.98732  | Homo sapiens Chromosome 16 BAC clone CIT | 2.83 | 3.57  |
|    | 406922 | S70284    | Hs.119597 | gb:stearoyl-CoA desaturase [human, adipo | 2.82 | 3.80  |
| 50 | 437470 | AL390147  | Hs.134742 | hypothetical protein DKFZp547D065        | 2.82 | 6.40  |
|    | 429807 | AK002138  | Hs.306227 | Homo sapiens cDNA FLJ11276 fis, clone PL | 2.82 | 2.97  |
|    | 425180 | U00115    | Hs.155024 | B-cell CLL/lymphoma 6 (zinc finger prote | 2.81 | 5.15  |
|    | 415409 | AW993701  |           | NS1-associated protein 1                 | 2.80 | 6.16  |
|    | 433848 | AF095719  | Hs.93764  | carboxypeptidase A4                      | 2.80 | 2.88  |
| 55 | 425750 | AL050276  | Hs.42400  | zinc finger protein 288                  | 2.79 | 5.99  |
|    | 433638 | AW872507  | Hs.3462   | cytochrome c oxidase subunit VIic        | 2.78 | 5.25  |
|    | 429128 | AA446869  | Hs.119316 | ESTs                                     | 2.78 | 4.17  |
|    | 446292 | AF081497  | Hs.279682 | Rh type C glycoprotein                   | 2.77 | 7.37  |
|    | 430420 | AW140027  | Hs.26373  | Homo sapiens cDNA: FLJ23449 fis, clone H | 2.76 | 6.09  |
| 60 | 419923 | AW081455  | Hs.120219 | ESTs                                     | 2.76 | 4.31  |
|    | 407555 | Z48511    |           | gb:H.sapiens XG mRNA (clone PEP11).      | 2.76 | 4.12  |
|    | 425240 | AA306495  | Hs.1869   | phosphoglucomutase 1                     | 2.74 | 5.92  |
|    | 459317 | BRCA1b    |           | Eos Control                              | 2.74 | 19.85 |
|    | 425819 | N92165    | Hs.93231  | ESTs                                     | 2.74 | 5.72  |
| 65 | 408839 | AW277084  |           | gb:xp61h09.x1 NCL_CGAP_Ov39 Homo sapiens | 2.73 | 3.93  |
|    | 418253 | AA215539  | Hs.283643 | Homo sapiens cDNA FLJ11606 fis, clone HE | 2.72 | 5.94  |
|    | 409453 | AI885516  | Hs.95612  | ESTs                                     | 2.72 | 6.51  |
|    | 406625 | Y13647    | Hs.119597 | stearoyl-CoA desaturase (delta-9-desatur | 2.72 | 3.80  |
|    | 420074 | AA253425  | Hs.190074 | ESTs                                     | 2.71 | 4.04  |
| 70 | 429547 | AW009166  | Hs.99376  | FGENESH predicted novel secreted protein | 2.71 | 2.84  |
|    | 444026 | AA205759  | Hs.10119  | hypothetical protein FLJ14957            | 2.71 | 6.17  |
|    | 407112 | AA070801  | Hs.51615  | ESTs, Weakly similar to ALU7_HUMAN ALU S | 2.70 | 5.23  |
|    | 429615 | AF258627  | Hs.211562 | ATP-binding cassette, sub-family A (ABC1 | 2.69 | 5.33  |
|    | 419098 | AA234041  | Hs.87271  | ESTs                                     | 2.69 | 3.22  |
|    | 424206 | NM_003734 | Hs.198241 | amine oxidase, copper containing 3 (vasc | 2.69 | 6.64  |
| 75 | 443102 | AI247472  | Hs.132965 | ESTs                                     | 2.68 | 5.85  |
|    | 411939 | AI365585  | Hs.146246 | ESTs                                     | 2.68 | 5.38  |
|    | 453201 | AI432195  | Hs.135098 | ESTs                                     | 2.68 | 3.69  |
|    | 420231 | R06866    | Hs.19813  | ESTs                                     | 2.67 | 4.70  |
| 80 | 404996 |           |           | Target Exon                              | 2.67 | 4.97  |
|    | 452955 | AW390282  | Hs.31130  | transmembrane 7 superfamily member 2     | 2.66 | 6.36  |
|    | 447205 | BE617015  | Hs.11006  | ESTs, Moderately similar to T17372 plasm | 2.65 | 15.65 |
|    | 417365 | D50683    | Hs.82028  | transforming growth factor, beta recepto | 2.65 | 7.74  |
|    | 444169 | AV648170  | Hs.58756  | ESTs                                     | 2.64 | 3.40  |

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|    |        |           |           |  |      |       |
|----|--------|-----------|-----------|--|------|-------|
| 5  | 431247 | AL021578  | Hs.278489 | mainlin 4                                | 2.64 | 3.35  |
|    | 423960 | AA164516  | Hs.136309 | SH3-containing protein SH3GLB1           | 2.63 | 5.12  |
|    | 432093 | H28383    |           | gb:y152c03.r1 Soares breast 3NbHBst Homo | 2.63 | 4.08  |
|    | 408669 | AI493591  | Hs.78146  | platelet/endothelial cell adhesion molec | 2.61 | 6.44  |
|    | 440924 | AF151872  | Hs.7527   | small fragment nuclease                  | 2.59 | 6.37  |
| 10 | 416232 | AW502678  | Hs.79090  | exportin 1 (CRM1, yeast, homolog)        | 2.59 | 6.46  |
|    | 425320 | U29344    | Hs.83190  | fatty acid synthase                      | 2.59 | 3.93  |
|    | 402315 |           |           | NM_003430:Homo sapiens zinc finger prote | 2.58 | 6.09  |
|    | 449539 | W80363    | Hs.58446  | ESTs                                     | 2.58 | 4.05  |
|    | 418271 | NM_000919 | Hs.83920  | peptidylglycine alpha-amidating monooxyg | 2.58 | 5.61  |
| 15 | 449967 | R40978    | Hs.271498 | ESTs, Moderately similar to ALU1_HUMAN A | 2.58 | 3.54  |
|    | 438752 | AW238673  | Hs.146038 | ESTs                                     | 2.58 | 5.24  |
|    | 424675 | NM_005512 | Hs.151641 | glycoprotein A repetitions predominant   | 2.57 | 5.16  |
|    | 438763 | AI583207  | Hs.99029  | CCAAT/enhancer binding protein (C/EBP),  | 2.57 | 6.45  |
|    | 413630 | AL036883  | Hs.75450  | delta sleep inducing peptide, immunoreac | 2.56 | 6.38  |
| 20 | 424834 | AK001432  | Hs.153408 | Homo sapiens cDNA FLJ10570 fis, clone NT | 2.56 | 2.90  |
|    | 427666 | AI791495  | Hs.180142 | calmodulin-like skin protein (CLSP)      | 2.56 | 2.67  |
|    | 426403 | NM_000361 | Hs.2030   | thrombomodulin                           | 2.56 | 5.19  |
|    | 432906 | BE265489  | Hs.3123   | lethal giant larvae (Drosophila) homolog | 2.55 | 5.62  |
|    | 420924 | R01026    | Hs.245321 | ESTs                                     | 2.55 | 3.22  |
| 25 | 427527 | AI809057  | Hs.153261 | immunoglobulin heavy constant mu         | 2.55 | 5.45  |
|    | 407083 | Z48511    |           | H.sapiens XG mRNA (clone PEP11)          | 2.55 | 4.50  |
|    | 445437 | AI224165  | Hs.148725 | ESTs                                     | 2.54 | 4.72  |
|    | 425097 | NM_014247 |           | PDZ domain containing guanine nucleotide | 2.54 | 5.28  |
|    | 420105 | AW015571  | Hs.32244  | ESTs, Weakly similar to FMOD_HUMAN FIBRO | 2.53 | 6.55  |
| 30 | 429554 | NM_012275 | Hs.207224 | interleukin 1, delta                     | 2.53 | 2.84  |
|    | 408896 | AI610447  | Hs.48778  | riban protein                            | 2.53 | 7.08  |
|    | 409169 | F00991    | Hs.50889  | (clone PWHLC2-24) myosin light chain 2   | 2.52 | 8.68  |
|    | 420235 | AA256756  | Hs.31178  | ESTs                                     | 2.51 | 4.21  |
|    | 436314 | AI983409  |           | ESTs                                     | 2.51 | 3.11  |
| 35 | 440602 | AI743491  | Hs.292692 | ESTs                                     | 2.50 | 2.71  |
|    | 444946 | AW139205  | Hs.156457 | hypothetical protein FLJ22408            | 2.48 | 2.86  |
|    | 430235 | BE268048  | Hs.236494 | RAB10, member RAS oncogene family        | 2.48 | 5.37  |
|    | 423929 | M69136    | Hs.135626 | chymase 1, mast cell                     | 2.48 | 3.21  |
|    | 426689 | BE245550  | Hs.171825 | basic helix-loop-helix domain containing | 2.48 | 7.88  |
| 40 | 421811 | AA022550  | Hs.108548 | PABP-interacting protein 2               | 2.48 | 5.28  |
|    | 414420 | AA043424  | Hs.76095  | immediate early response 3               | 2.47 | 8.33  |
|    | 420693 | NM_001972 | Hs.99863  | elastase 2, neutrophil                   | 2.47 | 2.78  |
|    | 420139 | NM_005357 | Hs.95351  | lipase, hormone-sensitive                | 2.46 | 10.12 |
|    | 447179 | AW015633  | Hs.157299 | ESTs                                     | 2.46 | 3.45  |
| 45 | 451687 | AL041260  | Hs.26837  | Homo sapiens mRNA; cDNA DKFZp586K1123 (f | 2.46 | 5.47  |
|    | 420322 | AB014555  | Hs.96731  | huntingtin interacting protein-1-related | 2.45 | 6.18  |
|    | 421064 | AI245432  | Hs.101382 | tumor necrosis factor, alpha-induced pro | 2.45 | 5.75  |
|    | 421818 | AW992976  | Hs.50098  | NM_002489:Homo sapiens NADH dehydrogenas | 2.45 | 6.73  |
|    | 412524 | AA417813  | Hs.44208  | hypothetical protein FLJ23153            | 2.44 | 10.55 |
| 50 | 439639 | AA370045  | Hs.6607   | AXIN1 up-regulated                       | 2.44 | 5.22  |
|    | 436009 | H57130    | Hs.120925 | ESTs                                     | 2.44 | 2.94  |
|    | 414814 | D14697    | Hs.77393  | farnesyl diphosphate synthase (farnesyl  | 2.43 | 5.17  |
|    | 434060 | AA744902  | Hs.197922 | hypothetical protein PRO1489             | 2.43 | 5.56  |
|    | 425335 | BE394327  | Hs.296267 | folistatin-like 1                        | 2.43 | 10.52 |
| 55 | 406997 | U07807    |           | metallothionein IV                       | 2.42 | 4.35  |
|    | 431545 | AF095703  | Hs.8110   | L-3-hydroxyacyl-Coenzyme A dehydrogenase | 2.42 | 6.72  |
|    | 417029 | AW952192  | Hs.273385 | guanine nucleotide binding protein (G pr | 2.41 | 5.22  |
|    | 412825 | AW167439  | Hs.190651 | Homo sapiens cDNA FLJ13625 fis, clone PL | 2.41 | 5.56  |
|    | 445462 | AA378776  | Hs.288649 | hypothetical protein MGC3077             | 2.41 | 5.24  |
| 60 | 448954 | AB014564  | Hs.22616  | KIAA0664 protein                         | 2.40 | 5.31  |
|    | 447218 | BE617762  | Hs.10748  | hypothetical protein DKFZp434B195        | 2.40 | 5.24  |
|    | 423810 | AL132565  | Hs.132955 | BCL2/adenovirus E1B 19kD-interacting pro | 2.39 | 5.55  |
|    | 450440 | AB024334  | Hs.25001  | tyrosine 3-monooxygenase/tryptophan 5-mo | 2.39 | 7.63  |
|    | 430356 | N87990    | Hs.239870 | Homo sapiens mRNA; cDNA DKFZp564H0764 (f | 2.38 | 5.99  |
| 65 | 418355 | L42563    | Hs.11165  | ATPase, H? transporting, nongastric, alp | 2.38 | 3.84  |
|    | 416273 | AW575691  | Hs.79123  | KIAA0084 protein                         | 2.38 | 5.22  |
|    | 427272 | NM_001096 | Hs.174140 | ATP citrate lyase                        | 2.38 | 5.41  |
|    | 437186 | AA338305  | Hs.5472   | hypothetical protein FLJ20173            | 2.35 | 5.13  |
|    | 443679 | AK001810  | Hs.9670   | hypothetical protein FLJ10948            | 2.33 | 5.81  |
| 70 | 431179 | AI338644  | Hs.195432 | aldehyde dehydrogenase 2 family (mitocho | 2.33 | 7.89  |
|    | 418400 | BE243026  | Hs.301989 | KIAA0245 protein                         | 2.33 | 5.36  |
|    | 456876 | AL044870  | Hs.208780 | ESTs, Weakly similar to T29647 hypotheti | 2.32 | 3.27  |
|    | 407082 | Z47055    |           | gb:Human partial cDNA sequence, farnesyl | 2.31 | 4.65  |
|    | 426508 | W23184    | Hs.170171 | glutamate-ammonia ligase (glutamine synt | 2.31 | 9.37  |
| 75 | 408536 | AW381532  | Hs.135188 | ESTs                                     | 2.31 | 2.60  |
|    | 410552 | X66945    | Hs.748    | fibroblast growth factor receptor 1 (fms | 2.30 | 5.94  |
|    | 437201 | F29279    | Hs.171625 | hypothetical protein MGC14697            | 2.30 | 5.75  |
|    | 417314 | N68168    |           | gb:za11c01.s1 Soares fetal liver spleen  | 2.30 | 3.12  |
|    | 433738 | AI684802  |           | ESTs                                     | 2.30 | 3.91  |
| 80 | 410531 | AW752953  |           | gb:QV0-CT0224-261099-035-g02 CT0224 Homo | 2.29 | 3.61  |
|    | 422491 | AA338548  | Hs.117546 | neuronalin                               | 2.29 | 5.66  |
|    | 434411 | AA632649  | Hs.201372 | ESTs                                     | 2.28 | 4.40  |
|    | 451926 | AW134519  | Hs.96125  | Homo sapiens, Similar to clone FLB3816,  | 2.28 | 5.14  |
|    | 401131 |           |           | NM_001651*:Homo sapiens aquaporin 5 (AQP | 2.27 | 5.62  |
|    | 401205 |           |           | Target Exon                              | 2.27 | 2.98  |
|    | 422109 | S73265    | Hs.1473   | gastrin-releasing peptide                | 2.26 | 3.94  |
|    | 456646 | AJ243662  | Hs.110196 | NICE-1 protein                           | 2.26 | 2.52  |

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|    |        |           |           |   |      |       |
|----|--------|-----------|-----------|---|------|-------|
| 5  | 443049 | AI028613  | Hs.132343 | ESTs                                      | 2.25 | 3.13  |
|    | 440160 | BE560269  | Hs.7010   | NPD002 protein                            | 2.25 | 4.93  |
|    | 438367 | N79688    | Hs.204354 | ras homolog gene family, member B         | 2.25 | 9.58  |
|    | 442987 | AA075975  |           | Homo sapiens clone TCCCIA00427 mRNA sequ  | 2.24 | 6.19  |
|    | 421545 | AA292810  | Hs.90034  | hypothetical protein FLJ21916             | 2.24 | 2.58  |
| 10 | 447150 | AI439011  | Hs.86386  | myeloid cell leukemia sequence 1 (BCL2-r  | 2.23 | 9.03  |
|    | 450014 | N41322    | Hs.18441  | ESTs                                      | 2.23 | 4.50  |
|    | 426611 | BE178050  | Hs.171271 | catenin (cadherin-associated protein), b  | 2.22 | 5.64  |
|    | 434039 | L32977    | Hs.3712   | ubiquinol-cytochrome c reductase, Rieske  | 2.22 | 5.57  |
|    | 427569 | BE299197  | Hs.179665 | cyclin-dependent kinase inhibitor 1A (p2  | 2.22 | 5.10  |
| 15 | 444637 | T19101    | Hs.11494  | fibulin 5                                 | 2.22 | 6.43  |
|    | 406710 | AI708347  | Hs.184014 | ribosomal protein L31                     | 2.21 | 9.10  |
|    | 424909 | S78187    | Hs.153752 | cell division cycle 25B                   | 2.20 | 6.13  |
|    | 407228 | M25079    | Hs.155376 | hemoglobin, beta                          | 2.20 | 11.34 |
|    | 450612 | AL359946  | Hs.14779  | acetyl-CoA synthetase                     | 2.20 | 7.03  |
| 20 | 458568 | AI769067  | Hs.127824 | ESTs, Weakly similar to T28770 hypotheti  | 2.20 | 5.68  |
|    | 407370 | AA682384  | Hs.182084 | ESTs                                      | 2.20 | 7.00  |
|    | 438942 | AW875398  | Hs.6451   | PRO0659 protein                           | 2.19 | 6.09  |
|    | 400228 |           |           | NM_021724*.Homo sapiens nuclear receptor  | 2.19 | 6.95  |
|    | 410185 | BE294068  | Hs.737    | immediate early protein                   | 2.18 | 11.72 |
| 25 | 428150 | AW950547  | Hs.70312  | cytochrome c oxidase subunit VIIa polype  | 2.17 | 7.05  |
|    | 400307 | AF005081  |           | Homo sapiens skin-specific protein (xp32  | 2.17 | 6.41  |
|    | 424425 | AB031480  | Hs.146824 | SPR1 protein                              | 2.17 | 3.68  |
|    | 414459 | Y11525    | Hs.76171  | CCAAT/enhancer binding protein (C/EBP),   | 2.17 | 3.11  |
|    | 400082 |           |           | Eos Control                               | 2.16 | 8.40  |
| 30 | 434702 | AL039734  | Hs.4099   | nardilysin (N-arginine dibasic convertas  | 2.16 | 6.83  |
|    | 439651 | AF086480  | Hs.56255  | ESTs                                      | 2.16 | 3.72  |
|    | 431838 | AI097229  | Hs.217484 | ESTs, Weakly similar to ALU1_HUMAN ALU S  | 2.15 | 3.34  |
|    | 420225 | AW243046  | Hs.282076 | Homo sapiens mRNA for KIAA1650 protein,   | 2.14 | 6.20  |
|    | 428848 | NM_000230 | Hs.194236 | leptin (murine obesity homolog)           | 2.14 | 3.42  |
| 35 | 415213 | NM_002933 | Hs.78224  | ribonuclease, RNase A family, 1 (pancrea  | 2.14 | 9.81  |
|    | 434454 | AF217798  | Hs.3850   | LIS1-interacting protein NUDEL; endoolig  | 2.14 | 6.75  |
|    | 452467 | AW500815  |           | ESTs                                      | 2.13 | 4.66  |
|    | 418226 | AA424202  | Hs.83834  | cytochrome b-5                            | 2.13 | 5.41  |
|    | 414815 | AW292140  | Hs.130286 | ESTs                                      | 2.12 | 4.14  |
| 40 | 430967 | H16791    | Hs.100895 | ESTs                                      | 2.12 | 4.14  |
|    | 426102 | AF200496  | Hs.166371 | interleukin 1, zeta                       | 2.12 | 3.77  |
|    | 410223 | S73775    | Hs.60708  | calsequestrin 1 (fast-twitch, skeletal m  | 2.11 | 5.30  |
|    | 439518 | W76326    |           | gb:zd60cd04.r1 Soares_fetal_heart_NbHH19W | 2.11 | 4.01  |
|    | 427228 | AA115770  | Hs.174051 | small nuclear ribonucleoprotein 70kD pol  | 2.10 | 5.13  |
| 45 | 436961 | AW375974  | Hs.156704 | ESTs                                      | 2.10 | 3.33  |
|    | 417139 | M69043    | Hs.81328  | nuclear factor of kappa light polypeptid  | 2.10 | 8.13  |
|    | 445831 | NM_006055 | Hs.13351  | LanC (bacterial lanthibiotic synthetase c | 2.08 | 5.42  |
|    | 431593 | NM_002108 | Hs.276590 | ESTs                                      | 2.08 | 4.43  |
|    | 423887 | AL080207  | Hs.134585 | DKFZP434G232 protein                      | 2.08 | 3.92  |
| 50 | 424389 | AA339786  |           | lymphocyte-specific protein 1             | 2.07 | 5.52  |
|    | 407394 | AF005081  |           | gb:Homo sapiens skin-specific protein (x  | 2.06 | 5.93  |
|    | 400198 |           |           | Eos Control                               | 2.05 | 10.48 |
|    | 426335 | AI054347  | Hs.2017   | ribosomal protein L38                     | 2.04 | 5.57  |
|    | 443652 | AI080692  | Hs.134229 | ESTs, Weakly similar to I54401 hypertens  | 2.04 | 3.36  |
| 55 | 448804 | AW512213  | Hs.342849 | ADP-ribosylation factor-like 5            | 2.02 | 3.32  |
|    | 443932 | AW888222  | Hs.9973   | tensin                                    | 2.02 | 9.28  |
|    | 421324 | BE257515  | Hs.103503 | deoxyribonuclease I-like 2                | 2.02 | 5.71  |
|    | 426406 | AI742501  | Hs.169756 | complement component 1, s subcomponent    | 2.01 | 5.49  |
|    | 410669 | AW805749  |           | superoxide dismutase 2, mitochondrial     | 2.01 | 3.05  |
| 60 | 446193 | AI279390  | Hs.144658 | ESTs, Weakly similar to T17257 hypotheti  | 2.01 | 2.77  |
|    | 400078 |           |           | Eos Control                               | 2.00 | 11.41 |
|    | 456267 | AI127958  | Hs.83393  | cystatin E/M                              | 1.99 | 3.59  |
|    | 413125 | BE244589  | Hs.75207  | glyoxalase I                              | 1.98 | 6.70  |
|    | 415433 | W70067    | Hs.58066  | ESTs                                      | 1.98 | 5.59  |
| 65 | 434699 | AA643687  | Hs.149425 | Homo sapiens cDNA FLJ11980 fis, clone HE  | 1.98 | 3.52  |
|    | 417553 | L09190    |           | trichohyalin                              | 1.98 | 3.39  |
|    | 403105 |           |           | Target Exon                               | 1.98 | 5.05  |
|    | 414081 | AW969976  |           | matrix Gla protein                        | 1.97 | 8.74  |
|    | 422639 | AI929377  | Hs.173724 | creatine kinase, brain                    | 1.97 | 5.51  |
| 70 | 452208 | AA024792  | Hs.31895  | hypothetical protein MGC4093              | 1.97 | 5.67  |
|    | 436106 | AI050715  | Hs.2331   | E2F transcription factor 5, p130-binding  | 1.97 | 5.75  |
|    | 439265 | AL134430  | Hs.6906   | Homo sapiens cDNA: FLJ23197 fis, clone R  | 1.96 | 5.09  |
|    | 430037 | BE409649  | Hs.227789 | mitogen-activated protein kinase-activat  | 1.96 | 5.49  |
|    | 440054 | AW661947  | Hs.6891   | splicing factor, arginine/serine-rich 6   | 1.95 | 5.95  |
| 75 | 417088 | M54915    | Hs.81170  | pim-1 oncogene                            | 1.95 | 8.19  |
|    | 429451 | BE409861  | Hs.202833 | heme oxygenase (decycling) 1              | 1.95 | 5.19  |
|    | 415274 | AF001548  | Hs.78344  | myosin, heavy polypeptide 11, smooth mus  | 1.95 | 6.78  |
|    | 452472 | AW957300  | Hs.294142 | ESTs, Weakly similar to C55663 oligodend  | 1.94 | 5.98  |
|    | 414860 | BE255593  | Hs.77502  | methionine adenosyltransferase II, alpha  | 1.94 | 5.13  |
| 80 | 437220 | AL117542  | Hs.334305 | GS1999full                                | 1.94 | 3.42  |
|    | 450461 | BE408081  | Hs.46736  | hypothetical protein FLJ23476             | 1.94 | 5.66  |
|    | 424924 | AL039103  | Hs.153834 | pumilio (Drosophila) homolog 1            | 1.93 | 5.28  |
|    | 413945 | NM_000591 | Hs.75627  | CD14 antigen                              | 1.93 | 5.38  |
|    | 428193 | NM_004235 |           | Kruppel-like factor 4 (gut)               | 1.93 | 5.75  |
|    | 415988 | BE407713  | Hs.78943  | bleomycin hydrolase                       | 1.92 | 4.65  |
|    | 425783 | AI026740  | Hs.1948   | ribosomal protein S21                     | 1.92 | 9.79  |
|    | 431476 | BE612705  | Hs.256697 | histidine triad nucleotide-binding prote  | 1.91 | 7.00  |

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|    |        |           |           |  |      |       |
|----|--------|-----------|-----------|--|------|-------|
|    | 456653 | AI807519  | Hs.104520 | Homo sapiens cDNA FLJ13694 fis, clone PL     | 1.91 | 3.41  |
|    | 401846 |           |           | NM_000988*:Homo sapiens ribosomal protein    | 1.91 | 5.62  |
|    | 428368 | BE440042  | Hs.83326  | matrix metalloproteinase 3 (stromelysin      | 1.90 | 4.00  |
|    | 400199 |           |           | Eos Control                                  | 1.89 | 15.74 |
| 5  | 429367 | AB007867  | Hs.278311 | plexin B1                                    | 1.88 | 5.58  |
|    | 400083 |           |           | Eos Control                                  | 1.88 | 9.07  |
|    | 433465 | AV657778  | Hs.3314   | selenoprotein P, plasma, 1                   | 1.88 | 5.16  |
|    | 400079 |           |           | Eos Control                                  | 1.87 | 8.57  |
|    | 411807 | AK000290  | Hs.44033  | dipeptidyl peptidase 8                       | 1.86 | 5.19  |
| 10 | 409178 | BE393948  | Hs.50915  | kalikrein 5                                  | 1.85 | 2.75  |
|    | 422624 | BE616678  | Hs.76152  | KDEL (Lys-Asp-Glu-Leu) endoplasmic retic     | 1.85 | 5.33  |
|    | 443121 | Z19267    | Hs.9006   | VAMP (vesicle-associated membrane protei     | 1.85 | 6.01  |
|    | 451092 | AI207256  | Hs.13766  | Homo sapiens mRNA for FLJ00074 protein,      | 1.84 | 2.82  |
|    | 430572 | U33114    | Hs.245188 | tissue inhibitor of metalloproteinase 3      | 1.83 | 5.10  |
| 15 | 426812 | AF105365  | Hs.172613 | solute carrier family 12 (potassium/chlo     | 1.83 | 6.48  |
|    | 439927 | AA854650  | Hs.124597 | ESTs   | 1.82 | 3.63  |
|    | 415089 | N25117    | Hs.299465 | ribosomal protein S26                        | 1.82 | 6.69  |
|    | 406400 |           |           | kalikrein 8 (neuropsin/ovasin) (KLK8)        | 1.82 | 2.95  |
|    | 406467 |           |           | Target Exon                                  | 1.79 | 2.65  |
| 20 | 426672 | AW270555  | Hs.171774 | hypothetical protein                         | 1.79 | 5.24  |
|    | 414088 | AW797956  | Hs.75748  | proteasome (prosome, macropain) subunit,     | 1.78 | 6.02  |
|    | 433271 | BE621697  | Hs.14317  | nucleolar protein family A, member 3 (H/     | 1.78 | 5.92  |
|    | 429307 | AU076592  | Hs.198951 | jun B proto-oncogene                         | 1.77 | 5.44  |
|    | 433640 | AW390125  | Hs.240443 | Homo sapiens cDNA: FLJ23538 fis, clone L     | 1.77 | 5.79  |
| 25 | 425503 | W92517    | Hs.158203 | actin binding LIM protein 1                  | 1.77 | 9.27  |
|    | 429191 | AF065215  | Hs.198161 | phospholipase A2, group IVB (cytosolic)      | 1.77 | 5.44  |
|    | 425875 | AU077333  | Hs.160483 | erythrocyte membrane protein band 7.2 (s     | 1.77 | 6.97  |
|    | 431021 | AI869664  |           | thiosulfate sulfurtransferase (rhodanese     | 1.77 | 5.23  |
|    | 432891 | AF161483  | Hs.279761 | HSPC134 protein                              | 1.75 | 5.73  |
| 30 | 432872 | AI908984  | Hs.279623 | selenoprotein X, 1                           | 1.75 | 5.72  |
|    | 451335 | AB023192  | Hs.26285  | imidazoline receptor candidate               | 1.75 | 6.87  |
|    | 428975 | NM_004672 | Hs.194694 | mitogen-activated protein kinase kinase      | 1.74 | 3.01  |
|    | 417824 | AA084798  | Hs.82646  | DnaJ (Hsp40) homolog, subfamily B, membe     | 1.74 | 5.75  |
|    | 439908 | AI168031  | Hs.155507 | ESTs   | 1.74 | 2.63  |
| 35 | 427349 | AA360154  | Hs.177415 | Finkel-Biskis-Reilly murine sarcoma viru     | 1.74 | 6.80  |
|    | 445919 | T53519    | Hs.334692 | hypothetical protein MGC14141                | 1.74 | 5.65  |
|    | 427391 | W60675    |           | hypothetical protein FLJ10350                | 1.73 | 6.13  |
|    | 425299 | AW505214  | Hs.155560 | calnexin                                     | 1.73 | 5.88  |
| 40 | 430449 | AA352723  | Hs.241471 | RNB5   | 1.72 | 5.14  |
|    | 456766 | R87310    | Hs.7740   | oxysterol binding protein-like 1             | 1.71 | 4.35  |
|    | 407694 | U77594    | Hs.37682  | retinoic acid receptor responder (lazarro    | 1.71 | 6.16  |
|    | 412374 | X01388    | Hs.73849  | apolipoprotein C-III                         | 1.70 | 5.18  |
|    | 417483 | BE549343  | Hs.82208  | acyl-Coenzyme A dehydrogenase, very long     | 1.70 | 7.46  |
|    | 410584 | AB011112  | Hs.64742  | KIAA0540 protein                             | 1.69 | 6.19  |
| 45 | 431882 | NM_001426 | Hs.271977 | engrailed homolog 1                          | 1.68 | 2.63  |
|    | 441379 | AW175787  | Hs.334841 | selenium binding protein 1                   | 1.67 | 7.42  |
|    | 422115 | AI878953  | Hs.111811 | microsomal glutathione S-transferase 3       | 1.67 | 6.93  |
|    | 406742 | AI468091  | Hs.279860 | tumor protein, translationally-controlle     | 1.66 | 6.26  |
|    | 432191 | AA043193  | Hs.273186 | hypothetical protein, clone Telethon(lta     | 1.65 | 5.83  |
| 50 | 452363 | AI582743  | Hs.94953  | Homo sapiens, Similar to complement comp     | 1.65 | 7.54  |
|    | 446623 | AF279865  | Hs.15711  | kinesin family member 13B                    | 1.65 | 5.36  |
|    | 406712 | M31212    | Hs.77385  | myosin, light polypeptide 6, alkali, smo     | 1.65 | 12.30 |
|    | 400202 |           |           | NM_002795*:Homo sapiens proteasome (pros     | 1.64 | 5.70  |
| 55 | 401429 |           |           | C14001067:gij4126465 dbj BAA36581.1  (AB     | 1.64 | 3.82  |
|    | 415166 | NM_003652 | Hs.78068  | carboxypeptidase Z                           | 1.62 | 5.95  |
|    | 410169 | AI373741  | Hs.59384  | hypothetical protein MGC3047                 | 1.61 | 6.60  |
|    | 406713 | U02629    | Hs.77385  | myosin, light polypeptide 6, alkali, smo     | 1.60 | 11.13 |
|    | 453027 | AI879341  | Hs.539    | ribosomal protein S29                        | 1.60 | 10.97 |
| 60 | 416955 | AW689150  | Hs.80595  | NM_004552*:Homo sapiens NADH dehydrogena     | 1.60 | 5.90  |
|    | 439053 | BE244588  | Hs.6456   | chaperonin containing TCP1, subunit 2 (b     | 1.57 | 5.60  |
|    | 400201 |           |           | NM_006156*:Homo sapiens neural precursor     | 1.57 | 5.32  |
|    | 407049 | X72632    |           | NM_021724*:Homo sapiens nuclear receptor     | 1.57 | 5.42  |
|    | 430775 | AI879186  | Hs.250895 | ribosomal protein L34                        | 1.57 | 7.09  |
| 65 | 427380 | NM_005534 | Hs.177559 | interferon gamma receptor 2 (interferon      | 1.56 | 5.37  |
|    | 407143 | C14076    | Hs.332329 | EST  | 1.56 | 6.54  |
|    | 436127 | W94824    | Hs.11565  | RIKEN cDNA 2010100O12 gene                   | 1.56 | 6.35  |
|    | 413659 | BE155647  |           | gb:PM2-HT0353-130100-002-e09 HT0353 Homo     | 1.55 | 5.96  |
|    | 445624 | AW140103  | Hs.78880  | ilvB (bacterial acetolactate synthase)-I     | 1.55 | 4.09  |
| 70 | 435044 | NM_002802 | Hs.4745   | proteasome (prosome, macropain) 26S subu     | 1.55 | 5.71  |
|    | 410397 | AF217517  | Hs.63042  | DKFZp564J157 protein                         | 1.54 | 5.14  |
|    | 429071 | AW794126  | Hs.195453 | ribosomal protein S27 (metalloproteinstimuli | 1.54 | 8.70  |
|    | 412915 | AW087727  | Hs.74823  | NM_004541:Homo sapiens NADH dehydrogenas     | 1.54 | 6.57  |
|    | 446429 | AI681807  | Hs.201391 | ESTs   | 1.53 | 2.87  |
|    | 414551 | AI815639  | Hs.76394  | enoyl Coenzyme A hydratase, short chain,     | 1.53 | 6.07  |
| 75 | 406801 | AW242054  | Hs.190813 | ribosomal protein L9                         | 1.52 | 5.63  |
|    | 437895 | AB014568  | Hs.5898   | KIAA0668 protein                             | 1.51 | 5.74  |
|    | 413929 | BE501689  | Hs.75617  | collagen, type IV, alpha 2                   | 1.51 | 6.40  |
|    | 425456 | T70445    | Hs.157850 | ribosomal protein L9                         | 1.51 | 7.08  |
| 80 | 409635 | Z37166    | Hs.55296  | HLA-B associated transcript-1                | 1.50 | 5.26  |
|    | 404467 |           |           | Target Exon                                  | 1.50 | 5.82  |
|    | 406743 | AA911568  | Hs.279860 | tumor protein, translationally-controlle     | 1.50 | 5.25  |
|    | 454098 | W27953    | Hs.292911 | Plakophilin                                  | 1.48 | 3.14  |
|    | 429205 | AI492393  | Hs.198248 | UDP-Gal:betaGlcNAc beta 1,4- galactosylt     | 1.48 | 6.24  |

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|    |             |                                       |  |  |      |       |
|----|-------------|---------------------------------------|--|--|------|-------|
| 5  | 413825      | BE299181                              | Hs.75564   | CD151 antigen                            | 1.47 | 5.64  |
|    | 421143      | AB024536                              | Hs.102171  | immunoglobulin superfamily containing le | 1.45 | 6.19  |
|    | 440254      | AI879332                              | Hs.7101  | anaphase-promoting complex subunit 5     | 1.45 | 5.50  |
|    | 406711      | N25514                                | Hs.77385   | myosin, light polypeptide 6, alkali, smo | 1.42 | 11.24 |
|    | 423513      | AF035960                              | Hs.129719  | transglutaminase 5                       | 1.42 | 3.18  |
|    | 406896      | D00159                                |  | gb:Homo sapiens gene for pancreatic elas | 1.41 | 6.92  |
|    | 433453      | BE548307                              | Hs.3297  | ribosomal protein S27a                   | 1.40 | 5.38  |
|    | 406800      | AA505535                              |  | gb:nh84h10.s1 NCL_CGAP_Br1.1 Homo sapien | 1.37 | 5.51  |
| 10 | 421748      | NM_014718                             | Hs.107809  | KIAA0726 gene product                    | 1.37 | 5.46  |
|    | 424372      | AW952803                              | Hs.21732   | Homo sapiens cDNA FLJ11780 fis, clone HE | 1.36 | 4.06  |
|    | 408250      | R92918                                | Hs.19597   | KIAA1694 protein                         | 1.27 | 2.74  |
|    | 431931      | AB035302                              | Hs.272212  | cadherin 9, type 2 (T1-cadherin)         | 1.15 | 2.65  |
|    | 406587      |                                       |  | C15000544*:gij5454148[ref]NP_006368.1] U | 1.06 | 3.11  |
| 15 | 409574      | AW419080                              | Hs.250645  | ESTs                                     | 1.00 | 3.60  |
|    | 404175      |                                       |  | Target Exon                              | 1.00 | 3.08  |
|    | 452640      | AA027115                              | Hs.100206  | ESTs, Weakly similar to A53856 aryl-acyl | 1.00 | 2.82  |
|    | 443564      | AI921685                              | Hs.199713  | ESTs                                     | 1.00 | 2.51  |
| 20 | TABLE 65B:  |                                       |  |  |      |       |
|    | Pkey:       | Unique Eos probeset identifier number |  |  |      |       |
|    | CAT number: | Gene cluster number                   |  |  |      |       |
|    | Accession:  | Genbank accession numbers             |  |  |      |       |
| 25 | Pkey        | CAT Number                            | Accession  |  |      |       |
|    | 407328      | 534268_1                              | AI673735 AA978066  |  |      |       |
|    | 427890      | 1373988_1                             | AA417099 AA435761 AA972917 AI660387  |  |      |       |
|    | 444207      | 9172_3                                | BE739425 AA514221 AA865491 AI828293 AA470456 AI276739 AA169357 BE932464 AA514889 AW819039 AW819083 BE843048 AI432496 AI470335  |  |      |       |
| 30 |             |                                       | AI247243 BG533994 AA513783 AI887309 AA528035 AW972006 AW873028 AI924914 AI818810 AW152378 AW084946 AI521413 AI669583 BE932521  |  |      |       |
|    |             |                                       | AI581370 BE180238 AW089750 AW771461 AW089714 AI590949 AI819148 AA731056 BF815234 BF911506 AA235803 AA485373 AI735658           |  |      |       |
|    |             |                                       | AW393133 AW073080 AI707637 BF353320 BE843111 AW819036 AW393135 BG697291 AV648670 AV654332 AV687530 BG566964 AI807430           |  |      |       |
|    |             |                                       | AI676072 AA837010 AI452482 AI625817 AW241750 BE048616 AI290928 AI680714 AA485530 BE175687 AV648513 AW130312 AI000556 AA632893  |  |      |       |
|    |             |                                       | BE674169 BF001208 AA948166 BE175650 AA524664 AA490345 AI244948 AA602956 AA483492 AA918178 AW802049 BG675859 AV658871           |  |      |       |
|    |             |                                       | BG678060 AI665004 AW819026 BE843092 AV686437 AV723049 BG616948 AI911647 AI743490 AI091096 BE857251 AI962074 AA040027 AW769317  |  |      |       |
| 35 |             |                                       | AA343477 AA640112 BF876213 R82948 H26425 H82876 BE843095 BE843140 BG536641 BG617830 AA235802 BE774985 BE006682 BF342375        |  |      |       |
|    |             |                                       | AA903144 BF338083 BF984258 AV657996 AI749532 BE788614 BE857252 BE932516 BE768573 AV657993 AV657777 AV752631 BE774974 T55847    |  |      |       |
|    |             |                                       | BF095761 BF911511 BE710793 BE180119 BG617338 H45942 T55897 AV657718 BG563497   |  |      |       |
|    | 407102      | 7177_2                                | AW945170 BF930905 F33652 BG057818 AI368018 AI421485 AI300352 AI378525 AI264177 AI276281 AI245302 AI281050 AI190036 AW451438    |  |      |       |
| 40 |             |                                       | NW242903 AA910870 F22289 F19647 F22375 AW473816 BF445785 AA774528 F33447 C01077 AW772227 F17759 H42812 R09701 AA349096         |  |      |       |
|    |             |                                       | R48772 H42892 H42537 R47898 N28263 H25721 F32386 H43971 R48205 F21390 H45809 AA007629 R47897 R83734 H45844 AW983653 H43970     |  |      |       |
|    |             |                                       | H42536 H24495 R48875 H42961 H22079 R86018  |  |      |       |
|    | 437596      | 2875_1                                | BC022398 AV743635 AW976922 AW152652 AA910013 AA834629 BG536317 AW849807 AV713062 AI684337 BE044081 AA761490                    |  |      |       |
|    | 440116      | 454673_1                              | R69942 BG655457 BF111453 AI149320 N23160 AI446431 AI758316 AV741781 BI791950 BM055014 AI798851 AA865357 AI417230 N67277 T55592 |  |      |       |
|    |             |                                       | T52179   |  |      |       |
| 45 |             |                                       | AV734838 AI937532 AI032318 AW749500 AA091720   |  |      |       |
|    |             |                                       | BG621493 BI056706 BG496376 R53718 W65356 R79357 BG434247 AA357769 AW978686 BG573200 BF132113 BF086709 AA366938 D79234          |  |      |       |
|    |             |                                       | BG494628 AA156754 BG434311 AW978683 AW273417 BM054662 AI799886 AI433351 AI160798 AI433742 BF056186 AI281606 AW015046 AI439585  |  |      |       |
|    |             |                                       | AI245530 AI078267 AA807170 AA837395 W61252 AA831085 AA287371 AW768354 AA890606 AI302539 AI708575 AI673031 AI242260 AW514069    |  |      |       |
|    |             |                                       | AA283958 AA825452 AI371234 AA425696 AA453422 AA827697 R23653 D20240 AA772517 H13802 R66972 R79360 R27351 F03379 AA031952       |  |      |       |
|    |             |                                       | N69504 R33143 R79358 R39136 R38800 R15089 R52937 R37502 H01021 R33634 R46551 Z40404 BG291052 BG570357 AW391046 BG496872        |  |      |       |
| 50 |             |                                       | H23558   |  |      |       |
|    | 424571      | 9758_1                                | BE379766 AW152643 AI803450 AI564343 AI092711 AI140525 AW152156 AI620740 AI554689 AI161209 AI290242 AI339745 AI374611 AI347388  |  |      |       |
|    |             |                                       | AI858296 AI140529 AI366124 AA493912 AA406235 AA493889 AI057160 AW022264 AI097277 AI144126 AI080051 AA983529 AA860507 N53469    |  |      |       |
|    |             |                                       | AA843767 N81163 N70628 AA424577 AA983537 BF003004 AA626688 AA235977 AI057152 AI095366 AI095356 AA458646 AW194479 AA150439      |  |      |       |
|    |             |                                       | AI375272 AW571777 AI359198 AA993793 BE614394 BE738239 AA127883 AI034344 T59504 D81608 AA908704 AW051665 AA382785 AA307208      |  |      |       |
|    |             |                                       | N24639 AI370715 BE244980 AA548596 AW449675 AI191008 BF223749 N70752 N22266 AI191012 AA028001 AI419106 BF215661 BF591548        |  |      |       |
| 55 |             |                                       | BG942356 AI474968 BE858217 BF793358 AV756758 BG483603 AI093724 BF693395 BG545345 AI744294 T59549 AA811773 BG499757             |  |      |       |
|    | 420787      | 55832_7                               | BE674920 AA564248 AA280309   |  |      |       |
|    | 456332      | 21353_10                              | BG740624 AV720262 BG198346 BG215119 AW841716 AA228357 AW841786   |  |      |       |
| 60 | 418479      | 175360_1                              | BF966791 BG564455 BE672212 AI151416 AI566231 AI417585 AI378391 AA236264 AI337574 AI346166 AA406590 AA748618 AW771957 AA478626  |  |      |       |
|    |             |                                       | AW338072 AI889444 AI810315 BE503662 BG231886 AI888230 AI289102 BF594638 AW074094 AW512456 AA832229 AI056108 AI025868 AI245806  |  |      |       |
|    |             |                                       | D61957 AI093841 AI721013 AI597594 AA993022 AI128620 AI285106 W37459 W35410 N90037 AA890323 R39943 AI68741 AA829976 AA479201    |  |      |       |
|    |             |                                       | AI539018 AA875875 AA448827 AW779493 Z39056 H84925 AA223923 AW517592 AI804400 AA911882 BM353143 D62885 AI457883 AI880626        |  |      |       |
|    |             |                                       | R31694 R42772 R68804 R44147 R71463 AV742540 BF966987   |  |      |       |
| 65 | 431628      | 30288_1                               | AF146277 NM_012120 AF164377 AW976054 AW662923 AW770101 AI597184 AA713959 AA808021 AW444640 AI018159 AL050105 AW958324          |  |      |       |
|    |             |                                       | BI858773 BM312584 BF594436 AI629024 AA311487 BG617872 AW629675 AA384810 AW953668 BF171208 BE768429 BF326254 AW181992           |  |      |       |
|    |             |                                       | AW118462 AW572001 BG533184 AA768779 AA825697 AA808149 BF036424 AJ420469 AW175925 AA173981 AA557142 AW302163 AW088608           |  |      |       |
|    |             |                                       | AA847195 AI418480 BM353163 AI015673 AI357621 AI374592 AI245029 AI580659 AI370154 AA767503 AA643885 BM091307 BG496655 AW364502  |  |      |       |
|    |             |                                       | AW377222 AW371202 BE138896 R80586 BM090998 D25882 M85322 AI541363 BF675114 BG926529 AA627866 BE879221 BF594796 BF675714        |  |      |       |
|    |             |                                       | BI085785 BG190411 BG217933 BG219447 BF886143 BG403278  |  |      |       |
| 70 | 426101      | 3211_1                                | AL049987 BG620667 BG571984 AW362842 BE150456 BE326465 AW872412 AA868553 AI024689 AA442638 AA813604 AA442648 AA663108           |  |      |       |
|    |             |                                       | AA442379 AA229448 N56349 AA460220 AW971193 AA453725 AI742087 AI860142 AW769479 AI917507 AI860141 BE045272 AW277065 AI921333    |  |      |       |
|    |             |                                       | AI354470 BE466760 AI827987 AI005467 AA833517 AA563934 AA522837 AA812876 AW020895 AA600372 AA663178 AI187977 AA229164 AW270324  |  |      |       |
|    |             |                                       | AA703066 T78981 AA632986 BE708493 R31132 AI253986 AI916737 T84796 T84294 AW961515 AI459289 BF109829 BI491853 AI084517 AW103830 |  |      |       |
|    |             |                                       | BE835233 AI472712 AV741009 AA551512 N28268 AA436880 AA447794 BE835410 BE835385 BE818352 BE818350 R64648 BE646467 AA493776      |  |      |       |
| 75 |             |                                       | AA437299 BE818343 R59514 R31089 BF576826 AU186065 BF802058 AI217018 AA247541 AI191725 BE766918                                 |  |      |       |
|    | 454947      | 1083824_1                             | AW846590 AW846515 AW846584 AW846592 AW846521 AW846610  |  |      |       |
|    | 438962      | 195763_1                              | AI207343 BF813684 BF928775 AA828585  |  |      |       |
|    | 431693      | 1414_4                                | AB075855 AI799883 AI952039 BM313847 AW167132 AW264027 AI394192 BM272158 BM272359 BG057287 BE464852 AI620722 BE046016           |  |      |       |
| 80 |             |                                       | AI758979 AW474705 AW474624 AW440580 AI289435 AW002172 AI458169 AI634183 AI125609 AI951377 AI631154 AI453490 AI857358 AI469756  |  |      |       |
|    |             |                                       | BG683503 AI434048 F09546 AW518770 BF855622 AI659151 AA985193 AI814412 AW298184 H09775 AI869379 AW207026 AI659678 AI826075      |  |      |       |
|    |             |                                       | BF940660 AA744971 C00469 AI672560 AL045697 BF847489 BF842860 T65400 AI863491 H24845 T54772 BE090906 BE090917 BE090877 AA152265 |  |      |       |
|    |             |                                       | BE244301 BI038346 BI038045 W94876 AA093121 BI523346 AW470130 N92723 AA258877 R62397 BI523168                                   |  |      |       |

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|    |        |           |   |
|----|--------|-----------|---|
|    | 450515 | 13638_2   | BE299605 AI589870 AA847598 AI470122 BF939896 AI304356 BE223045 BF435800 AI394207 AI708171 AW025415 AI079409 AW008420 AW304226 N34543 AW603578 AA526961 AA983631 N99134 AA626645 R45023 AA902417 AW672925 AA449985 AA953982 AW675471 AA010052 N80194 H14620 H28475 H26247 BF333581 AW842369 H06848 H05608 H81745 H15016 R51905 AA860423 AI860904 AA876023  |
| 5  | 434230 | 41110_1   | AF119900 NM_018539 AA702388 N53043 BF351064 N70103 AI207469 AA551569 AW383189 W00906 W00935 AA87252   |
|    | 448144 | 48653_1   | BC015871 AI521618 AI471709 AW169230 BG539605 BI058963 BI058949 BG548398 BG952412 AW842037 AW842040 AW890573   |
|    | 453225 | 12287_1   | AK054673 D16294 NM_006111 BC001918 BI758758 AU125294 AU121192 AU118572 AL517117 BE793962 BI826721 AW149620 BG721751 BI916889 BE795064 AI934471 BF435179 BE797475 BE797475 BG744432 BF733017 BI261710 BF435252 BE267474 BE219495 AV653212 AW248975 BI832737 BE264857 BE386198 AA773811 AI826904 BF732388 AI281977 BF732958 BF434612 AA430672 BF724595 AA058529 BG500189 AV687020 AA034427 AV696822 |
| 10 |        |           | BC674590 BI262247 BE748762 BG568992 BG180336 BE748454 BG876983 BE222517 W61060 BG993321 BG742061 BG696266 BG740805  |
|    |        |           | BG698598 AA031863 AF006747 AA129619 BG745080 H29767 AA011078 T88743 BG216950 AI608941 AW166202 AA522692 AI927649 AW237367   |
|    |        |           | AI935538 AI689743 AW966083 BE326704 AU147054 AW129250 BE463425 AU148980 AI242161 AW615658 AU145096 BE465120 AU159062  |
|    |        |           | AI679419 AW473145 BG236394 AI292110 AI985496 AA995857 BE551066 AI632625 AW511387 AI080003 AW243240 AI604340 AI075293 AW205957   |
| 15 |        |           | AI679929 AI681080 AI753324 BF593137 AW337148 BE326667 AI637787 AI659936 F22148 AI332985 AI650925 AW248532 BE048931 F30242   |
|    |        |           | AI524808 BE939886 AI340251 AI962198 BE463831 AI347479 BE221712 AW193412 BF434502 BE939895 AI373314 AW270842 AW024782 AI272109   |
|    |        |           | AW777225 AW052130 F36818 AW269249 AW838580 AI655549 AI927017 AI821667 AI796037 AW772479 AA995455 AA470517 R00503 AI765977   |
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|    |        |           | AI676899 AA031697 AA129593 D25761 AA100913 AW134585 AA129330 BF434518 BE622820 AA587251 AW149318 H07926 R40908 AA011079   |
|    |        |           | BE967287 BE253428 AI681438  |
|    | 445493 | 423456_1  | AV711317 AI809938 AI808768 AI240593 AI915771  |
|    | 417054 | 12405_2   | BG533564 BG618564 AW296119 AI269233 BF508328 AW364777 AW292258 AA371049 AI452471 AI092522 BG618376 AL049080 AA631068  |
| 25 |        |           | BG564643 T53833 AV702544 BG533452 AV705004 AA588281 T28665 BG569026 AV646874 AV647253 AV647455 AV647749 BI759444 AV652457   |
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|    |        |           | AI420505 AA035245 AV704972 BG564113 AI439237 AI287456 AV695686 AA349017   |
|    | 408138 | 14592_2   | BF374043 BG568336 AW374058 AW961372 AA328028 BF438186 AI268678 AV724415 BG029720 AA725816 AI926580 BM310209 AA968470  |
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|    |        |           | AA973639 W68358 BE170126 T81345 N50135 AI567418 W67220 BF437728   |
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|    | 421998 | 133592_1  | BF757233 BG911321 BF351759 AW244016 AW026834 AW024260 AI420138 AA779354 AI093360 AI934858 AW151292 AI373133 AI335587 AI969728   |
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|    | 408239 | 103120_1  | AW469418 AA053401 AA053416  |
|    | 436280 | 36296_1   | AK026215 AI201248 BE671206 AA860436 AA730787 AA834507 D79304 D79806 AW961628 AI017068 BE044373 AA322458 AA987927 AA385869   |
| 45 |        |           | BI492783 AW021853 R79299 N73028 AI016522 N24609 AW192569 AA707819 AI690734 R79189 AI535900 AW589301 AI128434 BE838011 BE837891  |
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|    | 436701 | 28142_1   | Z69892 AI201833 BM353155 AI473754 AI147901 AI803109 AA843296 AA418925 AI478552 AI400067 AI360304 AA418828 AW301673 BE218952   |
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|    | 424399 | 2196_1    | NM_058173 AF414087 W72837 BF742809 AW070916 BE092421 AI905687 AA340069 BE074512 AI905623 AI905633 BG202312 W72838 AI139456  |
|    |        |           | BG218084 BE926938 BE186013 AW176044 AW291950 BG185269 BG197186 BG192597 BG183176 BG207535 AI217172 BE815819 AI905624  |
|    |        |           | R75793 BG202313 AI905837 BE815853   |
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| 55 | 437611 | 240436_1  | AK058006 BF724822 W65303 AW887764 AW023806 Z25353 AW022095 AA730973 W00417 W73819 BF982096 AI927669 AW188021 AW770478   |
|    | 414496 | 1526_1    | AI913512 AA604358 AI697341 AI691028 AI338392 AI079403 H97538 AI144448 AI253102 AI051402 AI335900 AI668132 N28900 H98465 BF268386  |
|    |        |           | AI799915 AI819228 BE048413 AW304723 AI819923 BF223106 AA155907 AW298079 BF055272 BF446804 AI005886 BF197538 AA032180  |
|    |        |           | AA992597 AW590254 AA027824 AI123699 AI131331 AI655843 AA932907 AW104493 AI150615 BF110226 AW172221 AI312659 AA057312 BE673669   |
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| 60 |        |           | AI091778 W65401 AI687374 AI218085 AI765158 AI018002 AI653068 AI335704 AI520850 AW275228 AW275204 AI420247 AA975336 AI697042   |
|    |        |           | AW182235 AA736386 AI281682 AW169698 AW263325 BE645834 AI377438 AI146706 AA613808 AA716538 BI496247 AA032246 AI698930 AI193399   |
|    |        |           | N70026 H86792 AA404489 W61267 BF447230 AA910805 AA150774 AA621907 AA902526 AI827634 AW022037 BF059000 BI496246 BG577007   |
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|    |        |           | N24622 N27149 N70109 R43771 AA010296 W84611 H98889 H88965 AW594424 AA034139 AA065223 N99696 BG981481 N94371 AA767970 W47146   |
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| 70 | 441925 | 59915_1   | AK057669 AK054977 AL519747 BE893744 BM313248 BG913430 H80793 BF813504 N36311 N39276 H95973 BF791919 BE739392 BE144239   |
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|    |        |           | AA402764 AI214620 AA765312 BF380770 AA442682 AL519746 AW295039 AI037878 AW473433 AI499437 AI401618 AI130831 AA427406 AI042138   |
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| 75 |        |           | AI370491 BE858907 N62185 AA705746 BE379632 W93803 AI440333 AW367670 AW367640 N77131 BF993216 AI858263 W52329 N68106 R83113  |
|    |        |           | R85153 BE380058 AA082537 AA729731 W23495 W31190 BF995236 BF968827 BF355168 N24508 AA215711 BF170735 AA280395 BE738851   |
|    |        |           | AW367707 AA630879 AA428420 R76236 BG567847 N25931 AA173568 AI073567 AA004957 AI539585 N95093 H99798 H95072 H96653 AA215712  |
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| 80 | 440030 | 843417_1  | R58506  |
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|    |        |           | BE178766 AI909166 W79619 AA346208 N54022 R98542 AA005419 AA890703 AW510832 BM126988 BF528760 AA858017 BM126698 AI423291   |
|    |        |           | AW173383 AA742205 AI693060 AA746651 AA490661 AW241710 AI635076 AI073737 AA875841 AA907556 N50889 AW438573 AW273496 AA633604   |
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|   |                            |                                 |  |
|---|----------------------------|---------------------------------|--|
|   |                            |                                 | BF445607 AA699324 AA025643 AW573103 AI167444 AA580002 AW103144 AI640654 AA857115 AA923021 AI066439 AI358865 AA843287 AI824604<br>AA732370 AW002202 AI219540 AA621697 AI950639 AA904277 AI867527 BF437695 AA808593 AI784144 AI648539 AV752557 AV752603 AA025642<br>AA764744 AW149075 N30700 H92303 W79523 AI762795 AA282784 H78923 AA252879 H98107 R23754 AA005152 N99239 N74632 H80133 H24710<br>R38907 R66368 R42466 R52648 H11010 R98493   |
| 5 | 410453<br>454065<br>426143 | 1027545_1<br>517162_1<br>3806_1 | BE065904 AW749036 BE175748 BE175746 BE175747 BE175745 T64217<br>BE394588 AW024754 BE183167 BE183166 BE378353<br>BC005265 BG176720 AW006027 BM352064 AW026316 AI635822 AI880584 AI693769 AI092211 BI492387 AI400449 AW166297 BF939910 AA232282<br>AW021432 AI333893 AA494308 AA854899 AI436795 AW069256 AA682373 AI092748 AA993184 AI126077 AI081758 AI240686 AI261863 AI378423<br>AA465237 AI376096 AA035579 AI087306 AA448162 AA129977 AI090903 AI080686 AI288939 N33004 AI801240 AW021546 AI370773 AI086064<br>AA669528 AI250053 AI870113 AA853181 AA858014 BG055562 BG939559 AW080765 AA032283 AW467587 H40506 D00762 NM_002788 AA641134<br>AI582295 AI417525 AI563975 AI093566 AI707743 AI209741 AW073417 BE875418 BM264076 BG876884 AI680535 AW854219 BE774635 AW854212<br>BG952443 AW854221 AW854208 BE156348 BE843056 AW858991 BE937569 BG878291 BG876450 AW819099 AI908570 AA449871 AU135228<br>BM478404 BF126296 AA375499 AA248473<br>AI220117 AI857837 AI218371 BM091400 AI304964 AI198508 AI400738 AW571549 AW950042 AI089943 AA437280 AU150878 BF197070 AI267984<br>BF594181 BF196688 AI433152 AI338921 AI620364 AI280197 AA652531 AI674938 AI342447 AI620350 AI281295 AI148621 N54787 AI338121<br>AI281153 N51899 AI087072 AA954788 AW069054 AI346309 BG529629 AI340135 BF083036 AI167365 AW819657 AA935468 AI467868 AW148701<br>AI383720 BE047685 AW015498 AA937149 AA708346 AW771478 AW802508 H53334 AW389204 AW798230 AI655392 AI560688 AW950043 AI961682<br>AV706506 R01853 AA126514 N62757 AI536893 AI926052 AI418720 N99964 AI568933 AI915737 AI080691 AI185358 NA8996 N68575 H82824 H60037<br>AI247247 T95664 BF593863 AI749637 AW088541 AA991294 AA887452 AI073726 AA633132 AA629674 AA629649 AA629656 AA578595 AI168758<br>AA804572 AI085786 AA994396 AA991209 AA948663 AA929054 AA927952 T87001 AA928210 AA629296 AW802267 AW384129 BF744400 AA194110<br>AI382839 AA194837 AA406284 AI250750 R37035 AI525586 W01244<br>NM_058173 AF414087 W72837 BF742809 AW070916 BE092421 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BG929224 BF593158<br>AI355222 BF378422 AA366587 BF874552 AW277084 R26970 D79194 R27662<br>AW972670 AA525808 H28359 H28383<br>AF070570 BF439282 BF109960 AI480268 AI038060 AW082339 BF516290 BE218214 AI469956 AA039955 BE644674 AI861871 AA766231 AA845840<br>W85716 AA676253 AI087188 AA022908 AW953178 T33195 BF594711 AA488969 R55652 D81245 D80778 D81560 AW560933 BF930897 BE698103<br>AA040024 BF515960 BE168475 AA453247 AI267601 R60894 R44223 T33194 AA114936 W31640 W38829 W39109 AA004849 H41952 W88634<br>BF031932 BM423354 AL041825 H29654 AI908178 W85754 AI905762 AA309860 C04540 AA340246 H84669<br>AA708982 AI095911 AI983409<br>NA<br>N68168 N69188 N90450<br>AL037666 AW607643 AI280025 AL037665 AW291619 AI280142 AA765506 AI684802 AW085941 AI688062<br>H88044 BE156092 AW752953<br>BC016329 BG530458 AW811919 AW811918 BG777252 N28284 AA280517 N26361 BG612488 BI491654 BE042557 AI921004 AW665869 AA845400<br>BF057417 AI735558 BM146017 AI538936 AI439915 AI745155 AA933065 AA935277 AI161350 AA884866 AI692463 AA938040 AV717682 AI439961<br>AI439956 AI885932 AI538058 H60829 AA513966 AI249944 Z39473 AI832915 AA565386 AA074079 BM145279 BF791544 AW811909 BF964902<br>BG113250 N99606 AA312166 BF696463 D61610 AV757976 AA092342 BE972583 BG776159<br>NM_021724 M24898 X72631 BE550221 BF436030 F18898 AI567477 BG033127 BG747927 BF823716 AA371902 AI137978 AL577786 BI490529<br>AA021622 AA151679 AA745053 AA454168 R85506 AA016015<br>AF005081 BG193848<br>AA026381 AW500815 AI806691 AW502933 AW303573 BE328059 AI201422 BE673566 AW182125 H13705<br>AF086341 W76326 W72300<br>BG190758 AW961118 W77994 AA339877 AW845121 AW845129 BG181820 BE176719 AI125483 AI161017 W73951 AI250771 AA912611 AA339786<br>BE838286 BE838282 BE716636 AA777158 W94063 BE716628 BE716625 BE838371 BF371044 BE716631 BE716402<br>AF005081 BG193848<br>AW796921 AW798102 AW805749 AW805872 BF985060 AW794380 BF380449 AW794466 AW794538<br>AL545411 AI093639 BF437150 AI130946 W60055 W80663 AA258580 W73279 W76156 W80652 AW058658 AI204699 W60115 N56751 N30878<br>AI769345 R71250 AI363766 R22777 R17009 R27985 R28243<br>BI754027 BF696071 AI351939 BG151298 AI919334 AI401620 BI770165 W72057 T96158 T29478 AA181252 BG927793 AA714431 AA600749<br>AA181247 AA614756 AA081092 H52207 BG926934 BF222579 BG899001 N64245 AA953040 AI832406 AA102441 BG928081 AA993445 AA916041<br>AA987847 AA983329 AA737219 AA916443 AW128994 AI492560 AI761847 BC005272 NM_000900 X53331 M58549 BI758966 AI598829 BI754530<br>BG699770 BE439699 BE440148 AV704365 AV733652 BG212015 BG184149 BG200180 BG212690 BI761222 BG182079 AW338822 AI925631<br>AI423041 AW071181 AI889836 AW129112 BG925339 AI017633 AA568964 BF275590 AI004210 AI809799 BE083097 BG896220 AW997681 BF668788<br>BE083134 AW631281 BG193052 BG183095 BE440088 BG185728 AI499579 AA188162 AA864282 BI493352 AA155854 AA836749 AA836844<br>AA985478 AW082299 AI816747 AA450221 AA971294 BE327509 AI719662 BG576669 AI479382 BF824747 AI741800 BG882962 AI088473 AA916151<br>AW473324 BG901177 BE439998 AW023269 BE813871 AW999947 BE839108 AV707983 AA369722 AW796627 AW80608 AI341771 AA302459<br>BI493353 AA366332 AA371104 AA367277 AI547972 BG928011 AI678903 AI699886 AI966165 AA484893 AA643953 AW591063 BG203275 BG211093<br>AI334791 AA916589 AW058266 AI362370 AI143352 AA508721 AI928079 D57214 BE045265 AA541785 BG219510 BG201686 BG195572 AW019904<br>AW089242 AA953322 AI686698 F27562 AA614749 D56645 F20774 F30660 F25646 AW023542 AA827300 AA582214 AI701289 AA228293 AI906950<br>AA230156 AA384572 AW438988 AA742516 BI490938 AA731082 BF665869 BG190518 AV704158 BE439643 AA910666 AA155913 AA923097<br>AA975721 AA985555 BG927032 AA948389 AA451625 AA916141 AL572719 AV707258 AW083733 AA128053 AI953789 AI911993 AA421798<br>BG429150 AI915306 Z30130 AA126929 BG926630 AA081013 AA553696 AA916094 BG924321 AI039722 AI954968 AI372839 AI401406 AI538215 |

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|        |   |   |  |  |
|--------|---|---|--|--|
| 428193 | 430_1   | AF105036 U70653 NM_004235 AF022184 AU141767 AU141110 AL040569 D44830 BI011351 AL575805 AI290876 AI014784 AI393429 AI266211 AW074303 AA620711 BF197792 AW008766 D25944 AI687397 AA621680 AV714408 BF446905 BM314505 BF514079 BM314197 AA845201 AW874084 BE720622 AI127241 AA236239 AI679709 AI679135 AI572470 AA573434 AI568487 BE049325 AA687950 BG925989 AI338031 AI365073 AI024576 AA298805 H04001 H45668 BG682146 AL552388 BI462361 BG547513 BG896863 BI256661 |  |  |
| 5      | 431021  | 10409_1   | NM_003312 BC010148 AK000862 D87292 BG709214 BF972766 BG740474 BI771592 BI159859 BI820468 BI523933 AI869664 AA314620 BF724353 BG194276 BG195282 BI524679 BF435589 AI300546 AA481682 AW780207 AI800832 AI380540 BE222877 AW300707 AA481445 AW015893 AI381541 AA768558 AI138798 AA432063 AA948713 AI869485 AI307419 AI336589 AI301672 BF055581 AI312785 AI521208 AI927918 AI989759 M78015 BF718621 AI927654 AI795909 AI335381 BF334524 AW007444 AA706797 AA975178 AA884739 AA443837 AA933897 AI826464 AI271737 AA053419 H79704 AI984483 BG952614 BF345358 AW083336 AA643660 AI478232 AA603071 BE714413 AW078660 AW070418 R02364 BG925951 AL568823 AA053459 AA446748 BG954446 BF760569   |  |
| 10     | 427391  | 9048_3  | AY007099 AU150467 AI127583 BE735800 AI125772 AI373009 AI215670 AI769136 AA586848 AW451158 N50799 AA936337 AI355427 BE577905 AW338020 BG151557 AA657954 AI754947 AW467279 AI128755 BF448136 AI369247 BF439175 BE207948 AI089272 BI911455 AA420720 F36980 AI494204 AA953319 AA155753 AI052675 AA044804 AI282678 BG741226 F25798 AA180204 AI682613 AU152630 AA420766 AI373393 AI885767 T03896 BF939430 AA974325 AW072996 AW005963 BG252471 AI192002 AI918908 AA776144 BI834864 AI753954 BE908511 AW628731 AA034958 BF447074 AW194649 AI915192 AL567164 BF591569 AL565970 AW471137 AW276992 AL536717 BF591783 AI571746 BF939172 BG745029 BG575588 BI054960 H51485 AW799491 AI370437 H26413 AA585334 AU151276 AA074274 AA936883 AW131643 AI221650 AW105476 AW952294 H23835 BI035010 F22360 BF849322 |  |
| 15     | 400202  | 11771_2   | BE873890 BF745945 AA156007 AA573157 AW874610 AA916387 N75963 BM083306 AW044671 BC013008 NM_002795 D26598 BG118716 BI910891 BF972860 BG119842 BI094093 AL538757 BE271653 BI856538 BE909573 BG109826 BE784430 BE899255 BI833973 BM010809 BE621321 BG684956 BE904726 BI871370 AV708990 BF971483 BE298241 BI197007 BE272092 BG120374 AW963509 BE540572 AV744947 BG943041 AW327463 BG472870 BE393697 N28533 AA316042 N42043 AW404246 AW892094 AA379896 AW801110 AW406977 AA379791 BG941889 BE076254 AA360459 AA379385 AA320056 BG942618 D31230 AA308300 AA360371 AA371733 AA732937 AA494241 W32225 BF745937 AI383690 BG202360   |  |
| 20     | 400201  | 24179_2   | NM_006156 D23662 BF038671 BI670321 BI603145 BI666956 BG716628 BG707476 BG768814 BE312007 BF125930 BF037916 BG942671 AI752472 AW009362 BE379126 BI198555 BF125026 N28289 BE388301 BG327102 AI571450 BF038400 AI884649 AI718962 AI742314 AA977058 AI150699 BG944784 AA187402 BG283893 AV712007 W01301 BG774109 W77840 C15672 BI670016 AI752473 AA484409 C14921 N41745 C15220 F30164 AA133181 BF768974 H30334 AA034968 AA384232 AA353297 AW407023 AA337516 F36177 AA374444 AA402758 AI141545 BI021470 AA973914  |  |
| 25     | 413659  | 1526081_1   | BE155647 BE155627  |  |
| 30     | 406800  | 0_0   | AA505535   |  |
| 35     | TABLE 65C:<br>Pkey: Unique number corresponding to an Eos probeset<br>Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <a href="#">Nature</a> 402:489-495.<br>Strand: Indicates DNA strand from which exons were predicted.<br>NL_position: Indicates nucleotide positions of predicted exons. |   |  |  |
| 40     | Pkey  | Ref   | Strand   | NL_position                              |
|        | 405121  | 8102330   | Minus  | 35816-36004,36587-36684                  |
|        | 401203  | 9743387   | Minus  | 172961-173056,173868-173928              |
|        | 400494  | 9714719   | Plus   | 169845-170272                            |
|        | 402294  | 2282012   | Minus  | 2575-3000                                |
|        | 404730  | 8389582   | Plus   | 119832-120016,124110-124275              |
|        | 403593  | 6862650   | Minus  | 62554-62712,69449-69602                  |
|        | 403710  | 6437516   | Plus   | 27413-28978                              |
| 45     | 401905  | 8671966   | Plus   | 153965-154441,156599-156819              |
|        | 403108  | 8980955   | Plus   | 93253-93667                              |
|        | 404996  | 6007890   | Plus   | 37999-38145,38652-38998,39727-39872,4055 |
|        | 402315  | 7381741   | Minus  | 30728-32065                              |
|        | 401131  | 8699812   | Minus  | 94802-94987,95804-95887,96323-96487,9759 |
| 50     | 401205  | 9743388   | Plus   | 167373-167433,167936-168031              |
|        | 403105  | 8980016   | Minus  | 145287-145744                            |
|        | 401846  | 7712190   | Minus  | 82775-82823,82912-83022                  |
|        | 406400  | 9256298   | Plus   | 1553-1712,1878-2140,4252-4385,5922-6077  |
|        | 406467  | 9795551   | Plus   | 182212-182958                            |
| 55     | 401429  | 8217890   | Minus  | 86946-87579                              |
|        | 404467  | 8077630   | Minus  | 24951-25853                              |
|        | 406587  | 8189273   | Minus  | 120577-120718                            |
|        | 404175  | 9931117   | Minus  | 107420-107547,109625-109796              |

TABLE 66A. DISEASE INDICATIONS AND PREFERRED UTILITIES FOR SELECTED GENES

Table 66A provides disease indications and preferred utilities for about 439 selected genes. These genes were identified using Eos/Affymetrix Genechip arrays.

|           |  |
|-----------|--|
| Primekey: | Unique Eos probeset identifier number  |
| ExAccn:   | Exemplar Accession number  |
| UgID:     | Unigene ID number  |
| UgTitle:  | Unigene title  |
| Disease:  | diseases indicated for selected gene as described in table 1 and abbreviated as follows: AWPC (androgen independent prostate diseases), arth (arthritic diseases), bph (benign prostatic hyperplasia), blad (bladder diseases), angio (blood vessel diseases), EWS (bone diseases), glio (brain diseases), breast (breast diseases), cerv (cervical diseases), colon (colorectal diseases), esoph (esophageal diseases), fibro (fibrotic diseases), headnk (head & neck diseases), lei (leiomyoma diseases), leuk (leukocyte diseases), hepC (liver diseases), lung (lung diseases), ovar (ovarian diseases), endo (ovarian endometrioid diseases), omuc (ovarian mucinous diseases), panc (pancreatic diseases), pros (prostate diseases), renal (renal diseases), mela (skin diseases), stom (stomach diseases), test (testicular diseases), uter (uterine diseases) |
| Utility:  | preferred utilities for selected gene as described in the text and abbreviated as follows: CTL (DNA vaccine target), diag (diagnostic or prognostic target), mAb (monoclonal antibody target), s.m. (small molecule target)  |

| Primekey | Ex Accn  | UgID      | Ug Title                                  | Disease  | Utility       |
|----------|----------|-----------|---|--|---------------|
| 400289   | X07820   | Hs.2258   | matrix metalloproteinase 10 (stromelysin) | angio, blad, lung, cerv, ovar, headnk, esoph       | mAb+diag+s.m. |
| 400297   | AI127076 | Hs.306201 | hypothetical protein DKFZp564D1278        | breast, blad, colon, pros                          | mAb           |
| 400303   | AA242758 | Hs.79136  | LIV-1 protein, estrogen regulated         | breast, ovar, pros, stom, uter, blad, lung, headnk | mAb           |
| 400843   |          |           | NM_003105*:Homo sapiens sortilin-related  | blad   | s.m.          |
| 402075   |          |           | ENSP00000251056*:Plasma membrane calcium  | blad, lung, headnk, cerv, mela, esoph              | mAb+diag      |
| 402901   |          |           | NM_025206*:Homo sapiens hypothetical pro  | blad   | CTL           |
| 404287   |          |           | FGENESH predicted novel CUB-domain conta  | panc, lung, colon, uter, esoph                     | mAb+s.m.      |



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|    |        |           |  |   |               |
|----|--------|-----------|--|---|---------------|
| 5  | 404682 |           | ortholog of mouse polydomain protein     | panc  | diag          |
|    | 404875 |           | NM_022819: Homo sapiens phospholipase A2 | blad  | CTL+s.m.      |
|    | 404977 |           | Insulin-like growth factor 2 (somatomedi | blad, ovar  | mAb+diag      |
|    | 405033 |           | C1002652: gi544327 sp Q04799 FM05_RABIT  | blad  | s.m.          |
|    | 405547 |           | NM_018833: Homo sapiens transporter 2, A | cerv, mela  | mAb+s.m.      |
|    | 406400 |           | kallikrein 8 (neuropsin/ovasin) (KLK8)   | ovar, uter  | diag          |
|    | 406964 | M21305    | FGENES predicted novel secreted protein  | angio, blad, fibro  | diag          |
| 10 | 407603 | AW955705  | Hs.62604                                 | glio, blad  | CTL           |
|    | 407792 | A1077715  | Hs.39384                                 | ovar, uter, cerv, panc  | mAb+diag      |
|    | 407811 | AW190902  | Hs.40098                                 | blad, panc, stom, uter, lung, esoph                             | diag          |
|    | 407836 | T79340    | Hs.22575                                 | angio   | CTL           |
|    | 407975 | X89426    | Hs.41716                                 | angio, renal  | diag          |
|    | 408243 | Y00787    | Hs.624                                   | blad, stom, headnk, cerv, lung, angio, esoph, panc              | diag          |
| 15 | 408367 | AK001178  | Hs.44424                                 | mela  | mAb+s.m.      |
|    | 408369 | R38438    | Hs.118747                                | pros, lung, fibro, uter, glio, cerv, ovar                       | mAb           |
|    | 408380 | AF123050  | Hs.44532                                 | lung, blad, headnk, panc, stom, fibro, esoph, mela              | CTL           |
|    | 408482 | NM_000676 | Hs.45743                                 | lung, esoph, headnk   | mAb+s.m.      |
|    | 408562 | A1436323  | Hs.31141                                 | uter, fibro   | mAb+s.m.      |
| 20 | 408790 | AW580227  | Hs.47860                                 | blad  | mAb+s.m.      |
|    | 408908 | BE296227  | Hs.250822                                | lung, lung, headnk, stom  | s.m.          |
|    | 409041 | AB033025  | Hs.50081                                 | uter, ovar, lung, colon, stom, headnk, breast, panc             | CTL+diag      |
|    | 409079 | W87707    | Hs.82065                                 | breast, pros  | mAb+s.m.      |
|    | 409103 | AF251237  | Hs.112208                                | lung  | CTL           |
| 25 | 409178 | BE393948  | Hs.50915                                 | ovar, breast, mela  | diag          |
|    | 409220 | BE243323  | Hs.51233                                 | angio, renal, colon, stom                                       | mAb+s.m.      |
|    | 409348 | A1401535  | Hs.146090                                | renal, glio   | mAb+s.m.+CTL  |
|    | 409389 | AB007979  | Hs.301281                                | glio  | mAb+diag      |
|    | 409420 | Z15008    | Hs.54451                                 | lung, headnk, panc, stom, cerv, esoph, blad                     | diag          |
| 30 | 409632 | W74001    | Hs.55279                                 | lung, blad, headnk  | diag          |
|    | 409637 | AA323948  | Hs.55407                                 | Homo sapiens mRNA; cDNA DKFZp434K0621 (f renal                  | mAb+s.m.+CTL  |
|    | 409663 | A1743750  | Hs.98306                                 | renal   | CTL           |
|    | 409745 | AA077391  |  | ovar, renal   | mAb+s.m.+CTL  |
|    | 409757 | NM_001898 | Hs.123114                                | panc, stom, lung, blad,   | diag          |
| 35 | 409893 | AW247090  | Hs.57101                                 | lung, cerv, blad, test, esoph                                   | CTL+s.m.      |
|    | 409956 | AW103364  | Hs.727                                   | breast, panc, ovar, colon, headnk, lung, blad, esoph            | diag          |
|    | 410001 | AB041036  | Hs.57771                                 | ovar, pros, uter, cerv, lung                                    | diag          |
|    | 410055 | AJ250839  | Hs.58241                                 | renal   | s.m.          |
|    | 410153 | BE311926  | Hs.15830                                 | renal, blad   | CTL           |
| 40 | 410274 | AA381807  | Hs.51762                                 | lung, renal   | CTL           |
|    | 410309 | BE043077  | Hs.278153                                | panc  | s.m.          |
|    | 410407 | X66839    | Hs.63287                                 | renal, lung, colon, stom, ovar, uter, blad                      | mAb+s.m.      |
|    | 410418 | D31382    | Hs.63325                                 | colon, blad, lung, ovar, panc, headnk                           | mAb+diag+s.m. |
|    | 411274 | NM_002776 | Hs.69423                                 | colon, ovar, uter, cerv, headk, panc                            | diag          |
| 45 | 411411 | AA345241  | Hs.55950                                 | renal   | mAb+s.m.      |
|    | 411773 | NM_006799 | Hs.72026                                 | ovar  | diag          |
|    | 412078 | X69699    | Hs.73149                                 | ovar  | CTL           |
|    | 412140 | AA219691  | Hs.73625                                 | lung, blad, headnk, breast, ovar, panc, angio, test, mela       | s.m.          |
|    | 412580 | AA113262  | Hs.17901                                 | mela  | mAb+s.m.+CTL  |
| 50 | 412609 | Z48804    | Hs.74124                                 | mela  | s.m.          |
|    | 412628 | A1972402  | Hs.306051                                | pros  | diag          |
|    | 412709 | AL022327  | Hs.74518                                 | glio  | mAb+s.m.      |
|    | 412719 | AW016610  | Hs.816                                   | lung, headnk, blad, glio, cerv                                  | s.m.          |
|    | 412959 | D87458    | Hs.75090                                 | glio  | CTL+s.m.      |
| 55 | 412986 | X81120    | Hs.75110                                 | glio  | mAb+s.m.      |
|    | 413048 | M93221    | Hs.75182                                 | fibro, panc   | mAb           |
|    | 413063 | AL035737  | Hs.75184                                 | glio, ovar, blad, lung  | diag          |
|    | 413278 | BE563085  | Hs.833                                   | panc, lung, blad, breast, cerv, ovar, headnk, esoph, mela, stom | CTL+s.m.      |
|    | 413324 | V00571    | Hs.75294                                 | blad  | diag          |
| 60 | 413385 | M34455    | Hs.840                                   | blad, lung, mela, fibro, uter                                   | s.m.          |
|    | 413554 | AA319146  | Hs.75426                                 | panc, glio  | diag          |
|    | 413719 | BE439580  | Hs.75498                                 | panc, lung, headnk, cerv, colon, uter, stom, esoph              | diag          |
|    | 414577 | A1056548  | Hs.72116                                 | angio   | CTL+diag      |
|    | 414774 | X02419    | Hs.77274                                 | lung, blad, headnk, panc, stom, ovar, esoph                     | diag          |
| 65 | 414812 | X72755    | Hs.77367                                 | breast, blad, lung, fibro, panc, colon, headnk,                 |               |
|    |        |           |  | cerv, stom, renal, ovar, test, mela, esoph                      | diag          |
|    | 414825 | X06370    | Hs.77432                                 | glio, lung, renal, esoph, panc, headnk, arth                    | mAb+s.m.+CTL  |
|    | 414883 | AA926960  | Hs.348669                                | lung, ovar, stom, colon, cerv, headnk, test                     | s.m.          |
| 70 | 414907 | X90725    | Hs.77597                                 | blad, lung, ovar, test  | s.m.          |
|    | 414945 | BE076358  | Hs.77667                                 | mela  | mAb+s.m.      |
|    | 415138 | C18356    | Hs.295944                                | angio, panc, stom, lung, uter                                   | CTL+diag      |
|    | 415511 | A1732617  | Hs.182362                                | blad, ovar, renal   | mAb+s.m.+CTL  |
|    | 415539 | A1733881  | Hs.72472                                 | breast, uter, pros  | mAb+s.m.      |
|    | 415668 | AW957684  | Hs.306814                                | mela  | diag          |
| 75 | 415669 | NM_005025 | Hs.78589                                 | lung  | mAb+diag+s.m. |
|    | 415817 | U88967    | Hs.78867                                 | lung, glio, headnk, cerv, mela, esoph, fibro                    | mAb+s.m.      |
|    | 415910 | U20350    | Hs.78913                                 | glio  | mAb+s.m.      |
|    | 415929 | AA724373  | Hs.304950                                | mela  | mAb           |
|    | 415989 | A1267700  | Hs.351201                                | pros, ovar, blad, lung, headnk, panc, colon, stom               | mAb+s.m.+CTL  |
| 80 | 416091 | AF295370  | Hs.283082                                | headnk, esoph, mela   | CTL+diag      |
|    | 416209 | AA236776  | Hs.79078                                 | lung, headnk, colon, uter, stom                                 | CTL+s.m.      |
|    | 416250 | AA581386  | Hs.73452                                 | esoph, lung, cerv, ovar   | mAb+s.m.      |
|    | 416350 | AF188625  | Hs.189507                                | test, mela, fibro   | CTL           |
|    | 416530 | U62801    | Hs.79361                                 | ovar, uter  | diag          |

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|    |        |           |           |  |   |               |
|----|--------|-----------|-----------|--|---|---------------|
|    | 416636 | N32536    | Hs.42645  | solute carrier family 16 (monocarboxylic | breast, panc, uter, mela  | mAb+s.m.      |
|    | 416658 | U03272    | Hs.79432  | fibrillin 2 (congenital contractural ara | lung, ovar, uter, blad, angio, test   | diag          |
|    | 416836 | D54745    | Hs.80247  | cholecystokinin                          | pros, EWS, glio   | diag          |
| 5  | 416857 | AA188775  | Hs.292453 | FGENESH predicted TM containing protein  | lung  | mAb+s.m.      |
|    | 417034 | NM_006183 | Hs.80962  | neurotensin                              | lung, headnk, cerv  | diag          |
|    | 417079 | U65590    | Hs.81134  | interleukin 1 receptor antagonist        | blad, lung, headnk, cerv, esoph   | diag          |
|    | 417166 | AA431323  | Hs.42146  | Paired box protein Pax-3                 | mela  | CTL           |
|    | 417355 | D13168    | Hs.82002  | endothelin receptor type B               | glio, mela  | mAb+s.m.      |
| 10 | 417389 | BE260964  | Hs.82045  | midkine (neurite growth-promoting factor | ovar, lung, blad, uter, cerv, panc, stom, mela, test, colon                   | mAb+diag      |
|    | 417433 | BE270266  | Hs.82128  | ST4 oncofetal trophoblast glycoprotein   | panc, breast, blad, lung, headnk, cerv, uter, ovar, stom, renal               | mAb           |
|    | 417542 | J04129    | Hs.82269  | progestagen-associated endometrial prote | lung, mela  | mAb+diag      |
|    | 417771 | AA804698  | Hs.82547  | retinoic acid receptor responder (lazaro | blad, cerv, panc, ovar  | mAb           |
|    | 417866 | AW067903  | Hs.82772  | collagen, type XI, alpha 1               | lung, panc, breast, ovar, headnk, stom  | CTL           |
| 15 | 417931 | W95642    | Hs.82961  | trefoil factor 3 (intestinal)            | ovar, panc, stom, colon, uter, pros   | diag          |
|    | 417933 | X02308    | Hs.82962  | thymidylate synthetase                   | blad, lung, angio, colon, panc, esoph   | s.m.          |
|    | 418007 | M13509    | Hs.83169  | matrix metalloproteinase 1 (interstitial | lung, blad, fibro, headnk, panc, stom, colon, ovar, esoph, mela               | mAb+diag+s.m. |
|    | 418030 | BE207573  | Hs.83321  | neuromedin B                             | glio, panc  | diag          |
|    | 418064 | BE387287  | Hs.83384  | S100 calcium-binding protein, beta (neur | mela  | diag          |
| 20 | 418281 | U09550    | Hs.1154   | oviductal glycoprotein 1, 120kD (mucin 9 | uter, ovar  | CTL+diag      |
|    | 418478 | U38945    | Hs.1174   | cyclin-dependent kinase inhibitor 2A (me | lung, blad, ovar, headnk, panc, cerv, mela                                    | s.m.          |
|    | 418506 | AA084248  | Hs.372651 | Unknown protein for MGC:29643 (formerly  | angio, ovar, glio, uter, lung, blad, panc, mela                               | mAb+diag      |
|    | 418526 | BE019020  | Hs.85838  | solute carrier family 16 (monocarboxylic | lung, blad, renal, panc, stom, colon, ovar                                    | mAb+s.m.      |
|    | 418558 | AW082266  | Hs.86131  | Fas (TNFRSF6)-associated via death domai | esoph, headnk   | s.m.          |
| 25 | 418678 | NM_001327 | Hs.167379 | cancer/testis antigen (NY-ESO-1)         | lung, blad, stom, ovar, panc, esoph, cerv, mela                               | CTL           |
|    | 418830 | BE513731  | Hs.88959  | hypothetical protein MGC4816             | lung  | CTL           |
|    | 418867 | D31771    | Hs.89404  | msh (Drosophila) homeo box homolog 2     | blad  | s.m.          |
|    | 418870 | AF147204  | Hs.89414  | chemokine (C-X-C motif), receptor 4 (fus | leuk, ovar, breast, blad, renal   | mAb+s.m.      |
|    | 419080 | AW150835  | Hs.18878  | hypothetical protein FLJ21620            | renal, uter, lung   | CTL           |
| 30 | 419121 | AA374372  | Hs.89626  | parathyroid hormone-like hormone         | lung, esoph, headnk, blad   | diag          |
|    | 419171 | NM_002846 | Hs.89655  | protein tyrosine phosphatase, receptor t | lung  | mAb+s.m.      |
|    | 419172 | AW338625  | Hs.22026  | ESTs; similar to TRANSMEMBRANE 4 SUPERF  | angio, renal  | mAb+s.m.      |
|    | 419183 | U06069    | Hs.89663  | cytochrome P450, subfamily XXIV (vitamin | blad, lung, headnk, panc  | CTL+s.m.      |
|    | 419216 | AU076718  | Hs.164021 | small inducible cytokine subfamily B (Cy | panc, lung, stom, cerv, pros, headnk, esoph                                   | diag          |
| 35 | 419235 | AW470411  | Hs.288433 | neurotrophin                             | panc, fibro, headnk, lung   | mAb+diag      |
|    | 419452 | U33635    | Hs.90572  | PTK7 protein tyrosine kinase 7           | ovar, pros, lung, breast, uter, test, panc, stom                              | mAb+s.m.      |
|    | 419508 | AW997938  | Hs.90786  | ATP-binding cassette, sub-family C (CFTR | glio, omuc, stom, lung, panc, colon, renal, uter                              | mAb+s.m.      |
|    | 419556 | U29615    | Hs.91093  | chitinase 1 (chitotriosidase)            | lung, fibro, test   | mAb+diag      |
|    | 419704 | AA429104  | Hs.45057  | ESTs                                     | glio  | CTL+s.m.      |
| 40 | 419723 | AL120193  | Hs.339810 | longevity assurance (LAG1, S. cerevisiae | glio  | mAb+diag      |
|    | 419741 | NM_007019 | Hs.93002  | ubiquitin carrier protein E2-C           | blad, lung, colon, ovar, test, esoph, mela                                    | CTL+s.m.      |
|    | 420159 | AI572490  | Hs.99785  | Homo sapiens cDNA: FLJ21245 fis, clone C | blad, stom  | mAb           |
|    | 420162 | BE378432  | Hs.95577  | cyclin-dependent kinase 4                | lung, mela  | s.m.          |
|    | 420208 | BE276055  | Hs.95972  | silver (mouse homolog) like              | mela  | CTL           |
| 45 | 420370 | Y13645    | Hs.97234  | uroplakin 2                              | blad  | mAb           |
|    | 420440 | NM_002407 | Hs.97644  | mammaglobin 2                            | ovar, uter, cerv  | diag          |
|    | 420602 | AF060877  | Hs.99236  | regulator of G-protein signalling 20     | headnk, glio, cerv, mela  | CTL+s.m.      |
|    | 420610 | AI683183  | Hs.99348  | distal-less homeo box 5                  | uter, endo, lung  | CTL           |
|    | 420737 | L08096    | Hs.99899  | CD70; tumor necrosis factor (ligand) s   | renal   | mAb+s.m.      |
| 50 | 420789 | AI670057  | Hs.199882 | ESTs                                     | renal   | mAb+s.m.+CTL  |
|    | 420876 | AA918425  | Hs.177744 | FGENES predicted novel protein containin | panc, blad  | s.m.          |
|    | 421066 | AU076725  | Hs.101408 | branched chain aminotransferase 2, mitoc | blad, lung  | CTL+s.m.      |
|    | 421110 | AJ250717  | Hs.1355   | cathepsin E                              | blad, panc, stom, lung, fibro, ovar, esoph                                    | sm+diag       |
|    | 421340 | F07783    | Hs.1369   | decay accelerating factor for complement | angio, panc, stom   | diag          |
| 55 | 421379 | Y15221    | Hs.103982 | small inducible cytokine subfamily B (Cy | breast, panc, headnk, lung, stom, blad, cerv, colon, fibro, test, mela, esoph | diag          |
|    | 421471 | U90545    | Hs.327179 | solute carrier family 17 (sodium phospho | renal   | mAb+s.m.      |
|    | 421474 | U76362    | Hs.104637 | solute carrier family 1 (glutamate trans | lung  | mAb+s.m.      |
|    | 421508 | NM_004833 | Hs.105115 | absent in melanoma 2                     | blad, esoph, lung, mela   | mAb+s.m.+CTL  |
|    | 421524 | AA312082  | Hs.105445 | GDNF family receptor alpha 1             | breast  | mAb+s.m.      |
| 60 | 421552 | AF026692  | Hs.105700 | secreted frizzled-related protein 4      | breast, ovar, panc, cerv, uter, pros, lung, stom, headnk                      | diag          |
|    | 421574 | AJ000152  | Hs.105924 | defensin, beta 2                         | headnk, lung  | CTL+diag      |
|    | 421582 | AI910275  | Hs.350470 | trefoil factor 1 (breast cancer, estroge | breast, panc, lung, omuc  | diag          |
|    | 421666 | AL035250  | Hs.1408   | endothelin 3                             | mela  | mAb+diag      |
|    | 421753 | BE314828  | Hs.107911 | ATP-binding cassette, sub-family B (MDR/ | lung  | mAb+s.m.      |
| 65 | 421817 | AF146074  | Hs.108660 | ATP-binding cassette, sub-family C (CFTR | lung, cerv, headnk, blad  | mAb+s.m.      |
|    | 422033 | AW245805  | Hs.110903 | claudin 5 (transmembrane protein deleted | glio  | mAb+s.m.      |
|    | 422048 | NM_012445 | Hs.288126 | spondin 2, extracellular matrix protein  | panc, pros  | diag          |
|    | 422109 | S73265    | Hs.1473   | gastrin-releasing peptide                | panc, lung, colon, fibro  | diag          |
|    | 422158 | L10343    | Hs.112341 | protease inhibitor 3, skin-derived (SKAL | headnk, blad, lung, cerv, stom, esoph   | diag          |
| 70 | 422163 | AF027208  | Hs.112360 | prominin (mouse)-like 1                  | colon, breast, fibro  | mAb+s.m.      |
|    | 422192 | AA305159  | Hs.113019 | fls485                                   | mela  | s.m.          |
|    | 422260 | AA315993  | Hs.105484 | regenerating gene type IV                | colon, omuc, stom, panc   | mAb+diag      |
|    | 422282 | AF019225  | Hs.114309 | apolipoprotein L                         | blad, lung, headnk, renal   | diag          |
|    | 422283 | AW411307  | Hs.114311 | CDC45 (cell division cycle 45, S.cerevis | lung, blad, test, cerv, headnk, esoph   | s.m.          |
| 75 | 422309 | U79745    | Hs.114924 | solute carrier family 16 (monocarboxylic | mela  | mAb+s.m.+CTL  |
|    | 422330 | D30783    | Hs.115263 | epiregulin                               | panc, colon, blad   | mAb+diag      |
|    | 422397 | AJ223366  | Hs.116051 | MYEOV Myeloma overexpressed gene (in a s | panc, stom, colon, esoph, renal, blad   | CTL+s.m.      |
|    | 422424 | AI186431  | Hs.296638 | prostate differentiation factor          | blad, panc, pros, angio, colon, stom, lung, mela                              | diag          |
|    | 422627 | BE336857  | Hs.118787 | transforming growth factor, beta-induced | colon, renal  | mAb+diag      |
| 80 | 422765 | AW409701  | Hs.1578   | baculoviral IAP repeat-containing 5 (sur | lung, blad  | s.m.          |
|    | 422809 | AK001379  | Hs.121028 | hypothetical protein FLJ10549            | blad, cer, lung, uter, angio, stom, test                                      | s.m.          |
|    | 422867 | L32137    | Hs.1584   | cartilage oligomeric matrix protein (pse | breast, ovar, pros, panc, lung, colon, uter                                   | diag          |
|    | 422956 | BE545072  | Hs.122579 | ECT2 protein (Epithelial cell transformi | ovar, blad, panc, lung, headnk, colon, stom                                   | CTL+s.m.      |
|    | 423161 | AL049227  | Hs.124776 | downstream of cadherin 6 (by 3.3kb)      | renal, ovar, blad   | mAb+s.m.      |

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|----|--------|-----------|-----------|--|--|---------------|
| 5  | 423184 | NM_004428 | Hs.1624   | ephrin-A1                                | pros, panc, renal  | mAb+s.m.      |
|    | 423242 | AL039402  | Hs.125783 | DEME-6 protein                           | breast, renal, ovar, pros, colon                                       | CTL           |
|    | 423422 | AC005175  | Hs.128425 | NY-REN-24 antigen                        | glio   | mAb           |
|    | 423508 | AW604297  | Hs.129711 | hepatitis A virus cellular receptor 1    | renal, colon   | mAb           |
|    | 423583 | AL122055  | Hs.129836 | KIAA1028 protein                         | pros   | s.m.          |
|    | 423634 | AW559308  | Hs.1690   | heparin-binding growth factor binding pr | lung, blad, headnk, panc   | diag          |
|    | 423673 | BE003054  | Hs.1695   | matrix metalloproteinase 12 (macrophage  | blad, lung, headnk, ovar, panc, colon, stom, uter, cerv, esoph, test   | mAb+diag+s.m. |
|    | 423936 | U77629    | Hs.135639 | achaete-scute complex (Drosophila) homol | colon, stom, ovar  | CTL           |
| 10 | 423961 | D13666    | Hs.136348 | periostin (OSF-2os)                      | breast, colon, blad, lung, fibro, panc, headnk, ovar, mela             | mAb+diag      |
|    | 424008 | R02740    | Hs.137555 | putative chemokine receptor; GTP-binding | blad, headnk, stom, cerv, esoph  | mAb+s.m.      |
|    | 424046 | AF027866  | Hs.138202 | serine (or cysteine) proteinase inhibito | headnk, lung, cerv   | diag          |
|    | 424252 | AK000520  | Hs.143811 | hypothetical protein FLJ20513            | colon, stom  | mAb+s.m.+CTL  |
|    | 424321 | W74048    | Hs.1765   | lymphocyte-specific protein tyrosine kin | mela, fibro  | s.m.          |
|    | 424381 | AA285249  | Hs.146329 | protein kinase Chk2 (CHEK2)              | lung, colon, test  | s.m.          |
| 15 | 424411 | NM_005209 | Hs.146549 | crystallin, beta A2                      | panc   | s.m.          |
|    | 424502 | AF242388  | Hs.149585 | lengsin                                  | lung   | s.m.          |
|    | 424503 | NM_002205 | Hs.149609 | integrin, alpha 5 (fibronectin receptor, | panc, pros, angio, blad, lung  | mAb+s.m.      |
|    | 424620 | AA101043  | Hs.151254 | kallikrein 7 (chymotryptic, stratum com  | ovar   | diag          |
| 20 | 424687 | J05070    | Hs.151738 | matrix metalloproteinase 9 (gelatinase B | headnk, panc, lung, blad, uter, cerv, colon, stom, test, mela          | diag          |
|    | 424735 | U31875    | Hs.272499 | short-chain alcohol dehydrogenase family | blad, breast   | CTL+s.m.      |
|    | 424825 | AF207069  | Hs.153357 | procollagen-lysine, 2-oxoglutarate 5-dio | mela   | CTL+s.m.      |
|    | 424905 | NM_002497 | Hs.153704 | NIMA (never in mitosis gene a)-related k | ovar, blad, lung, headnk, panc, stom                                   | s.m.          |
|    | 425009 | X58288    | Hs.154151 | protein tyrosine phosphatase, receptor l | renal, fibro   | mAb+s.m.      |
| 25 | 425071 | NM_013989 | Hs.154424 | deiodinase, iodothyronine, type II       | pros, colon, stom, uter, cerv, headnk, esoph, panc                     | diag          |
|    | 425088 | AA663372  | Hs.169395 | hypothetical protein FLJ12015            | glio, mela   | mAb+s.m.+CTL  |
|    | 425115 | R44684    | Hs.123956 | downstream of: G protein-coupled recept  | breast, ovar, lung, colon, panc, headnk, stom, uter, cerv, blad, esoph | mAb+s.m.      |
|    | 425247 | NM_005940 | Hs.155324 | matrix metalloproteinase 11 (stromelysin | lung, headnk   | mAb+diag+s.m. |
|    | 425322 | U63630    | Hs.155637 | protein kinase, DNA-activated, catalytic | mela, glio   | s.m.          |
| 30 | 425535 | AB007937  | Hs.158287 | syndecan 3                               | lung, headnk, cerv, esoph, blad  | mAb+s.m.      |
|    | 425650 | NM_001944 | Hs.1925   | desmoglein 3 (pemphigus vulgaris antigen | blad   | mAb           |
|    | 425721 | AC002115  | Hs.159309 | uroplakin 1A                             | endo, uter, colon  | CTL+diag      |
|    | 425723 | NM_014420 | Hs.159311 | dickkopf (Xenopus laevis) homolog 4      | lung   | s.m.          |
| 35 | 425734 | AF056209  | Hs.159396 | peptidylglycine alpha-amidating monooxyg | ovar, uter, lung   | mAb+diag      |
|    | 425776 | U25128    | Hs.159499 | parathyroid hormone receptor 2           | panc, glio   | s.m.          |
|    | 425842 | AI587490  | Hs.159523 | NK-2 (Drosophila) homolog B              | blad, lung, headnk   | mAb+s.m.      |
|    | 425852 | AK001504  | Hs.159651 | death receptor 6, TNF superfamily member | mAb  |               |
|    | 425883 | AL137708  | Hs.161031 | Homo sapiens mRNA; cDNA DKFZp434K0322 (f | blad, panc   | mAb+s.m.      |
|    | 425921 | NM_007231 | Hs.162211 | solute carrier family 6 (neurotransmitte | stom, panc   | mAb+s.m.      |
| 40 | 425998 | AU076629  | Hs.165950 | fibroblast growth factor receptor 4      | renal  | mAb+diag      |
|    | 426028 | NM_001110 | Hs.172028 | a disintegrin and metalloproteinase doma | blad   | mAb+diag      |
|    | 426215 | AW963419  | Hs.155223 | stanniocalcin 2                          | breast, lung, renal, colon, ovar, uter                                 | mAb+s.m.      |
|    | 426227 | U67058    | Hs.154299 | Human proteinase activated receptor-2 mR | panc, lung, colon, esoph, stom   | mAb+s.m.      |
|    | 426322 | J05068    | Hs.2012   | transcobalamin I (vitamin B12 binding pr | panc, blad, stom   | diag          |
|    | 426344 | H41821    | Hs.322469 | transcriptional activator of the c-fos p | glio   | CTL+s.m.      |
| 45 | 426427 | M86699    | Hs.169840 | TTK protein kinase                       | ovar, lung, headnk, cerv, colon, uter, stom, test                      | CTL+s.m.      |
|    | 426451 | AI908165  | Hs.169946 | GATA-binding protein 3 (T-cell receptor  | blad, breast   | s.m.          |
|    | 426514 | BE516633  | Hs.170195 | bone morphogenetic protein 7 (osteogenic | ovar, colon, blad, lung, cerv  | mAb+diag      |
|    | 426600 | NM_003378 | Hs.171014 | VGF nerve growth factor inducible        | mela   | diag          |
| 50 | 426761 | AI015709  | Hs.172089 | PORIMIN Pro-oncosis receptor inducing me | lung, esoph, pros, uter, panc, colon, ovar, headnk                     | mAb+s.m.      |
|    | 426812 | AF105365  | Hs.172613 | solute carrier family 12 (potassium/chlo | renal  | mAb+s.m.      |
|    | 426890 | AA393167  | Hs.41294  | ESTs                                     | renal, colon, ovar, uter, stom   | CTL           |
|    | 427239 | BE270447  | Hs.356512 | ubiquitin carrier protein                | lung, blad, test, mela   | CTL+s.m.      |
|    | 427335 | AA448542  | Hs.251677 | G antigen 7B                             | lung, headnk, blad, mela, esoph  | CTL           |
| 55 | 427343 | AI880044  | Hs.176977 | protein kinase C binding protein 2       | glio   | CTL+s.m.      |
|    | 427722 | AK000123  | Hs.180479 | hypothetical protein FLJ20116            | colon, stom, panc  | CTL           |
|    | 427747 | AW411425  | Hs.180655 | serine/threonine kinase 12               | blad, lung, ovar, stom, test, esoph                                    | s.m.          |
|    | 427923 | AW274357  | Hs.301406 | FGENESH predicted 11 TM protein          | mela   | mAb           |
|    | 427969 | NM_001963 | Hs.2230   | epidermal growth factor (beta-urogastron | panc   | mAb+diag      |
| 60 | 428093 | AW594506  | Hs.104830 | ESTs                                     | ovar, panc   | CTL           |
|    | 428141 | D50402    | Hs.182611 | solute carrier family 11 (proton-coupled | glio   | mAb+s.m.      |
|    | 428179 | AI127772  | Hs.279696 | serum/glucocorticoid regulated kinase-li | breast   | s.m.          |
|    | 428187 | AI687303  | Hs.285529 | G protein-coupled receptor 49            | ovar, uter, colon, stom  | mAb+s.m.      |
|    | 428242 | H55709    | Hs.2250   | leukemia inhibitory factor (cholinergic  | ovar, panc, , lung   | diag          |
| 65 | 428296 | NM_003058 | Hs.183572 | solute carrier family 22 (organic cation | renal  | mAb+s.m.      |
|    | 428330 | L22524    | Hs.2256   | matrix metalloproteinase 7 (matrilysin,  | uter, ovar, fibro, pros, panc, lung, blad, headnk, esoph, mela, stom   | mAb+diag+s.m. |
|    | 428368 | BE440042  | Hs.83326  | matrix metalloproteinase 3 (stromelysin  | headnk, stom, esoph, colon   | diag          |
|    | 428392 | H10233    | Hs.2265   | secretory granule, neuroendocrine protei | panc   | diag          |
|    | 428450 | NM_014791 | Hs.184339 | KIAA0175 gene product                    | ovar, cerv, panc, lung, blad, mela                                     | s.m.          |
| 70 | 428479 | Y00272    | Hs.334562 | cell division cycle 2, G1 to S and G2 to | lung, blad, colon, uter, ovar  | s.m.          |
|    | 428484 | AF104032  | Hs.184601 | solute carrier family 7 (cationic amino  | lung, blad, headnk, cerv, esoph, glio, uter, stom, colon, mela         | mAb+s.m.      |
|    | 428486 | AW583497  | Hs.184604 | pancreatic polypeptide                   | panc   | diag          |
|    | 428505 | AL035461  | Hs.2281   | chromogranin B (secretogranin 1)         | panc, lung   | diag          |
|    | 428513 | BE220806  | Hs.184697 | plexin C1                                | mela, panc, stom, headnk   | mAb           |
|    | 428579 | NM_005756 | Hs.184942 | G protein-coupled receptor 64            | ovar, EWS, uter  | mAb+s.m.      |
| 75 | 428664 | AK001666  | Hs.189095 | similar to SALL1 (sal (Drosophila)-like  | blad, ovar, pros, lung, stom, test                                     | CTL+s.m.      |
|    | 428698 | AA852773  | Hs.334838 | KIAA1866 protein                         | breast, colon, lung, panc, stom, headnk, ovar, EWS                     | mAb           |
|    | 428748 | AW593206  | Hs.98785  | Ksp37 protein                            | lung   | diag          |
|    | 428758 | AA433988  | Hs.98502  | CA125 antigen; mucin 16                  | ovar, cerv, lung, panc, stom, renal                                    | diag          |
| 80 | 428778 | AK000530  | Hs.193326 | fibroblast growth factor receptor-like 1 | ovar   | mAb+s.m.      |
|    | 428784 | Y12851    | Hs.193470 | purinergic receptor P2X, ligand-gated io | glio, mela   | mAb+s.m.      |
|    | 428841 | AI418430  | Hs.104935 | ESTs                                     | renal  | mAb+s.m.+CTL  |
|    | 428953 | AA306610  | Hs.348183 | tumor necrosis factor receptor superfam  | cerv, panc, colon, stom, headnk, renal                                 | mAb+diag      |
|    | 428969 | AF120274  | Hs.194689 | artemin                                  | lung, cerv   | diag          |

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|    | 428970 | BE276891  | Hs.194691 | retinoic acid induced 3 (RAIG1); metabo   | stom, panc, colon, ovar  | mAb+s.m.      |
|    | 429149 | AW193360  | Hs.197962 | Homolog of mouse ADP-ribosylation factor  | glio   | mAb+s.m.      |
|    | 429211 | AF052693  | Hs.198249 | gap junction protein, beta 5 (connexin 3  | lung, blad, headnk, cerv, esoph, stom, mela                                  | mAb+s.m.      |
| 5  | 429263 | AA019004  | Hs.198396 | ATP-binding cassette, sub-family A (ABC1  | lung   | mAb+s.m.      |
|    | 429276 | AF056085  | Hs.198612 | G protein-coupled receptor 51             | angio, blad, glio  | mAb+s.m.      |
|    | 429353 | AL117406  | Hs.335891 | ATP-binding cassette transporter MRP8     | breast, pros   | mAb+s.m.      |
|    | 429547 | AW009166  | Hs.99376  | FGENESH predicted novel secreted protein  | panc, headnk, lung, ovar   | diag          |
|    | 429610 | AB024937  | Hs.211092 | LUNX protein: PLUNC (palate lung and nas  | lung, fibro  | mAb+diag      |
| 10 | 429903 | AL134197  | Hs.93597  | cyclin-dependent kinase 5, regulatory su  | lung, mela   | s.m.          |
|    | 429910 | NM_000867 | Hs.2507   | 5-hydroxytryptamine (serotonin) receptor  | leio   | mAb+s.m.      |
|    | 430147 | R60704    | Hs.234434 | hairly/enhancer-of-split related with YRP | glio   | s.m.          |
|    | 430280 | AA361258  | Hs.237868 | interleukin 7 receptor                    | mela, lung, panc, stom, esoph, headnk  | mAb+s.m.+CTL  |
|    | 430377 | NM_001922 | Hs.301865 | dopachrome tautomerase (dopachrome delta  | mela   | CTL           |
|    | 430486 | BE062109  | Hs.241551 | chloride channel, calcium activated, fam  | lung, blad, headnk, cerv, esoph  | mAb+s.m.      |
| 15 | 430822 | AJ005371  | Hs.248017 | glyceraldehyde-3-phosphate dehydrogenase  | mela   | s.m.          |
|    | 430890 | X54232    | Hs.2699   | glypican 1                                | glio, lung, cerv, blad, esoph  | mAb+s.m.      |
|    | 431053 | S40359    | Hs.249141 | Glutamate receptor subunit                | glio   | mAb           |
|    | 431130 | NM_006103 | Hs.2719   | HE4; epididymis-specific, whey-acidic pr  | ovar, uter   | diag          |
|    | 431462 | AW583672  | Hs.256311 | granin-like neuroendocrine peptide precu  | panc, lung, glio, test   | diag          |
| 20 | 431515 | NM_002152 | Hs.258583 | EDG-7 (endothelial differentiation, lys   | ovar, pros, lung, blad   | mAb+s.m.      |
|    | 431620 | AA126109  | Hs.264981 | 2'-5'-oligoadenylate synthetase 2 (69-71  | esoph, cerv  | CTL+s.m.      |
|    | 431629 | AU077025  | Hs.265827 | interferon, alpha-inducible protein (clo  | panc, uter, cerv, stom, esoph, mela  | mAb+diag      |
|    | 431630 | NM_002204 | Hs.265829 | integrin, alpha 3 (antigen CD49C, alpha   | ovar, panc, blad, headnk, mela, renal  | mAb+s.m.      |
|    | 431840 | AA534908  | Hs.2860   | POU domain, class 5, transcription facto  | test, renal, blad  | CTL           |
| 25 | 431846 | BE019924  | Hs.271580 | uoplakin 1B                               | lung, blad, headnk, uter, cerv, stom, ovar                                   | mAb+diag      |
|    | 431870 | AW449902  | Hs.105500 | ESTs                                      | renal  | mAb+s.m.+CTL  |
|    | 431939 | AW008061  | Hs.231994 | ESTs                                      | renal, colon   | mAb+s.m.+CTL  |
|    | 431958 | X63629    | Hs.2877   | cadherin 3, type 1, P-cadherin (placenta  | lung, blad, cerv, headnk, ovar, colon, pros, panc, breast, esoph, test, mela | mAb+diag      |
| 30 | 432196 | AW300888  | Hs.273230 | hypothetical protein FLJ10830             | renal  | CTL           |
|    | 432201 | AI538613  | Hs.298241 | Transmembrane protease, serine 3          | breast, colon, ovar, stom, panc, uter, cerv, lung                            | mAb+diag+s.m. |
|    | 432579 | AF043244  | Hs.278439 | nucleolar protein 3 (apoptosis repressor  | renal  | CTL           |
|    | 432596 | AJ224741  | Hs.278461 | matrilin 3                                | panc, breast   | diag          |
|    | 432606 | NM_002104 | Hs.3066   | granzyme K (serine protease, granzyme 3;  | renal, breast, lung, stom, hepC, fibro                                       | CTL           |
| 35 | 432800 | BE391046  | Hs.278962 | AIM-1 protein                             | mela, pros   | mAb+s.m.      |
|    | 432829 | W60377    | Hs.57772  | ESTs                                      | blad   | CTL+s.m.      |
|    | 432867 | AW016936  | Hs.233364 | ESTs                                      | stom, colon  | mAb+s.m.+CTL  |
|    | 432874 | W94322    | Hs.279651 | melanoma inhibitory activity              | panc, stom, mela   | diag          |
|    | 432990 | AL036071  | Hs.279899 | tumor necrosis factor receptor superfami  | pros, renal  | mAb+s.m.      |
| 40 | 433001 | AF217513  | Hs.279905 | clone HQ0310 PRO0310p1                    | colon, breast, lung, blad, cerv, uter, test, mela                            | s.m.          |
|    | 433447 | U29195    | Hs.3281   | neuronal pentraxin II                     | mela, esoph, colon, renal  | diag          |
|    | 433848 | AF095719  | Hs.93764  | carboxypeptidase A4                       | headnk, esoph, lung  | s.m.          |
|    | 433867 | AK000596  | Hs.3618   | hippocalcin-like 1                        | renal  | CTL           |
|    | 434206 | AW136973  | Hs.362915 | ESTs, Weakly similar to S69890 mitogen i  | stom, colon  | CTL+s.m.      |
|    | 434276 | AF123659  | Hs.93605  | leucine zipper, putative tumor suppresso  | mela   | s.m.          |
| 45 | 435013 | H91923    | Hs.110024 | NM_020142:Homo sapiens NADH:ubiquinone o  | renal, lung  | CTL           |
|    | 435472 | AW972330  | Hs.283022 | triggering receptor expressed on myeloid  | glio   | mAb           |
|    | 435505 | AF200492  | Hs.211238 | interleukin-1 homolog 1                   | lung, headnk   | diag          |
|    | 435869 | AF255910  | Hs.54650  | junctional adhesion molecule 2            | angio, glio  | mAb           |
| 50 | 436456 | AW292677  | Hs.248122 | melanin-concentrating hormone receptor (  | mela, glio   | mAb+s.m.      |
|    | 436480 | AJ271643  | Hs.87469  | putative acid-sensing ion channel         | glio   | mAb+s.m.      |
|    | 436481 | AA379597  | Hs.5199   | HSPC150 protein similar to ubiquitin-con  | lung, blad, colon, ovar, uter, headnk, test                                  | s.m.          |
|    | 436576 | AI458213  | Hs.77542  | ESTs                                      | renal, panc, headnk, lung  | mAb+s.m.      |
|    | 436608 | AA628980  | Hs.192371 | down syndrome critical region protein DS  | blad, lung   | CTL+s.m.      |
| 55 | 436895 | AF037335  | Hs.5338   | carbonic anhydrase XII                    | breast, renal, ovar, glio  | mAb+s.m.      |
|    | 436961 | AW375974  | Hs.156704 | ESTs                                      | lung, panc, renal, uter, colon   | CTL           |
|    | 436982 | AB018305  | Hs.5378   | spondin 1, (f-spondin) extracellular mat  | ovar, fibro  | diag          |
|    | 437016 | AU076916  | Hs.5398   | guanine monophosphate synthetase          | lung, blad, cerv, esoph, headnk  | s.m.          |
|    | 437044 | AL035864  | Hs.69517  | differentially expressed in Fanconi's an  | headnk, cerv, lung, blad, breast, pros, ovar, stom, esoph                    | CTL           |
| 60 | 437100 | AI761073  | Hs.14535  | Homo sapiens cDNA: FLJ22314 fis, clone H  | panc, renal  | mAb+s.m.+CTL  |
|    | 437212 | AI765021  | Hs.210775 | ESTs                                      | renal, uter, ovar  | mAb+s.m.+CTL  |
|    | 437789 | AI581344  | Hs.127812 | ESTs, Weakly similar to T17330 hypotheti  | lung   | CTL           |
|    | 437852 | BE001836  | Hs.256897 | putative GPCR                             | blad, lung   | mAb+s.m.      |
| 65 | 437938 | AI950087  | Hs.369628 | gb:wq05c02.x1 NCI_CGAP_Kid12 Homo sapien  | renal, ovar, uter, cerv, blad, renal   | mAb+s.m.+CTL  |
|    | 438380 | T06430    | Hs.6194   | chondroitin sulfate proteoglycan BEHAB/b  | glio, mela   | diag          |
|    | 438549 | BE386801  | Hs.21858  | trinucleotide repeat containing 3         | mela   | CTL+diag      |
|    | 438859 | AI559626  | Hs.93522  | Homo sapiens mRNA for KIAA1647 protein,   | renal  | mAb+s.m.+CTL  |
|    | 438929 | AW195515  | Hs.253177 | ESTs                                      | renal  | mAb+s.m.+CTL  |
|    | 438966 | AW979074  |           | gb:EST391184 MAGE resequences, MAGP Ho    | renal  | mAb           |
| 70 | 439018 | AW300887  | Hs.26638  | membrane-spanning 4-domains, subfamily A  | uter, stom, pros, fibro  | mAb           |
|    | 439223 | AW238299  | Hs.250618 | UL16 binding protein 2                    | lung, headnk, cerv, esoph, blad, colon                                       | mAb           |
|    | 439477 | W69813    | Hs.58042  | ESTs, Moderately similar to GFR3_HUMAN G  | lung   | mAb+s.m.      |
|    | 439569 | AW602166  | Hs.222399 | CEGP1 protein                             | breast, AWPC, pros, blad   | diag          |
|    | 439606 | W79123    | Hs.58561  | G protein-coupled receptor 87             | lung, blad, headnk, cerv, esoph  | mAb+s.m.      |
| 75 | 439738 | BE246502  | Hs.9598   | sema domain, immunoglobulin domain (Ig).  | blad, lung, cerv, renal  | mAb+s.m.      |
|    | 439759 | AL359055  | Hs.67709  | Homo sapiens mRNA full length insert cDN  | colon, stom, panc, lung  | mAb+s.m.+CTL  |
|    | 439979 | AW600291  | Hs.6823   | hypothetical protein FLJ10430             | renal, cerv, pros, headnk, colon, test                                       | mAb           |
|    | 440006 | AK000517  | Hs.6844   | NALP2 protein; PYRIN-Containing APAF1-i   | blad, ovar, lung, headnk, test   | s.m.          |
|    | 440065 | W03476    | Hs.266331 | Homo sapiens Fc receptor homolog express  | mela   | diag          |
| 80 | 440225 | BE295782  | Hs.159    | tumor necrosis factor receptor superfami  | glio   | mAb           |
|    | 440304 | BE159394  | Hs.125395 | hepatitis A virus cellular receptor 1     | renal, colon, blad   | mAb+s.m.      |
|    | 440311 | AI733079  | Hs.125407 | ESTs, Moderately similar to ALUE_HUMAN I  | renal  | mAb+s.m.+CTL  |
|    | 440516 | S42303    | Hs.161    | cadherin 2, type 1, N-cadherin (neuronal  | glio, ovar, uter, renal, hepC  | mAb+diag      |
|    | 440672 | AF083811  | Hs.7345   | MAD1 (mitotic arrest deficient, yeast, h  | mela   | s.m.          |

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|    |        |           |           |   |  |               |
|----|--------|-----------|-----------|---|--|---------------|
| 5  | 441362 | BE614410  | Hs.23044  | RAD51 (S. cerevisiae) homolog (E. coli Re | lung, blad, headnk, test, mela, esoph                            | s.m.          |
|    | 441392 | AW451831  | Hs.222119 | ESTs, Weakly similar to S30433 keratin 1  | renal  | mAb+s.m.+CTL  |
|    | 442006 | AW975183  | Hs.372210 | ESTs, Weakly similar to S72482 hypotheti  | fibro, angio   | mAb           |
|    | 442117 | AW664964  | Hs.128899 | ESTs; hypothetical protein for IMAGE:447  | breast, lung, blad, panc, headnk, stom, ovar, pros               | mAb+s.m.      |
|    | 442133 | AW874138  | Hs.129017 | ESTs; type Ia transmembrane protein       | ovar, uter   | mAb           |
|    | 442438 | AA995998  |           | gb:os26b03.s1 NC1_CGAP_Kid5 Homo sapiens  | uter, ovar, renal  | mAb+s.m.+CTL  |
|    | 443105 | X96753    | Hs.9004   | chondroitin sulfate proteoglycan 4 (mela  | mela   | mAb+diag      |
|    | 443211 | AI128388  | Hs.143655 | ESTs                                      | blad, ovar, lung, headnk, stom                                   | mAb+s.m.+CTL  |
| 10 | 443247 | BE614387  | Hs.333893 | c-Myc target JPO1                         | colon, lung, blad, panc  | CTL           |
|    | 443426 | AF098158  | Hs.9329   | chromosome 20 open reading frame 1        | colon, lung, blad, stom, test, mela                              | CTL           |
|    | 443595 | AF169312  | Hs.9613   | PPAR(gamma) angiopoietin related protein  | renal  | diag          |
|    | 443646 | AI085198  | Hs.164226 | Thrombospondin 1                          | angio, panc, uter  | diag          |
|    | 443785 | AW449952  | Hs.190125 | basic-helix-loop-helix-PAS protein        | glio, uter, ovar   | mAb+s.m.+CTL  |
|    | 443859 | NM_013409 | Hs.9914   | folistatin                                | lung, cerv, headnk, blad, esoph                                  | diag          |
| 15 | 443987 | AW163123  | Hs.10071  | seven transmembrane protein TM7SF3        | renal  | mAb+s.m.      |
|    | 444006 | BE395085  | Hs.10086  | type I transmembrane protein Fn14         | panc, colon, lung, ovar, renal, esoph, mela, blad, stom, cerv    | mAb           |
|    | 444371 | BE540274  | Hs.239    | forkhead box M1                           | lung, headnk, blad, glio, test, mela                             | s.m.          |
|    | 444381 | BE387335  | Hs.283713 | hypothetical protein BC014245             | breast, colon, blad, lung, panc, headnk, ovar, stom, uter,       |               |
|    |        |           |           |   | renal, angio, test, mela, esoph                                  |               |
| 20 | 444488 | AW192879  | Hs.355660 | ancient conserved domain protein 4        | renal  | diag          |
|    | 444527 | NM_005408 | Hs.11383  | small inducible cytokine subfamily A (Cy  | fibro, esoph   | mAb+s.m.      |
|    | 444781 | NM_014400 | Hs.11950  | GPI-anchored metastasis-associated prote  | lung, blad, headnk, cerv   | diag          |
|    | 444783 | AK001468  | Hs.62180  | anillin (Drosophila Scraps homolog), act  | ovar, lung, blad, headnk, panc, cerv, stom, uter, colon, esoph   | mAb+diag      |
| 25 | 444809 | BE207568  | Hs.208219 | oculostepanin                             | mela   | CTL+s.m.      |
|    | 445070 | NM_000677 | Hs.258    | adenosine A3 receptor                     | glio, renal  | mAb+s.m.      |
|    | 445417 | AK001058  | Hs.12680  | a disintegrin-like and metalloprotease w  | panc, headnk, stom, lung, esoph                                  | diag          |
|    | 445537 | AJ245671  | Hs.12844  | EGF-like domain, multiple 6               | ovar, blad, uter, breast, lung, headnk, renal, fibro, panc, cerv | mAb+diag      |
|    | 445891 | AW391342  | Hs.199460 | DPIC1 protein                             | stom, panc, esoph, omuc, esoph                                   | mAb           |
| 30 | 445895 | D29954    | Hs.13421  | KIAA0056 protein                          | pros   | CTL           |
|    | 446051 | BE048061  | Hs.37054  | ephrin-A3                                 | colon, breast  | mAb+diag      |
|    | 446163 | AA026880  | Hs.25252  | prolactin receptor                        | breast, cerv, uter   | mAb+s.m.      |
|    | 446232 | AI281848  | Hs.194691 | retinoic acid induced 3                   | stom, panc, colon, ovar  | mAb+s.m.      |
|    | 446341 | AI040763  | Hs.310735 | FGENESH prediction similar to multidrug   | mela   | mAb+s.m.      |
| 35 | 446619 | AU076643  | Hs.313    | secreted phosphoprotein 1 (osteopontin,   | ovar, fibro, panc, headnk, lung, colon, blad, mela, esoph, uter  | diag          |
|    | 446650 | AB016625  | Hs.15813  | solute carrier family 22 (organic cation  | renal  | mAb+s.m.      |
|    | 446921 | AB012113  | Hs.16530  | small inducible cytokine subfamily A (Cy  | breast, panc, headnk, lung, fibro, mela                          | diag          |
|    | 447004 | AW296968  | Hs.157539 | FGENESH predicted secreted protein        | glio   | mAb+diag      |
|    | 447033 | AI357412  | Hs.157601 | Predicted gene: Eos cloned; secreted w/V  | colon, pros, fibro, breast, ovar, lung, panc                     | CTL+diag      |
| 40 | 447072 | D61594    | Hs.17279  | tyrosylprotein sulfotransferase 1         | glio, panc   | CTL+s.m.      |
|    | 447131 | NM_004585 | Hs.17466  | retinoic acid receptor responder (tazaro  | renal, breast, stom, lung, mela, ovar                            | mAb+s.m.      |
|    | 447208 | BE315291  | Hs.237971 | hypothetical protein MGC5627              | esoph, stom, colon   | CTL+diag      |
|    | 447269 | NM_004861 | Hs.17958  | cerebroside (3'-phosphoadenylylsulfate g  | renal  | CTL           |
|    | 447342 | AI199268  | Hs.19322  | Homo sapiens, Similar to RIKEN cDNA 2010  | colon, blad, pros, lung, stom, AWPC, ovar                        | CTL           |
| 45 | 447400 | AK000322  | Hs.18457  | hypothetical protein FLJ20315             | colon, pros, stom, uter  | CTL           |
|    | 447674 | BE270640  | Hs.19192  | cyclin-dependent kinase 2                 | mela   | s.m.          |
|    | 447835 | AW591623  | Hs.164129 | ESTs, Weakly similar to I38022 hypotheti  | renal, ovar, uter  | mAb+s.m.+CTL  |
|    | 447937 | AI109716  | Hs.20034  | Homo sapiens mRNA full length insert cDN  | mela   | mAb+s.m.      |
|    | 448105 | AW591433  | Hs.298241 | Transmembrane protease, serine 3          | breast, panc, colon, lung, ovar, stom                            | mAb+s.m.+CTL  |
| 50 | 448243 | AW369771  | Hs.367688 | integrin, beta 8                          | ovar, uter, lung, stom, headnk, glio, panc                       | mAb+s.m.      |
|    | 448321 | NM_005883 | Hs.20912  | adenomatous polyposis coli like           | glio   | mAb+s.m.+CTL  |
|    | 448499 | BE613280  | Hs.77550  | p53-regulated DDA3                        | glio   | CTL+s.m.      |
|    | 448595 | AB014544  | Hs.21572  | KIAA0644 gene product                     | breast, glio   | mAb+s.m.      |
|    | 448610 | NM_006157 | Hs.21602  | nel (chicken)-like 1                      | mela   | diag          |
| 55 | 448733 | NM_005629 | Hs.187958 | solute carrier family 6 (neurotransmitte  | lung, renal  | mAb+s.m.      |
|    | 448844 | AI581519  | Hs.177164 | FGENESH predicted novel cell surface pr   | panc, lung, stom, omuc   | mAb+s.m.      |
|    | 449048 | Z45051    | Hs.22920  | similar to S68401 (cattle) glucose induc  | panc, ovar, uter, glio, headnk, lung                             | mAb           |
|    | 449444 | AW818436  | Hs.351306 | solute carrier family 16 (monocarboxylic  | renal, panc  | mAb+s.m.      |
|    | 449523 | NM_000579 | Hs.54443  | chemokine (C-C motif) receptor 5          | lung, panc, renal, stom, hepC, fibro, mela                       | mAb+s.m.      |
| 60 | 449720 | AA311152  | Hs.288708 | hypothetical protein FLJ21562             | colon  | CTL           |
|    | 449722 | BE280074  | Hs.23960  | cyclin B1                                 | headnk, blad, lung, panc, angio, test, mela, esoph               | s.m.          |
|    | 450001 | NM_001044 | Hs.406    | solute carrier family 6 (neurotransmitte  | renal  | mAb+s.m.      |
|    | 450375 | AA009647  | Hs.352537 | a disintegrin and metalloproteinase doma  | breast, ovar, headnk, panc, lung, esoph, colon                   | mAb+diag+s.m. |
| 65 | 450531 | AW301032  | Hs.203800 | (BC017500) Similar to hypothetical prote  | colon  | CTL           |
|    | 450701 | H39960    | Hs.288467 | hypothetical protein XP_098151 (leucine-  | lung, headnk, panc, breast, stom, ovar, esoph, colon             | mAb+diag      |
|    | 450726 | AW204600  | Hs.355462 | HUMPSPBA Human pulmonary surfactant-asso  | fibro, lung  | s.m.          |
|    | 450931 | N25156    | Hs.25648  | tumor necrosis factor receptor superfami  | lung, renal  | mAb+s.m.      |
|    | 450983 | AA305384  | Hs.25740  | ERO1 (S. cerevisiae)-like                 | blad, lung, ovar, panc   | diag          |
| 70 | 451099 | R52795    | Hs.25954  | interleukin 13 receptor, alpha 2          | glio, fibro, mela  | mAb+s.m.      |
|    | 451310 | AW250651  | Hs.26213  | Human DNA sequence from clone RP3-447F3   | colon, panc  | CTL           |
|    | 451527 | AF022813  | Hs.26518  | transmembrane 4 superfamily member 7      | renal  | mAb           |
|    | 451537 | R56631    | Hs.26550  | retinoid X receptor, gamma                | mela   | CTL+s.m.      |
|    | 451668 | Z43948    | Hs.326444 | cartilage acidic protein 1                | blad, ovar, lung   | mAb+diag      |
|    | 451939 | U80456    | Hs.27311  | single-minded (Drosophila) homolog 2      | pros   | CTL           |
| 75 | 451979 | F06972    | Hs.27372  | endothelial tyrosine kinase (Etk) (BMX),  | angio  | CTL+s.m.      |
|    | 451988 | AF263928  | Hs.27410  | papillomavirus regulatory factor PRF-1    | renal  | CTL           |
|    | 452097 | AB002364  | Hs.27916  | a disintegrin-like and metalloprotease (  | ovar   | mAb+s.m.+diag |
|    | 452190 | H26735    | Hs.91668  | Homo sapiens clone PP1498 unknown mRNA    | breast, stom, panc   | mAb           |
|    | 452194 | AI694413  | Hs.373599 | olfactory receptor, family 2, subfamily   | stom, panc, renal, colon, mela, fibro                            | mAb+s.m.      |
| 80 | 452203 | X57522    | Hs.352018 | transporter 1, ATP-binding cassette, sub  | cerv, esoph, blad, stom, mela, renal                             | mAb+s.m.      |
|    | 452281 | T33500    | Hs.28792  | Homo sapiens cDNA FLJ11041 fis, clone PL  | breast, headnk, panc, stom, lung, esoph, fibro                   | diag          |
|    | 452355 | N54926    | Hs.29202  | G protein-coupled receptor 34             | glio, fibro, panc  | mAb+s.m.      |
|    | 452401 | NM_007115 | Hs.29352  | tumor necrosis factor, alpha-induced pro  | blad, breast, panc, headnk, stom, lung, arth, renal, esoph       | diag          |
|    | 452431 | U88979    | Hs.29499  | tol-like receptor 3                       | renal, hepC  | mAb           |

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|    |        |           |           |  |  |              |
|----|--------|-----------|-----------|--|--|--------------|
| 5  | 452747 | BE153855  | Hs.61460  | Ig superfamily receptor LNIR             | breast, blad, lung, headnk, ovar, stom, uter, panc   | mAb          |
|    | 452795 | AW392555  | Hs.18878  | hypothetical protein FLJ21620            | renal, headnk, colon, lung, panc                     | mAb+s.m.+CTL |
|    | 452838 | U65011    | Hs.30743  | preferentially expressed antigen in mela | lung, ovar, breast, mela, test, esoph, renal         | CTL          |
|    | 452862 | AW378065  | Hs.8687   | ADAMTS2 (a disintegrin-like and metallo  | headnk, breast, colon, arth, lung, blad, esoph, stom | mAb+diag     |
|    | 453195 | BE241876  | Hs.32352  | hypothetical protein DKFZp434K1210       | renal  | CTL          |
|    | 453496 | AA442103  | Hs.33084  | solute carrier family 2 (facilitated glu | renal, pros  | mAb+s.m.     |
|    | 453642 | AI370936  | Hs.34074  | dipeptidylpeptidase VI                   | glio   | mAb+s.m.     |
|    | 453837 | AL138387  | Hs.256126 | baculoviral IAP repeat-containing 7 (liv | renal, mela  | s.m.         |
| 10 | 453857 | AL080235  | Hs.35861  | Ras-induced senescence 1 (RIS1)          | glio, lung, uter, headnk, cerv, panc, pros           | mAb+s.m.     |
|    | 453958 | AA847843  | Hs.62711  | High mobility group (nonhistone chromoso | lung, uter, blad, test                               | CTL+s.m.     |
|    | 456546 | AI690321  | Hs.203845 | KCNK15 potassium channel, subfamily K, m | ovar   | mAb+s.m.     |
|    | 456662 | NM_002448 | Hs.1494   | msh (Drosophila) homeo box homolog 1 (fo | uter, ovar   | CTL          |
|    | 456759 | BE259150  | Hs.127792 | delta (Drosophila)-like 3                | glio, lung   | mAb+s.m.     |
| 15 | 457133 | M54968    | Hs.351221 | v-Ki-ras2 Kirsten rat sarcoma 2 viral on | panc   | s.m.         |
|    | 457489 | AI693815  | Hs.127179 | cryptic gene                             | panc, pros, lung                                     | diag         |
|    | 457561 | AA331517  | Hs.286055 | chimerin (chimaerin) 2                   | glio   | mAb+s.m.     |
|    | 458079 | AI796870  | Hs.54277  | Homo sapiens similar to RIKEN cDNA 28100 | mela, fibro  | mAb          |
|    | 458435 | AI418718  | Hs.144121 | ESTs, Weakly similar to T46916 hypotheti | glio   | mAb+s.m.+CTL |
| 20 | 458627 | AW088642  | Hs.97984  | SRY (sex determining region Y)-box 17 (S | ovar, uter, test                                     | CTL          |

TABLE 66B:

Pkey: Unique Eos probeset identifier number  
CAT number: Gene cluster number  
Accession: Genbank accession numbers

|    |        |            |   |
|----|--------|------------|---|
| 25 | Pkey   | CAT Number | Accession   |
|    | 409745 | MH1944_5   | BI030997 AA921874 AW188822 BI027862 AI347618 AI361453 AI088754 AW207491 AA077391 BG012775 BG997382 AA286833 AA150722 BI007625 BI027864 BI009100 BI006275 BI006270 BI031000 BI029864 BI006277 BI007627 BI006266 BI006991 BI006990 BI007763 BI007762 BG997377 AA150780 BI033518 BI027818 BG015789 BI033807 AA341445 |
| 30 | 438966 | 1242593_1  | AW979074 AA834841 AA828650  |
|    | 442438 | 24590_1    | AK022175 AU147222 AI124945 AU121400 F07756 AW979025 AA828595 AA828577 BE935573 AA829588 AI743616 BE315309 BE047365 AI761053 AW168960 AA833900 BG679419 BE171071 BF034368 BF574297 R61781 F08149 F07647 T77332 AA897461 AI829714 AI376820 AI809991 AW661854  |

TABLE 66C:

Pkey: Unique number corresponding to an Eos probeset  
Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.  
Strand: Indicates DNA strand from which exons were predicted.  
NT\_position: Indicates nucleotide positions of predicted exons.

|    |        |         |        |  |
|----|--------|---------|--------|--|
| 45 | Pkey   | Ref     | Strand | NT_position                              |
|    | 400843 | 9188605 | Plus   | 5863-5970,7653-7784,8892-9023,9673-9807, |
|    | 402075 | 8117407 | Plus   | 121907-122035,122804-122921,124019-12416 |
|    | 402901 | 8894222 | Minus  | 175426-175667                            |
|    | 404287 | 2326514 | Plus   | 53134-53281                              |
|    | 404682 | 9797231 | Minus  | 40977-41150                              |
|    | 404875 | 9801324 | Plus   | 96588-96732,97722-97831                  |
| 50 | 404977 | 3738341 | Minus  | 43081-43229                              |
|    | 405033 | 7107731 | Minus  | 142358-142546                            |
|    | 405547 | 1054740 | Plus   | 124361-124520,124914-125050              |
|    | 406400 | 9256298 | Plus   | 1553-1712,1878-2140,4252-4385,5922-6077  |

TABLE 67:

Pkey: Unique Eos probeset identifier number  
ExAccn: Exemplar Accession number, Genbank accession number  
UnigeneID: Unigene number  
Unigene Title: Unigene gene title  
Seq ID No: Sequence Identification Number linking the information in Table 67 to the sequences in Table 68

|    |        |           |           |  |                    |
|----|--------|-----------|-----------|--|--------------------|
| 65 | Pkey   | ExAccn    | UnigeneID | Unigene Title                            | Seq ID No          |
|    | 418007 | M13509    | Hs.83169  | matrix metalloproteinase 1 (interstitial | Seq ID No 1 & 199  |
|    | 418007 | M13509    | Hs.83169  | matrix metalloproteinase 1 (interstitial | Seq ID No 2 & 200  |
|    | 428368 | BE440042  | Hs.83326  | matrix metalloproteinase 3 (stromelysin  | Seq ID No 3 & 201  |
|    | 417866 | AW067903  | Hs.82772  | collagen, type XI, alpha 1               | Seq ID No 4 & 202  |
|    | 444381 | BE387335  | Hs.283713 | hypothetical protein BC014245            | Seq ID No 5 & 203  |
|    | 452281 | T93500    | Hs.28792  | Homo sapiens cDNA FLJ11041 fis, clone PL | Seq ID No 6        |
| 70 | 428698 | AA852773  | Hs.334838 | KIAA1866 protein                         | Seq ID No 7 & 204  |
|    | 452862 | AW378065  | Hs.8687   | ADAMTS2 (a disintegrin-like and metallo  | Seq ID No 8 & 205  |
|    | 432201 | AI538613  | Hs.298241 | Transmembrane protease, serine 3         | Seq ID No 9 & 206  |
|    | 434206 | AW136973  | Hs.362915 | ESTs, Weakly similar to S69890 mitogen i | Seq ID No 10 & 207 |
|    | 422260 | AA315993  | Hs.105484 | regenerating gene type IV                | Seq ID No 11 & 208 |
| 75 | 409041 | AB033025  | Hs.50081  | Hypothetical protein, XP_051860 (KIAA119 | Seq ID No 12 & 209 |
|    | 443426 | AF098158  | Hs.9329   | chromosome 20 open reading frame 1       | Seq ID No 13 & 210 |
|    | 443211 | AI128388  | Hs.143655 | ESTs                                     | Seq ID No 14       |
|    | 428664 | AK001666  | Hs.189095 | similar to SALL1 (sal (Drosophila)-like  | Seq ID No 15 & 211 |
|    | 413278 | BE563085  | Hs.833    | interferon-stimulated protein, 15 kDa    | Seq ID No 16 & 212 |
| 80 | 452401 | NM_007115 | Hs.29352  | tumor necrosis factor, alpha-induced pro | Seq ID No 17 & 213 |
|    | 452401 | NM_007115 | Hs.29352  | tumor necrosis factor, alpha-induced pro | Seq ID No 18 & 214 |
|    | 408380 | AF123050  | Hs.44532  | diubiquitin                              | Seq ID No 19 & 215 |
|    | 416209 | AA236776  | Hs.79078  | MAD2 (mitotic arrest deficient, yeast, h | Seq ID No 20 & 216 |
|    | 409757 | NM_001898 | Hs.123114 | cystatin SN                              | Seq ID No 21 & 217 |

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|    |        |           |           |  |                     |
|----|--------|-----------|-----------|--|---------------------|
| 5  | 425921 | NM_007231 | Hs.162211 | solute carrier family 6 (neurotransmitter) | Seq ID No 22 & 218  |
|    | 452194 | AI694413  | Hs.373599 | olfactory receptor, family 2, subfamily    | Seq ID No 23 & 219  |
|    | 452194 | AI694413  | Hs.373599 | olfactory receptor, family 2, subfamily    | Seq ID No 24 & 220  |
|    | 444783 | AK001468  | Hs.62180  | anillin (Drosophila Scraps homology), act  | Seq ID No 25 & 221  |
|    | 422956 | BE545072  | Hs.122579 | ECT2 protein (Epithelial cell transformi   | Seq ID No 26 & 222  |
|    | 424905 | NM_002497 | Hs.153704 | NIMA (never in mitosis gene a)-related k   | Seq ID No 27 & 223  |
|    | 415989 | AI267700  | Hs.351201 | ESTs                                       | Seq ID No 28        |
|    | 415989 | AI267700  | Hs.351201 | ESTs                                       | Seq ID No 29        |
| 10 | 424252 | AK000520  | Hs.143811 | hypothetical protein FLJ20513              | Seq ID No 30 & 224  |
|    | 424252 | AK000520  | Hs.143811 | hypothetical protein FLJ20513              | Seq ID No 31 & 225  |
|    | 432867 | AW016936  | Hs.233364 | ESTs                                       | Seq ID No 32        |
|    | 439759 | AL359055  | Hs.67709  | Homo sapiens mRNA full length insert cDN   | Seq ID No 33        |
|    | 428970 | BE276891  | Hs.194691 | retinoic acid induced 3 (RAIG1); melabo    | Seq ID No 34 & 226  |
| 15 | 428953 | AA306610  | Hs.348183 | tumor necrosis factor receptor superfam    | Seq ID No 35 & 227  |
|    | 428953 | AA306610  | Hs.348183 | tumor necrosis factor receptor superfam    | Seq ID No 36 & 228  |
|    | 428953 | AA306610  | Hs.348183 | tumor necrosis factor receptor superfam    | Seq ID No 37 & 229  |
|    | 428953 | AA306610  | Hs.348183 | tumor necrosis factor receptor superfam    | Seq ID No 38 & 230  |
|    | 428953 | AA306610  | Hs.348183 | tumor necrosis factor receptor superfam    | Seq ID No 39 & 231  |
| 20 | 452203 | X57522    | Hs.352018 | transporter 1, ATP-binding cassette, sub   | Seq ID No 40 & 232  |
|    | 428330 | L22524    | Hs.2256   | matrix metalloproteinase 7 (matrilysin,    | Seq ID No 41 & 233  |
|    | 436480 | AJ271643  | Hs.87469  | putative acid-sensing ion channel          | Seq ID No 42 & 234  |
|    | 407603 | AW955705  | Hs.62604  | Homo sapiens, clone IMAGE:4299322, mRNA,   | Seq ID No 43 & 235  |
|    | 425115 | R44664    | Hs.123956 | downstream of: G protein-coupled recept    | Seq ID No 44 & 236  |
| 25 | 435472 | AW972330  | Hs.283022 | triggering receptor expressed on myeloid   | Seq ID No 45 & 237  |
|    | 418870 | AF147204  | Hs.89414  | chemokine (C-X-C motif), receptor 4 (fus   | Seq ID No 46 & 238  |
|    | 415511 | AI732617  | Hs.182362 | ESTs                                       | Seq ID No 47        |
|    | 440304 | BE159984  | Hs.125395 | hepatitis A virus cellular receptor 1      | Seq ID No 48 & 239  |
|    | 423161 | AL049227  | Hs.124776 | downstream of: cadherin 6 (by 3.3kb)       | Seq ID No 49 & 240  |
| 30 | 423161 | AL049227  | Hs.124776 | downstream of: cadherin 6 (by 3.3kb)       | Seq ID No 50        |
|    | 410153 | BE311926  | Hs.15830  | hypothetical protein FLJ12691              | Seq ID No 51 & 241  |
|    | 410153 | BE311926  | Hs.15830  | hypothetical protein FLJ12691              | Seq ID No 52 & 242  |
|    | 410153 | BE311926  | Hs.15830  | hypothetical protein FLJ12691              | Seq ID No 53 & 243  |
|    | 410153 | BE311926  | Hs.15830  | hypothetical protein FLJ12691              | Seq ID No 54 & 244  |
| 35 | 436895 | AF037335  | Hs.5338   | carbonic anhydrase XII                     | Seq ID No 55 & 245  |
|    | 436895 | AF037335  | Hs.5338   | carbonic anhydrase XII                     | Seq ID No 56 & 246  |
|    | 421471 | U90545    | Hs.327179 | solute carrier family 17 (sodium phosph    | Seq ID No 57 & 247  |
|    | 428296 | NM_003058 | Hs.183572 | solute carrier family 22 (organic cation   | Seq ID No 58 & 248  |
|    | 426890 | AA393167  | Hs.41294  | ESTs                                       | Seq ID No 59 & 249  |
| 40 | 437212 | AI755021  | Hs.210775 | ESTs                                       | Seq ID No 60        |
|    | 438966 | AW979074  |           | gb:EST391184 MAGE resequences, MAGP Homo   | Seq ID No 61        |
|    | 440311 | AI733079  | Hs.125407 | ESTs, Moderately similar to ALUE_HUMAN !   | Seq ID No 62        |
|    | 437100 | AI761073  | Hs.14535  | Homo sapiens cDNA: FLJ22314 fis, clone H   | Seq ID No 63        |
|    | 437100 | AI761073  | Hs.14535  | Homo sapiens cDNA: FLJ22314 fis, clone H   | Seq ID No 64        |
| 45 | 450001 | NM_001044 | Hs.406    | solute carrier family 6 (neurotransmitter  | Seq ID No 65 & 250  |
|    | 419080 | AW150835  | Hs.18878  | hypothetical protein FLJ21620              | Seq ID No 66 & 251  |
|    | 443595 | AF169312  | Hs.9613   | PPAR(gamma) angiopoietin related protein   | Seq ID No 67 & 252  |
|    | 443595 | AF169312  | Hs.9613   | PPAR(gamma) angiopoietin related protein   | Seq ID No 68        |
|    | 410407 | X66839    | Hs.63287  | carbonic anhydrase IX                      | Seq ID No 69 & 253  |
| 50 | 453496 | AA442103  | Hs.33084  | solute carrier family 2 (facilitated glu   | Seq ID No 70 & 254  |
|    | 420737 | L08096    | Hs.99899  | CD70 ; tumor necrosis factor (ligand) s    | Seq ID No 71 & 255  |
|    | 439979 | AW600291  | Hs.6823   | hypothetical protein FLJ10430              | Seq ID No 72 & 256  |
|    | 420789 | AI670057  | Hs.199882 | ESTs                                       | Seq ID No 73        |
|    | 420789 | AI670057  | Hs.199882 | ESTs                                       | Seq ID No 74        |
| 55 | 441392 | AW451831  | Hs.222119 | ESTs, Weakly similar to S30433 keratin 1   | Seq ID No 75 & 257  |
|    | 452431 | U88879    | Hs.29499  | toll-like receptor 3                       | Seq ID No 76 & 258  |
|    | 431870 | AW449902  | Hs.105500 | ESTs                                       | Seq ID No 77        |
|    | 431870 | AW449902  | Hs.105500 | ESTs                                       | Seq ID No 78        |
|    | 449523 | NM_000579 | Hs.54443  | chemokine (C-C motif) receptor 5           | Seq ID No 79 & 259  |
| 60 | 409745 | AA077391  |           | gb:7B14E12 Chromosome 7 Fetal Brain cDNA   | Seq ID No 80        |
|    | 438859 | AI559626  | Hs.93522  | Homo sapiens mRNA for KIAA1647 protein,    | Seq ID No 81        |
|    | 409637 | AA323948  | Hs.55407  | Homo sapiens mRNA; cDNA DKFZp434K0621 (f   | Seq ID No 82 & 260  |
|    | 409637 | AA323948  | Hs.55407  | Homo sapiens mRNA; cDNA DKFZp434K0621 (f   | Seq ID No 83        |
|    | 409348 | AI401535  | Hs.146090 | ESTs                                       | Seq ID No 84        |
| 65 | 447269 | NM_004861 | Hs.17958  | cerebroside (3-phosphoadenylylsulfate:g    | Seq ID No 85 & 261  |
|    | 453195 | BE241876  | Hs.32352  | hypothetical protein DKFZp434K1210         | Seq ID No 86 & 262  |
|    | 428841 | AI418430  | Hs.104935 | ESTs                                       | Seq ID No 87        |
|    | 428841 | AI418430  | Hs.104935 | ESTs                                       | Seq ID No 88        |
|    | 428841 | AI418430  | Hs.104935 | ESTs                                       | Seq ID No 89        |
| 70 | 409663 | AI743750  | Hs.98306  | KIAA1862 protein                           | Seq ID No 90 & 263  |
|    | 409663 | AI743750  | Hs.98306  | KIAA1862 protein                           | Seq ID No 91 & 264  |
|    | 431939 | AW008061  | Hs.231994 | ESTs                                       | Seq ID No 92 & 265  |
|    | 432606 | NM_002104 | Hs.3066   | granzyme K (serine protease, granzyme 3;   | Seq ID No 93 & 266  |
|    | 411411 | AA345241  | Hs.55950  | ESTs, Weakly similar to KIAA1330 protein   | Seq ID No 94 & 267  |
| 75 | 433867 | AK000596  | Hs.3618   | hippocalcin-like 1                         | Seq ID No 95 & 268  |
|    | 433867 | AK000596  | Hs.3618   | hippocalcin-like 1                         | Seq ID No 96 & 269  |
|    | 437938 | AI950087  | Hs.369628 | gb:wq05602.x1 NCI_CGAP_Kid12 Homo sapien   | Seq ID No 97        |
|    | 432579 | AF043244  | Hs.278439 | nucleolar protein 3 (apoptosis repressor   | Seq ID No 98 & 270  |
|    | 418526 | BE019020  | Hs.85838  | solute carrier family 16 (monocarboxylic   | Seq ID No 99 & 271  |
| 80 | 432196 | AW300888  | Hs.273230 | hypothetical protein FLJ10830              | Seq ID No 100 & 272 |
|    | 432196 | AW300888  | Hs.273230 | hypothetical protein FLJ10830              | Seq ID No 101 & 273 |
|    | 438929 | AW195515  | Hs.253177 | ESTs                                       | Seq ID No 102       |
|    | 410055 | AJ250839  | Hs.58241  | gene for serine/threonine protein kinase   | Seq ID No 103 & 274 |
|    | 446650 | AB016625  | Hs.15813  | solute carrier family 22 (organic cation   | Seq ID No 104 & 275 |

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|    |        |           |           |   |                     |
|----|--------|-----------|-----------|---|---------------------|
| 5  | 426812 | AF105365  | Hs.172613 | solute carrier family 12 (potassium/chlo  | Seq ID No 105 & 276 |
|    | 447131 | NM_004585 | Hs.17466  | retinoic acid receptor responder (tazaro  | Seq ID No 106 & 277 |
|    | 449444 | AW818436  | Hs.351306 | solute carrier family 16 (monocarboxylic  | Seq ID No 107 & 278 |
|    | 422627 | BE336857  | Hs.118787 | transforming growth factor, beta-induced  | Seq ID No 108 & 279 |
|    | 444488 | AW192879  | Hs.355660 | ancient conserved domain protein 4        | Seq ID No 109 & 280 |
| 10 | 450931 | N25156    | Hs.25648  | tumor necrosis factor receptor superfam   | Seq ID No 110 & 281 |
|    | 409220 | BE243323  | Hs.51233  | tumor necrosis factor receptor superfam   | Seq ID No 111 & 282 |
|    | 409220 | BE243323  | Hs.51233  | tumor necrosis factor receptor superfam   | Seq ID No 112 & 283 |
|    | 425998 | AU076629  | Hs.165950 | fibroblast growth factor receptor 4       | Seq ID No 113 & 284 |
|    | 425998 | AU076629  | Hs.165950 | fibroblast growth factor receptor 4       | Seq ID No 114 & 285 |
| 15 | 425009 | X58288    | Hs.154151 | protein tyrosine phosphatase, receptor t  | Seq ID No 115 & 286 |
|    | 443987 | AW163123  | Hs.10071  | seven transmembrane protein TM7SF3        | Seq ID No 116 & 287 |
|    | 432990 | AL036071  | Hs.279899 | tumor necrosis factor receptor superfam   | Seq ID No 117 & 288 |
|    | 436576 | A1458213  | Hs.77542  | ESTs                                      | Seq ID No 118 & 289 |
|    | 451527 | AF022813  | Hs.26518  | transmembrane 4 superfamily member 7      | Seq ID No 119 & 290 |
| 20 | 448733 | NM_005629 | Hs.187958 | solute carrier family 6 (neurotransmitte  | Seq ID No 120 & 291 |
|    | 410274 | AA381807  | Hs.61762  | hypoxia-inducible protein 2               | Seq ID No 121 & 292 |
|    | 125218 | H91923    | Hs.110024 | Empirically selected from AFFX single pr  | Seq ID No 122 & 293 |
|    | 436961 | AW375974  | Hs.156704 | ESTs                                      | Seq ID No 123       |
|    | 431630 | NM_002204 | Hs.265829 | integrin, alpha 3 (antigen CD49C, alpha   | Seq ID No 124 & 294 |
| 25 | 431630 | NM_002204 | Hs.265829 | integrin, alpha 3 (antigen CD49C, alpha   | Seq ID No 125 & 295 |
|    | 419508 | AW997938  | Hs.90786  | ATP-binding cassette, sub-family C (CFTR  | Seq ID No 126 & 296 |
|    | 431840 | AA534908  | Hs.2860   | POU domain, class 5, transcription facto  | Seq ID No 127 & 297 |
|    | 442438 | AA995998  |           | gb:os26b03.s1 NCL CGAP_Kid5 Homo sapiens  | Seq ID No 128       |
|    | 447835 | AW591623  | Hs.164129 | ESTs, Weakly similar to I38022 hypotheti  | Seq ID No 129       |
| 30 | 429276 | AF056085  | Hs.198612 | G protein-coupled receptor 51             | Seq ID No 130 & 298 |
|    | 448595 | AB014544  | Hs.21572  | KIAA0644 gene product                     | Seq ID No 131 & 299 |
|    | 440516 | S42303    | Hs.161    | cadherin 2, type 1, N-cadherin (neuronal  | Seq ID No 132 & 300 |
|    | 456759 | BE259150  | Hs.127792 | delta (Drosophila)-like 3                 | Seq ID No 133 & 301 |
|    | 447004 | AW296968  | Hs.157539 | FGENESH predicted secreted protein        | Seq ID No 134 & 302 |
| 35 | 425088 | AA663372  | Hs.169395 | hypothetical protein FLJ12015             | Seq ID No 135 & 303 |
|    | 409389 | AB007979  | Hs.301281 | Homo sapiens mRNA, chromosome 1 specific  | Seq ID No 136 & 304 |
|    | 448321 | NM_005883 | Hs.20912  | adenomatous polyposis coli like           | Seq ID No 137 & 305 |
|    | 426344 | H41821    | Hs.322469 | transcriptional activator of the c-fos p  | Seq ID No 138 & 306 |
|    | 419704 | AA429104  | Hs.45057  | ESTs                                      | Seq ID No 139 & 307 |
| 40 | 412959 | D87458    | Hs.75090  | KIAA0282 protein                          | Seq ID No 140 & 308 |
|    | 448499 | BE613280  | Hs.77550  | p53-regulated DDA3                        | Seq ID No 141 & 309 |
|    | 458435 | A1418718  | Hs.144121 | ESTs, Weakly similar to T46916 hypotheti  | Seq ID No 142 & 310 |
|    | 443785 | AW449952  | Hs.190125 | basic-helix-loop-helix-PAS protein        | Seq ID No 143 & 311 |
|    | 427343 | A1880044  | Hs.176977 | protein kinase C binding protein 2        | Seq ID No 144 & 312 |
| 45 | 416857 | AA188775  | Hs.292453 | FGENESH predicted TM containing protein   | Seq ID No 145 & 313 |
|    | 429149 | AW193360  | Hs.197962 | Homolog of mouse ADP-ribosylation factor  | Seq ID No 146 & 314 |
|    | 418030 | BE207573  | Hs.83321  | neuromedin B                              | Seq ID No 147 & 315 |
|    | 457561 | AA331517  | Hs.286055 | chimerin (chimaerin) 2                    | Seq ID No 148 & 316 |
|    | 457561 | AA331517  | Hs.286055 | chimerin (chimaerin) 2                    | Seq ID No 149 & 317 |
| 50 | 430147 | R60704    | Hs.234434 | hairy/enhancer-of-split related with YRP  | Seq ID No 150 & 318 |
|    | 453642 | A1370936  | Hs.34074  | dipeptidylpeptidase VI                    | Seq ID No 151 & 319 |
|    | 453857 | AL080235  | Hs.35861  | Ras-induced senescence 1 (RIS1)           | Seq ID No 152 & 320 |
|    | 449048 | Z45051    | Hs.22920  | similar to S68401 (cattle) glucose induc  | Seq ID No 153 & 321 |
|    | 418506 | AA084248  | Hs.372651 | Unknown protein for MGC:29643 (formerly   | Seq ID No 154 & 322 |
| 55 | 416636 | N32536    | Hs.42645  | solute carrier family 16 (monocarboxylic  | Seq ID No 155 & 323 |
|    | 421508 | NM_004833 | Hs.105115 | absent in melanoma 2                      | Seq ID No 156 & 324 |
|    | 421379 | Y15221    | Hs.103982 | small inducible cytokine subfamily B (Cy  | Seq ID No 157 & 325 |
|    | 428784 | Y12851    | Hs.193470 | purinergic receptor P2X, ligand-gated io  | Seq ID No 158 & 326 |
|    | 431958 | X63629    | Hs.2877   | cadherin 3, type 1, P-cadherin (placenta  | Seq ID No 159 & 327 |
| 60 | 417542 | J04129    | Hs.82269  | progesterone-associated endometrial prote | Seq ID No 160 & 328 |
|    | 418678 | NM_001327 | Hs.167379 | cancer/testis antigen (NY-ESO-1)          | Seq ID No 161 & 329 |
|    | 418678 | NM_001327 | Hs.167379 | cancer/testis antigen (NY-ESO-1)          | Seq ID No 162 & 330 |
|    | 420208 | BE276055  | Hs.95972  | silver (mouse homolog) like               | Seq ID No 163 & 331 |
|    | 430377 | NM_001922 | Hs.301865 | dopachrome tautomerase (dopachrome delta  | Seq ID No 164 & 332 |
| 65 | 438549 | BE386801  | Hs.21858  | trinucleotide repeat containing 3         | Seq ID No 165 & 333 |
|    | 412580 | AA113262  | Hs.17901  | similar to CABLES (Homo sapiens)          | Seq ID No 166 & 334 |
|    | 417166 | AA431323  | Hs.42146  | Paired box protein Pax-3                  | Seq ID No 167 & 335 |
|    | 428513 | BE220806  | Hs.184697 | plexin C1                                 | Seq ID No 168 & 336 |
|    | 447937 | AL109716  | Hs.20034  | Homo sapiens mRNA full length insert cDN  | Seq ID No 169 & 337 |
| 70 | 447937 | AL109716  | Hs.20034  | Homo sapiens mRNA full length insert cDN  | Seq ID No 170 & 338 |
|    | 446341 | AL040763  | Hs.310735 | FGENESH prediction similar to multidrug   | Seq ID No 171 & 339 |
|    | 446341 | AL040763  | Hs.310735 | FGENESH prediction similar to multidrug   | Seq ID No 172 & 340 |
|    | 458079 | A1796870  | Hs.54277  | Homo sapiens similar to RIKEN cDNA 28100  | Seq ID No 173 & 341 |
|    | 415668 | AW957684  | Hs.306814 | Homo sapiens lysyl oxidase-like 4 (LOXL4  | Seq ID No 174 & 342 |
| 75 | 447674 | BE270640  | Hs.19192  | cyclin-dependent kinase 2                 | Seq ID No 175 & 343 |
|    | 447674 | BE270640  | Hs.19192  | cyclin-dependent kinase 2                 | Seq ID No 176 & 344 |
|    | 440065 | W03476    | Hs.266331 | Homo sapiens Fc receptor homolog express  | Seq ID No 177 & 345 |
|    | 414945 | BE076358  | Hs.77667  | lymphocyte antigen 6 complex, locus E     | Seq ID No 178 & 346 |
|    | 440672 | AF083811  | Hs.7345   | MAD1 (mitotic arrest deficient, yeast, h  | Seq ID No 179 & 347 |
| 80 | 412609 | Z48804    | Hs.74124  | ocular albinism 1 (Nettleship-Falls)      | Seq ID No 180 & 348 |
|    | 453837 | AL138387  | Hs.256126 | baculoviral IAP repeat-containing 7 (liv  | Seq ID No 181 & 349 |
|    | 453837 | AL138387  | Hs.256126 | baculoviral IAP repeat-containing 7 (liv  | Seq ID No 182 & 350 |
|    | 434276 | AF123659  | Hs.93605  | leucine zipper, putative tumor suppresso  | Seq ID No 183 & 351 |
|    | 408367 | AK001178  | Hs.44424  | Homo sapiens orphan neurotransmitter tra  | Seq ID No 184 & 352 |
|    | 444809 | BE207568  | Hs.208219 | oculoparlin                               | Seq ID No 185 & 353 |
|    | 415929 | AA724373  | Hs.304950 | Homo sapiens mucopolip-3 (MCOLN3)         | Seq ID No 186 & 354 |
|    | 421666 | AL035250  | Hs.1408   | endothelin 3                              | Seq ID No 187 & 355 |



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|        |           |           |  |                     |
|--------|-----------|-----------|--|---------------------|
| 424321 | W74048    | Hs.1765   | lymphocyte-specific protein tyrosine kin | Seq ID No 188 & 356 |
| 425535 | AB007937  | Hs.158287 | syndecan 3                               | Seq ID No 189 & 357 |
| 451537 | R56631    | Hs.26550  | retinoid X receptor, gamma               | Seq ID No 190 & 358 |
| 430280 | AA361258  | Hs.237868 | interleukin 7 receptor                   | Seq ID No 191 & 359 |
| 418064 | BE387287  | Hs.83384  | S100 calcium-binding protein, beta (neur | Seq ID No 192 & 360 |
| 448610 | NM_006157 | Hs.21602  | nel (chicken)-like 1                     | Seq ID No 193 & 361 |
| 432800 | BE391046  | Hs.278962 | AIM-1 protein                            | Seq ID No 194 & 362 |
| 416350 | AF188625  | Hs.189507 | phospholipase A2, group IID              | Seq ID No 195 & 363 |
| 405545 |           |           | Target Exon                              | Seq ID No 196 & 364 |
| 414812 | X72755    | Hs.77367  | monokine induced by gamma interferon     | Seq ID No 197 & 365 |
| 432874 | W94322    | Hs.279651 | melanoma inhibitory activity             | Seq ID No 198 & 366 |

Table 68 lists sequences as described in Table 67

Seq ID NO: 1 DNA sequence

Nucleic Acid Accession #: NM\_002421.2

Coding sequence: 1..1409

|             |             |            |            |            |             |      |
|-------------|-------------|------------|------------|------------|-------------|------|
| 1           | 11          | 21         | 31         | 41         | 51          |      |
| ATGCACAGCT  | TTCTCCACT   | GCTGCTGCTG | CTGTTCTGGG | GTGTGGTGTG | ACACAGCTTC  | 60   |
| CCAGCGACTC  | TAGAAACACA  | AGAGCAAGAT | GTGGACTTAG | TCCAGAAATA | CCTGGAAAAA  | 120  |
| TACTACAACC  | TGAAGAATGA  | TGGGAGGCAA | GTTGAAAAGC | GGAGAAATAG | TGGCCAGTG   | 180  |
| GTGAAAAATC  | TGAAGCAATC  | GCAGGAATTC | TTTGGGCTGA | AAGTGACTGG | GAAACCCAGAT | 240  |
| GCTGAAACCC  | TGAAGGTGAT  | GAAGCAGCCC | AGATGTGGAG | TGCCTGATGT | GGCTCAGTTT  | 300  |
| GTCTCTCACTG | AGGGGAACCC  | TCGCTGGGAG | CAAAACATC  | TGACCTACAG | GATTGAAAAAT | 360  |
| TACACGCCAG  | ATTTGCCAAAG | AGCAGATGTG | GACCATGCCA | TTGAGAAAGC | CTTCCAACCTC | 420  |
| TGGAGTAATG  | TCACACCTCT  | GACATTCAAC | AAGGTCTCTG | AGGGTCAAGC | AGACATCATG  | 480  |
| ATATCTTTTG  | TCAGGGGAGA  | TCATCGGGAC | AACTCTCCTT | TTGATGGACC | TGGAGGAAAT  | 540  |
| CTTGCTCATG  | CTTTTCAACC  | AGGCCCAAGT | ATTGGAGGGG | ATGCTCATT  | TGATGAAGAT  | 600  |
| GAAAGGTGGA  | CCAACAATTT  | CAGAGAGTAC | AACTTACATC | GTGTTGCGGC | TCATGAACTC  | 660  |
| GGCCATTCTC  | TTGGACTCTC  | CCATTCTACT | GATATCGGGG | CTTTGATGTA | CCCTAGCTAC  | 720  |
| ACCTTCAGTG  | GTGATGTTCA  | GCTAGCTCAG | GATGACATTG | ATGGCATCCA | AGCCATATAT  | 780  |
| GGACGTTCCC  | AAAATCCTGT  | CCAGCCCATC | GGCCCAACAA | CCCCAAAAGC | ATGTGACAGT  | 840  |
| AAGCTAACCT  | TTGATGCTAT  | AACTACGATT | CGGGGAGAAG | TGATGTTCTT | TAAAGACAGA  | 900  |
| TTCTACATGC  | GCACAAATCC  | CTTCTACCCG | GAAGTTGAGC | TCAATTTTCT | TTCTGTTTTT  | 960  |
| TGGCCACAAC  | TGCCAAATGG  | GCTTGAAGCT | GCTTACGAAT | TTGCCGACAG | AGATGAAGTC  | 1020 |
| CGGTTTTTCA  | AAGGGAATAA  | GTACTGGGCT | GTTCAAGGAC | AGAATGTGCT | ACACGGATAC  | 1080 |
| CCCAAGGACA  | TCTACAGCTC  | CTTTGGCTTC | CCTAGAACTG | TGAAGCATAT | CGATGCTGCT  | 1140 |
| CTTTCTGAGG  | AAAACACTGG  | AAAAACCTAC | TTCTTTGTGT | CTAACAAATA | CTGGAGGTAT  | 1200 |
| GATGAATATA  | AACGATCTAT  | GGATCCAGGT | TATCCCAAAA | TGATAGCACA | TGACTTTTCT  | 1260 |
| GGAAATGGCC  | ACAAAGTTGA  | TGCAGTTTTT | ATGAAAGATG | GATTTTTCTA | TTTCTTTTCT  | 1320 |
| GGAAACAAGAC | AATACAAATT  | TGATCTTAAA | ACGAAGAGAA | TTTGACTCT  | CCAGAAAGCT  | 1380 |
| AATAGCTGGT  | TCAACTGCAG  | GAAAAATTAG |            |            |             |      |

Seq ID NO: 2 DNA sequence

Nucleic Acid Accession #: NM\_002421.2

Coding sequence: 1..1409

|             |             |            |            |            |             |      |
|-------------|-------------|------------|------------|------------|-------------|------|
| 1           | 11          | 21         | 31         | 41         | 51          |      |
| ATGCACAGCT  | TTCTCCACT   | GCTGCTGCTG | CTGTTCTGGG | GTGTGGTGTG | ACACAGCTTC  | 60   |
| CCAGCGACTC  | TAGAAACACA  | AGAGCAAGAT | GTGGACTTAG | TCCAGAAATA | CCTGGAAAAA  | 120  |
| TACTACAACC  | TGAAGAATGA  | TGGGAGGCAA | GTTGAAAAGC | GGAGAAATAG | TGGCCAGTG   | 180  |
| GTTGAAAAAT  | TGAAGCAATC  | GCAGGAATTC | TTTGGGCTGA | AAGTGACTGG | GAAACCCAGAT | 240  |
| GCTGAAACCC  | TGAAGGTGAT  | GAAGCAGCCC | AGATGTGGAG | TGCCTGATGT | GGCTCAGTTT  | 300  |
| GTCTCTCACTG | AGGGGAACCC  | TCGCTGGGAG | CAAAACATC  | TGACCTACAG | GATTGAAAAAT | 360  |
| TACACGCCAG  | ATTTGCCAAAG | AGCAGATGTG | GACCATGCCA | TTGAGAAAGC | CTTCCAACCTC | 420  |
| TGGAGTAATG  | TCACACCTCT  | GACATTCAAC | AAGGTCTCTG | AGGGTCAAGC | AGACATCATG  | 480  |
| ATATCTTTTG  | TCAGGGGAGA  | TCATCGGGAC | AACTCTCCTT | TTGATGGACC | TGGAGGAAAT  | 540  |
| CTTGCTCATG  | CTTTTCAACC  | AGGCCCAAGT | ATTGGAGGGG | ATGCTCATT  | TGATGAAGAT  | 600  |
| GAAAGGTGGA  | CCAACAATTT  | CAGAGAGTAC | AACTTACATC | GTGTTGCGGC | TCATGCCCTC  | 660  |
| GGCCATTCTC  | TTGGACTCTC  | CCATTCTACT | GATATCGGGG | CTTTGATGTA | CCCTAGCTAC  | 720  |
| ACCTTCAGTG  | GTGATGTTCA  | GCTAGCTCAG | GATGACATTG | ATGGCATCCA | AGCCATATAT  | 780  |
| GGACGTTCCC  | AAAATCCTGT  | CCAGCCCATC | GGCCCAACAA | CCCCAAAAGC | ATGTGACAGT  | 840  |
| AAGCTAACCT  | TTGATGCTAT  | AACTACGATT | CGGGGAGAAG | TGATGTTCTT | TAAAGACAGA  | 900  |
| TTCTACATGC  | GCACAAATCC  | CTTCTACCCG | GAAGTTGAGC | TCAATTTTCT | TTCTGTTTTT  | 960  |
| TGGCCACAAC  | TGCCAAATGG  | GCTTGAAGCT | GCTTACGAAT | TTGCCGACAG | AGATGAAGTC  | 1020 |
| CGGTTTTTCA  | AAGGGAATAA  | GTACTGGGCT | GTTCAAGGAC | AGAATGTGCT | ACACGGATAC  | 1080 |
| CCCAAGGACA  | TCTACAGCTC  | CTTTGGCTTC | CCTAGAACTG | TGAAGCATAT | CGATGCTGCT  | 1140 |
| CTTTCTGAGG  | AAAACACTGG  | AAAAACCTAC | TTCTTTGTGT | CTAACAAATA | CTGGAGGTAT  | 1200 |
| GATGAATATA  | AACGATCTAT  | GGATCCAGGT | TATCCCAAAA | TGATAGCACA | TGACTTTTCT  | 1260 |
| GGAAATGGCC  | ACAAAGTTGA  | TGCAGTTTTT | ATGAAAGATG | GATTTTTCTA | TTTCTTTTCT  | 1320 |
| GGAAACAAGAC | AATACAAATT  | TGATCTTAAA | ACGAAGAGAA | TTTGACTCT  | CCAGAAAGCT  | 1380 |
| AATAGCTGGT  | TCAACTGCAG  | GAAAAATTAG |            |            |             |      |

Seq ID NO: 3 DNA sequence

Nucleic Acid Accession #: NM\_002422.2

Coding sequence: 64..1497

|            |            |            |            |             |            |     |
|------------|------------|------------|------------|-------------|------------|-----|
| 1          | 11         | 21         | 31         | 41          | 51         |     |
| ACAAGGAGGC | AGGCAAGACA | GCAAGGCATA | GAGACAACAT | AGAGCTAAGT  | AAAGCCAGTG | 60  |
| GAAATGAAGA | GTCTTCCAAT | CCTACTGTTG | CTGTGCGTGG | CAGTTTGCTC  | AGCCTATCCA | 120 |
| TTGGATGGAG | CTGCAAGGGG | TGAGGACACC | AGCATGAACC | TTGTTTCAGAA | ATATCTAGAA | 180 |
| AACTACTACG | ACCTCAAAAA | AGATGTGAAA | CAGTTTGTGA | GGAGAAAGGA  | CAGTGTCTCT | 240 |

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Seq ID NO: 4 DNA Sequence  
Nucleic Acid Accession #: NM\_001854  
Coding sequence: 162..5582

1 11 21 31 41 51  
| | | | |  
AAACATCAAA TTTAGAAGAA AAAGCCCTTT GACTTTTTC CCCTCTCCCT CCCCAATGGC 60  
TGTGTAGCAA ACATCCCTGG ACATACCTTG GAAAGGACGA AGTTGGTCTG CAGTCGCAAT 120  
TTCGTGGGTT GAGTTACACG TTGTGAGTGC GGGGCTCGGA GATGGAGCCG TGGTCCTCTA 180  
GGTGGAAACG GAAACGGTGG CTCTGGGATT TCACCGTAAC AACCTCGCA TTGACCTTCC 240  
TCTTCCAAGC TAGAGAGGTC AGAGGAGCTG CTCCAGTTGA TGTACTAAAA GCACTAGATT 300  
TTCACAATTC TCAGAGGGGA ATATCAAAAA CAACGGGATT TTGCACAAAC AGAAAGAAAT 360  
CTAAAGGCTC AGATACTGCT TACAGAGTTT CAAAGCAAGC ACAACTCAGT GCCCCAACAA 420  
AACAGTTATT TCCAGGTGGA ACTTTCCAG AAGACTTTTC AATACTATTT ACAGTAAAC 480  
CAAAAAAAGG AATTTCAGTCT TTCTTTTAT CTATATATAA TGAGCATGGT ATTCAGCAAA 540  
TTGGTGTGGA GGTGTGGAGA TCACCTGTTT TTCTGTTTGA AGACCAACT GGAAACCTG 600  
CCCCAGAAGA CTATCCCTCT TTCAGAACTG TTAACATCGC TGACGGGAAG TGGCATCGGG 660  
TAGCAATCAG CGTGGAGAAG AAAACTGTGA CAATGATTGT TGATTGTAAG AAGAAAAACA 720  
CGAAACCACT TGATAGAAGT GAGAGAGCAA TTGTTGATAC CAATGGAATC ACGGTTTTTG 780  
GAACAAGGAT TTTGGATGAA GAAGTTTTTG AGGGGGACAT TCAGCAGTTT TTGATCACAG 840  
GTGATCCCAA GGCAGCATAT GACTACTGTG AGCATTATAG TCCAGACTGT GACTCTTCAG 900  
CACCCAAGCG TGCTCAAGCT CAGGAACCTC AGATAGATGA GTATGCACCA GAGGATATAA 960  
TCGAATATGA CTATAGTAT GGGGAAGCAG AGTATAAAGA GGCTGAAAGT GTAACAGAGG 1020  
GACCCACTGT AACCTAGGAG ACAATAGCAC AGACGGAGGC AAACATCGTT GATGATTTTC 1080  
AAGAATACAA CTATGGAACA ATGGAAAGTT ACCAGACAGA AGCTCCTAGG CATGTTTCTG 1140  
GGACAAATGA GCCAAATCCA GTTGAAGAAA TATTTACTGA AGAATATCTA ACGGGAGAGG 1200  
ATTATGATTG CCAGAGGAAA AATTCTGAGG ATACACTATA TGAAACAAA GAAATAGACG 1260  
GCAGGGATTG TGATCTTCTG GTAGATGGAG ATTTAGGCGA ATATGATTTT TATGAATATA 1320  
AAGAATATGA AGATAAACCA ACAAGCCCCC CTAATGAAGA ATTTGGTCCA GGTGTACCAG 1380  
CAGAACTGTA TATTACAGTA ACAAGCATAA ATGGCCATGG TGCAATATGA GAGAAAGGAC 1440  
AGAAAGGAGA ACCAGCAGTG GTTGAGCCTG GTATGCTTGT CGAAGGACCA CCAGGACCAG 1500  
CAGGACCTGC AGGTATTATG GGTCTCCAG GTCTACAAGG CCCCCTGGA CCCCCTGGTG 1560  
ACCTCGGCGA TAGGGGCCCC CCAGGACGTC CTGGCTTACC AGGGGCTGAT GGTCTACCTG 1620  
GTCTCTCTGG TACTATGTTG ATGTTACCGT TCCGTTATGG TGGTATGGT TCCAAAGGAC 1680  
CAACCATCTC TGCTCAGGAA GCTCAGGCTC AAGCTATTCT TCAGCAGGCT CGGATTGCTC 1740  
TGAGAGGCCC ACCTGGCCCC ATGGGTCTAA CTGGAAGACC AGTCTCTGTG GGGGGGCTG 1800  
GTTTCATCTG GGCCTAAGGT GAGAGTGGTG ATCCAGGTCC TCAGGGCCCT CGAGGGGTCC 1860  
AGGGTCCCCC TGGTCCAACG GGAACAACTG GAAAAAGGGG TCGTCCAGGT GCAGATGGAG 1920  
GAAGAGGAAT GCCAGGAGAA CCTGGGGCAA AGGGAGATCG AGGGTTTGAT GGACTCCGG 1980  
GTCTGCCAGG TGACAAAGGT CACAGGGGTG AACGAGGTCC TCAAGTCTCT CCAGGTCTCT 2040  
CTGGTGATGA TGAATGAGG GGAGAAGATG GAGAAATTGG ACCAAGAGGT CTTCAGGTG 2100  
AAGCTGGCCC ACGAGGTTTG CTGGGTCCAA GGGGAACTCC AGGAGCTCCA GGGCAGCCTG 2160  
GTATGGCAGG TGTAGATGGC CCCCAGGAC CAAAGGGGAA CATGGGTCCC CAAGGGGAGC 2220  
CTGGGCTCTC AGGTCAACAA GGAATCCAG GACCTCAGG TCTTCTGGT CCACAAGGTC 2280  
CAATTGGTCC TCCTGGTGAA AAAGGACCAC AAGGAAAACC AGGACTTGCT GGACTTCTG 2340  
GTGCTGATGG GCCTCCTGGT CATCTGGGA AAGAAGGCCA GTCTGGAGAA AAGGGGGCTC 2400  
TGGGTCCCCC GGTCTTATTG GATNNCCGGG CCCCAGGGGA GTAAAGGGAG 2460  
CAGATGGTGT CAGAGGTCTC AAGGGATCTA AAGGTGAAAA GGGTGAAGAT GGTTTTCCAG 2520  
GATTCAAAGG TGACATGGGT CTAAGAGGTG ACAGAGGAGA AGTTGGTCAA ATTGGCCCAA 2580  
GAGGGNAAGA TGGCCCTGAA GGACCCAAAG GTGAGCAGG CCAACTGGA GACCCAGGTC 2640  
CTTCAGGTCA AGCAGAGGAA AAGGGAAAAC TTGGAGTTCC AGGATTACCA GGATATCCAG 2700  
GAAGACAAGG TCCAAAGGGT TCCACTGGAT TCCCTGGGTT TCCAGTGCC AATGGAGAGA 2760  
AAGGTGCACG GGGAGTAGCT GGCAACACG GCCCTCGGGG TCAGCGTGGT CCAACGGGTC 2820  
CTCAGGTTTC AAGAGGTGCA AGAGGTCCCA CTGGGAAACC TGGGCCAAAG GGCACCTCAG 2880  
GTGGCGATGG CCTCTGGGC CCTCCAGGTG AAAGAGGTCC TCAAGGACCT CAGGGTCCAG 2940  
TTGGATTCCC TGGACCAAAA GGCCCTCTCT GACCACAGG AAGGATGGGC TGCCCAGGAC 3000  
ACCTGGGCA ACGTGGGGAG ACTGATTTC AAGGCAAGAC CGGCCCTCCT GGGCCAGGGG 3060

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GAGTGGTTGG ACCACAGGGA CCAACCGGTG AGACTGGTCC AATAGGGGAA CGTGGGTATC 3120  
CTGGTCTCTC TGGCCCTCCT GGTGAGCAAG GTCTTCTCTG TGCTGCAGGA AAAGAAGGTG 3180  
CAAAAGGGTGA TCCAGGTCTT CAAGGTATCT CAGGGAAAGA TGGACCAGCA GGATTACGTG 3240  
GTTTCCCAGG GGAAGAGAGT CTTCTCTGAG CTCAGGGTGC ACCTGGACTG AAAGGAGGGG 3300  
AAGGTCCCCA GGGCCACCA GGTCCAGTTG GCTCACCAGG AGAACGTGGG TCAGCAGGTA 3360  
CAGCTGGCCC AATTGGTTTA CGAGGGCGCC CGGACCTCA GGGTCTCTCT GGTCCAGCTG 3420  
GAGAGAAAGG TGGTCTCGGA GAAAAAGGTC CCCAAGGGCC TGCAGGGAGA GATGGAGTTC 3480  
AAGGTCTCTG TGGTCTCCCA GGGCCAGCTG GTCTCTGCCG CTCCTCTGGG GAAGACGGAG 3540  
ACAAAGGTGA AATTGGTGAG CCGGACAAA AAGGCAGCAA GGGTGGCAAG GGAGAAAATG 3600  
GCCCTCCCGG TCCCCACAGT CTTCAAGGAC CAGTTGGTGC CCCTGGAATT GCTGGAGGTG 3660  
ATGGTGAACC AGGTCTCTAGA GGACAGCAGG GGATGTTTGG GCAAAAAGGT GATGAGGGTG 3720  
CCAGAGGCTT CCCTGGACCT CTTGGTCCAA TAGGTCTTCA GGGTCTGCCA GGCCACCTG 3780  
GTGAAAAAGG TGAATAATGG GATGTTGGTC CATGGGGGCC ACCTGGTCTT CCAGGCCCAA 3840  
GAGGCCCTCA AGGTCCCAAT GGAGCTGATG GACCACAAGG ACCCCACAGT TCTGTTGGTT 3900  
CAGTTGGTGG TGTTCGAGAA AAGGGTGAAC CTGGAGAAGC AGGAAACCCA GGCCTCTCTG 3960  
GGGAAGCAGG TGTAGCGGTG CCCAAAGGAG AAAGAGGAGA GAAAGGGGAA GCTGGTCCAC 4020  
CTGGAGCTGC TGGACCTCCA GGTGCCAAGG GCGCGCCAGG TGAATGATGG CCTAAGGGTA 4080  
ACCCGGGTCC TGTGTGTTT CTGGAGATG CTGGTCTCC TGGGGAACCT GGCCCTCGAG 4140  
GTCAAGATGG TGTGTGTTGT GACAAAGGTG AAGATGGAGA TCCTGGTCAA CCGGCTCTCTC 4200  
CTGGCCCATC TGGTGAAGGT GGCCACCCAG GTCTCTCTGG AAAACGAGGT CCTCTGGAG 4260  
CTCAGGTGC AGAGGGAAGA CAAGGTGAAA AAGGTGCTAA GGGGGAAGCA GGTGCAGAA 4320  
GTCTCTCTGG AAAAGCCGCG CCAGTCGCTC CTCAGGGACC TGCAGGAAAG CTTGGTCCAG 4380  
AAGGTCTCTG GGGCATCCCT GGTCTGTGG GAGAACAAGG TCTCCCTGGA GCTGCAGGCC 4440  
AAGATGGACC ACCTGGTCTT ATGGGACCTC CTGGCTTACC TGGTCTCAA GGTGACCTCT 4500  
GCTCCAAAGG TGAAGAGGGA CATCCTGGTT TAATTGGCTT GATTGGTCTT CCAGGAGAAC 4560  
AAGGGGAAAA AGGTGACCGA GGGCTCCCTG GAAGTCAAGG ATCTCCAGGA GCAAAAGGGG 4620  
ATGGGGGAAT TCTGTGTCCT GCTGGTCCCT TAGGTCCACC TGGTCTCCA GGCCTTACAG 4680  
GTCTCTCAAG CCCAAAGGAT AACAAAGGCT CTACTGGACC CGCTGGCCAG AAAGGTGACA 4740  
GTGGTCTTCC AGGGCTCTCT GGGCTCCAG GTCCACCTGG TGAAGTCATT CAGCCTTTAC 4800  
CAATCTTGTG CTCCAAAAAA ACGAGAAGAC ATACTGAAGG CATGCAAGCA GATGCAGATG 4860  
ATAATATTCT TGATTACTCG GATGGAATGG AAGAAATATT TGGTTCCTCT AATTCCCTGA 4920  
AACAAAGCAT CGACATATG AATTTCCAA TGGGTACTCA GACCAATCCA GCCCGAACTT 4980  
GTAAGACCT GCAACTCAGC CATCTGACT TCCAGATGG TGAATATTGG ATTGATCCTA 5040  
ACCAAGGTTG CTCAGAGAT TCCTTCAAAG TTTACTGTAA TTTCACATCT GGTGGTGAGA 5100  
CTTGCAATTG TCCAGACAAA AAATCTGAGG GAGTAAGAA TTTATCATGG CCAAGGAGA 5160  
AACCAGGAAG TTGTTTAGT GAATTTAAGA GGGGAAACT GCTTTCATAC TTAGATGTTG 5220  
AAGGAAATTC CATCAATATG GTGCAATGA CATTCTGAA ACTTCTGACT GCCTCTGCTC 5280  
GGCAAAATTT CACTTACCAC TGTCTCAGT CAGCAGCTG GTATGATGTG TCATCAGGAA 5340  
GTTATGACAA AGCACTTCGC TTCCTGGGAT CAAATGATGA GGAGATGTCC TATGACAATA 5400  
ATCCTTATTG CAAACACTG TATGATGTT GTACGTCCAG AAAAGGCTAT GAAAAAAGT 5460  
TCATTGAAAT CAATACACCA AAAATTGATC AAGTACCTAT TGTGATGTC ATGATCAGTG 5520  
ACTTTGGTGA TCAGAAATCAG AAGTTCGGAT TTGAAGTTGG TCCTGTTTGT TTTCTTGGCT 5580  
AAGATTAAGA CAAAGAACAT ATCAAATCAA CAGAAAAATG ACCTTGGTGC CACCAACCCA 5640  
TTTTGTGCCA CATGCAAGT TTGAATAAGG ATGATGSGAA AACAACGCTG CATATACAGG 5700  
TACCATTAGG GAAATACCGA TGCCTTGTG GGGGCAGAA CACAGACAAA AGCTTTGAAA 5760  
ATCATAAGA TATAAGTTGG TGTGGCTAAG ATGGAACAG GGCTGATTCT TGATTTCCAA 5820  
TTCTCAACTC TCCTTTTCTT ATTTGAATTT CTTTGGTGTG GTAGAAAAA AAAAAAGAAA 5880  
AATATATATT CATAAAAAAT ATGGTGCTCA TTCTCATCCA TCCAGGATGT ACTAAAAAG 5940  
TGTGTTTAAT AAATTGTAAT TATTTTGTGT ACAGTTCTAT ACTGTTATCT GTGTCCATT 6000  
50 CCAAAACTTG CACGTGTCCT TGAATTCGCT TGACTCTAAT TTATGAGGAT CCGCAACTCT 6060  
GATGGCAATA ATATATGTAT TATGAAAAAT AAGTTATGAT TTCCGATGAC CCTAAGTCCC 6120  
TTCTTTTGGT TAATGATGAA ATTCCTTTGT GTGTGTTT

55 Seq ID NO: 5 DNA sequence  
Nucleic Acid Accession #: XM\_057014  
Coding sequence: 143..874

1 11 21 31 41 51

60 GGGAGGCGAG GAGGCGCGCG GGTGAAAGGC GCATTGATGC AGCCTGCGGC GGCCTCGGAG 60  
CGCGGCGGAG CCAGACGCTG ACCACGTTC TCTCTCGGT CTCTCCGCC TCCAGTCCG 120  
CGCTGCCCCG CAGCCCGGAG CCATCGGACC CCAGGGCCCC GCGCCTCCC CGCAGCGGCT 180  
CCGCGGCGCTC CTGCTGCTCC TGCTGCTGCA GCTGCCCGCG CGTCCGAGCG CCTCTGAGAT 240  
CCCCAAGGGG AAGCAAAAGG CGCAGCTCCG GCAGGGGAG GTGGTGGACC TGTATAATG 300  
65 AATGTGCTTA CAAGGGCCAG CAGGAGTGCC TGGTGCAGAC GGGAGCCCTG GGGCCAATGG 360  
CATTCCGGGT ACACCTGGGA TCCCAGGTG GGATGGATT AAAGGAGAAA AGGGGGAATG 420  
TCTGAGGGAA AGCTTTGAGG AGTCCTGGAC ACCCAACTAC AAGCAGTGTT CATGGAGTTC 480  
ATTGAATTAT GGCATAGATC TTGGGAAAAT TCGGAGTGT ACATTACAA AGATGCGTTC 540  
AAATAGTGCT CTAAGAGTTT TGTTCAGTG CTCACCTCG CTAAAATGCA GAAATGCATG 600  
CTGTACGGT TGGTATTICA CATTCAATGG AGCTGAATG TCAGGACCTC TTCCCATGTA 660  
70 AGCTATAATT TATTGGACC AAGGAAGCCC TGAATGAAT TCAACAATTA ATATTTCATG 720  
CACTTCTTCT GTGGAAGGAC TTTGTGAAG AATTGGTGT GGATTAGTGG ATGTTGCTAT 780  
CTGGGTTGGC ACTTGTTCAG ATTACCCAAA AGGAGATGCT TCTACTGGAT GGAATTCAGT 840  
TTCTCGCATC ATTATTGAAG AACTACCAAA ATAAATGCTT TAATTTTCAT TTGCTACCTC 900  
75 TTTTTTTATT ATGCTTTGGA ATGGTTCAC TAAATGACAT TTTAAATAAG TTTATGTATA 960  
CATCTGAATG AAAAGCAAG CTAAATATGT TTACAGACCA AAGTGTGATT TCACACTGTT 1020  
TTTAAATCTA GCAATTATCA TTTTGCTTCA ATCAAAAGTG GTTTCAATAT TTTTITTAGT 1080  
TGTTTAGAAT ACTTCTTCA TAGTCACATT CTCTCAACCT ATAATTGGA ATATTGTTGT 1140  
GGTCTTTTGT TTTTCTCTT AGTATAGCAT TTTTAAAAA ATATAAAGC TACCAATCTT 1200  
80 TGTACAATTT GTAAATGTTA AGAATTTTT TTATATCTGT TAAATAAAAA TTATTTCCAA 1260  
CAACCTTAAA AAAAAA AAAA

Seq ID NO: 6 DNA Sequence  
Nucleic Acid Accession #: Eos sequence

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|--|--------------------------|-------------|-------------|-------------|-------------|------------------|
|  |                          |             |             |             |             |                  |
|  | CAGGCCGGAC               | CACCTGCTAT  | ATGTAGGCNN  | NNNNNNNNNN  | NNNNAAATAC  | ACTTACTGTG 60    |
|  | TTCTAGAGGC               | AGCCCTTTCT  | TATGCAGAAA  | ATACAATACG  | CACCTGCATGA | GAAGCTTGAG 120   |
| 5                                      | AGTGGATTCT               | AATCCAGGTC  | TGTCGACCTT  | GGATATCATG  | CATGTGGGAA  | GGTGGGTGTG 180   |
|  | GTGAGAAAA                | TTTAAAGCCA  | AGAGTAGATG  | GCCATGTTCA  | ACTTTACAAA  | ATTTCTTGGA 240   |
|  | AAACTGGCAG               | TATTTTGAAC  | TGCATCTTCT  | TTGGTACCGG  | AACCTGCAGA  | AACAGTGTGA 300   |
|  | GAAATTAAGT               | CCTGGTTTCA  | TGCGCAGTAG  | CAAAGATGGT  | CAAGGCCATG  | GA AAAAGCAG 360  |
|  | AAATTTACCA               | AGAAAGCTGA  | TACCCATGTA  | TAGTTCCAC   | TCATCTCAA   | TACATCTGCT 420   |
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Seq ID NO: 10 DNA Sequence  
Nucleic Acid Accession #: AK092195  
Coding sequence: 1..2034

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Seq ID NO: 12 DNA Sequence  
Nucleic Acid Accession #: XM\_051860.2  
Coding sequence: 261..4346

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| 5  | TGCTGACCAT | CAGCTGGCTC  | ACTCTGACCT  | GCTTCCCTGG  | GGCCACATCC  | ACAGTGGCTG  | 360  |
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|    | ACCATGTGCA | TATCGGCCAG  | GGCAAGACAC  | TGCTGCTCAC  | CTCTTCTGCC  | ACGGTCTATT  | 480  |
|    | CCATCCACAT | CTCAGAGGGA  | GGCAAGCTGG  | TCATTAAAGA  | CCACGACGAG  | CCGATTGTTT  | 540  |
| 10 | TGCGAACCCG | GCACATCCTG  | ATTGACAACG  | GAGGAGAGCT  | GCATGCTGGG  | AGTGCCCTCT  | 600  |
|    | GCCTTTTCCA | GGGCAATTTT  | ACCATCATT   | TGTATGGAAG  | GGCTGATGAA  | GGTATTTCAG  | 660  |
|    | CGGATTCCTA | CTATGGTCTG  | AAGTACATTG  | GGGTTGGTAA  | AGGAGGCGCT  | CTTGAGTTGC  | 720  |
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|    | CAGAAGGAGG | CTATTTTTTT  | GAAAGGAGCT  | GGGGCCACCG  | TGGAGTTATT  | GTTTCATGCA  | 840  |
| 15 | TCGACCCCAA | ATCAGGCACA  | GTACATCCAT  | CTGACCGGTT  | TGACACCTAT  | AGATCCAAGA  | 900  |
|    | AAGAGGTGTA | ACGTCTGGTC  | CAGTATTTGA  | ACGCGGTGCC  | CGATGGCAGG  | ATCCTTTCTG  | 960  |
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|    | AATTGGGAAG | CAAAACATTC  | CTGCACCTTG  | GATTTAGACA  | CCCTTGGAGT  | TTTCTAACTG  | 1080 |
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| 20 | CTGCTGCTGC | CCGGGTATTC  | AAATTTGTCC  | AGACAGAGCA  | TGGCGAATAT  | TTCAATGTTT  | 1200 |
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| 55 | GGGCCATTTG | CAGTGGGTGC  | TATGCACAGA  | TGTACATTCA  | AGCCTACAAG  | ACCAGTAACC  | 3300 |
|    | TGCGAATGAA | GATCATCAAG  | AATGACTTCC  | CCAGCCACCC  | TCTTTACCTG  | GAGGGGGCGC  | 3360 |
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|    | CCATCCACTG | GGACAGACG   | GCCCCCGCCG  | AACTCGCCAT  | CTGGCTCATC  | AACTTCAACA  | 3480 |
|    | AGGGCGACTG | GATCCGAGTG  | GGGCTCTGCT  | ACCCGCGAGG  | CAGCATTTC   | TCCATCTCT   | 3540 |
| 60 | CGGATGTTCA | CAATCGCCTG  | CTGAAGCAAA  | CGTCCAAGAC  | GGGCGTCTTC  | GTGAGGACCT  | 3600 |
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| 65 | CGATGCCCAA | GAAGCTCTTT  | GGTTCTCAGC  | TGAAAACAAA  | GGACCATTTT  | TTGGAGGTGA  | 3900 |
|    | AGATGGAGAG | TTCCAAGCAG  | CACCTCTTCC  | ACCTCTGGAA  | CGACTTCGCT  | TACATTGAAG  | 3960 |
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|    | GGCAGCTTTT | CAACTATGTG  | GCGACCATCC  | CTGACAATTC  | CATAGTGCTT  | ATGGCATCAA  | 4140 |
| 70 | AGGGAGGATA | CGTCTCCAGA  | GGCCCATGGA  | CCAGAGTGCT  | GGAAAAGCTT  | GGGGCAGACA  | 4200 |
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| 80 | GATCCCCATG | GTCTTTCAGCA | GACAAGTGAG  | GGTGGTAAAT  | GTAGGAGAAA  | GAGCCTTGCC  | 4800 |
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|    | AGAACTGGCT | ATCCTTGGGG  | AAGAGGCAAG  | CCCTGCCTCT  | GGCCGTGTCC  | ACCTTTTCAG  | 4920 |
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|    | GAGATTCAG  | AAATCTGCTG  | CATTTACAT   | GGTACCTGGA  | ACCAACAGT   | TCATGGATAT  | 5040 |
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CCTTCAAGA GGGCCTGCTT GGTCTCCCTCC ACCCAAGTGC ATCCATGAGA CTCGTCCAA 6360  
GAGTCCATTG CCGAGCTGGG AGCCAACCTG CAGGGAGTGC TTTCCACCA CACATCTTTC 6420  
AGCTGCTGGG AGGTGACCAT AGGGCTCTGC TTTTAAAGAT ATGGCTGCTT CAAAGGCCAG 6480  
AGTCACAGGA AGGACTTCTT CCAGGGAGAT TAGTGGTGAT GGAGAGGAGA GTTAAATAGA 6540  
CCTCATGTCC TTCTTGTCCA CGGTTTGTGT GAGTTTTCAC TCTTCTAATG CAAAGGCTCTC 6600  
ACACTGTGAA CCACTTAGGA TGTGATCACT TTCAGGTGGC CAGGAATGTT GAATGTCTTT 6660  
GGCTCAGTTC ATTTAAAAA GATATCTATT TGAAGTTCT CAGAGTTGTA CATATGTTTC 6720  
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TAGGCAATTT CTGTGTAGCA CAAATTTTCT TATTGCTTAG AAAATTGTCC TCCTTGTATT 6840  
TTCTGTGTTT AAGACTTAAG TGAGTTAGGT CTTTAAAGAA AGCAACGCTC CTCTGAAATG 6900  
CTGTCTTTT TTCTGTGTC GAAATAGCTG GTCTTTTTC GGGAGTTAGA TGTATAGAGT 6960  
GTTTGTATGT AAACATTTCT TGTAGGCATC ACCATGAACA AAGATATATT TTCTATTTAT 7020  
TTATTATATG TGCATTTCAA GAAGTCACTG TCAGAGAAAT AAAGAATTGT CTTAAATGTC 7080

Seq ID NO: 13 DNA Sequence  
Nucleic Acid Accession #: NM\_012112  
Coding sequence: 429..2672

1 11 21 31 41 51  
| | | | |  
40 TCAGACCTGT AGGCCTGATA GACTGATTAA ACCACAGAAG GTGACCTGCT GAGAAAAGTG 60  
GTACAAATAC TGGGAAAAAC CTGCTCTTCT GCGTTAAGTG GGAGACAATG TCACAAGTTA 120  
AAAGCTCTTA TTCTATGAT GCCCCTCGG ATTTTCATCA TTTTTCATCC TTGGATGATG 180  
AAGGAGATAC TCAAAACATA GATTATGAT TTGAGGAGAA GGCCAATTG GAGAATAAGT 240  
TACTGGGGAA GAATGGAATC GGAGGGCTTT TTCAGGGCAA AACTCCTTTG AGAAAGGCTA 300  
45 ATCTTCAGCA AGCTATTGTC ACACCTTTGA AACCAGTTGA CAACACTTAC TACAAAGAGG 360  
CAGAAAAAGA AAATCTTGTG GAACAATCCA TTCCGTCAAA TGCTTGTTC TCCCTGGAAG 420  
TTGAGGCAGC CATATCAAGA AAAACTCCAG CCCAGCCTCA GAGAAGATCT CTTAGGCTTT 480  
CTGCTCAGAA GNAATTTGGA CAGAAAGAAA AGCATCATGT AAAAATGAAA GCCAAGAGAT 540  
50 GTGCCACTCC TGTAATCATC GATGAAATTC TACCCTCTAA GAAAATGAAA GTTTCTAACA 600  
ACAAAAAGAA GCCAGAGGAA GAAGGCAGTG CTCATCAAGA TACTGCTGAA AAGAAATGCAT 660  
CTTCCCCAGA GAAAGCCAA GGTAGACATA CTGTGCTTGT TATGCCACT GCAAAGCAGA 720  
AGTTTCTAAA AAGTACTGAG GAGCAAGAGC TGGAGAAGAG TATGAAAATG CAGCAAGAGG 780  
TGTTGGAGAT GCGGAAAAAG AATGAAGAAT TCAAGAAACT TGCTCTGGCT GGAATAGGGC 840  
55 AACCTGTGAA GAAATCAGTG AGCCAGGTCA CCAATCAGT TGACTTCCAC TTCCGCACAG 900  
ATGAGCGAAT CAAACAACAT CCTGAGAACC AGGAGGAATA TAAGGAAGTG AACTTTACAT 960  
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AGCCTTTCAA CCTGTCCAA GGAAGAAAA GAACATTTGA TGAACAGTT TCTACATATG 1080  
TGCCCCCTGC ACAGCAAGTT GAAGACTTCC ATAAACGAAC CCCTAACAGA TATCATTTGA 1140  
60 GGAGCAAGAA GGATGATATT AACCTGTTAC CCTCCAAATC TTCTGTGACC AAGATTGTGA 1200  
GAGACCCAGA GACTCCTGTA CTGCAAAACA AACACCGTGC ACGGGCTGTG ACCTGCAAAA 1260  
GTACAGCAGA GCTGGAGCTG GAGGAGCTCG AGAAATTGCA ACAATACAAA TTCAAAGCAC 1320  
GTGAACCTGA TCCCAAGATA CTGGAAGGTG GGCCCATCTT GCCCAAGAAA CCACCTGTGA 1380  
AACCACCCAC CGAGCCTATT GGCTTTGATT TGGAAATTGA GAAAGAATC CAGGAGCGAG 1440  
65 AATCAAGAA GAAACACAG GATGAACACT TTGAATTTCA TTCCAGACTT TGCCCTACTA 1500  
AGATTTTGA AGATGTTGTG GGTGTTCTG AAAAGAAGGT ACTTCCAATC ACCGTCCCCA 1560  
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AGAATGTGAC CCAGATTGAA CCTTCTGCT TGGAGACTGA CAGAAGAGGT GCTCTGAAG 1920  
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TCAAGGCTCG TCCAAACACC GTCATCTCTC AGGAGCCCTT TGTTCCCAAG AAAGAGAAGA 2040  
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AGAAAGAGC CAAAGAGCGG CAGGAGCTGG AGAAGAGAAT GGCTGAGCTA GAAGCCGAGA 2160  
AAGCCAGCA GTTGGAGGAG GCCAGACTAC AGGAGGAAGA GCAGAAAAA GAGGAGCTGG 2220  
CCAGGCTACG GAGAGAACTG GTGCATAAGG CAAATCCAAT ACGCAAGTAC CAGGGTCTGG 2280  
AGATAAAGCT AAGTGACCAG CCTCTGACTG TGCCGTGATC TCCCAAAATC TCCACTCGAT 2340  
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CCTCAACCT AGGACCGTCT TGCTTTGTCA TTGGGCATGG AGAGAACCCA TTTCTCCAGA 2460  
CTTTTACCTA CCGTGCCTCG AGAAAGCATA CTTGACAATC GTGGACTCCA GTTTTGTGTA 2520  
GAATTGTTTT TTACATTATC TAAGGCTAAT AATGAGATGT AACTCATGAA TGTCTCGATT 2580  
AGACTCCATG TAGTTACTTC CTTTAAACCA TCAGCCGGCC TTTTATATAG GTCTTCACTC 2640  
TGACTAGAAT TTAGTCTCTG TGTACGACA GTGTAATCTC TAITGCTATT GCCCCTTACG 2700

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PCT/US02/29560

5  
 ACTCTCACCC TCTCCCCAAC TTTTITTTAA AATTITTAACC AGAAAATAAA GATAGTTAAA 2760  
 TCCTAAGATA GAGATTAAAGT CATGGTTTAA ATGAGGAACA ATCAGTAAAT CAGATTCTGT 2820  
 CCTCTTCTCT GCATACCGTG AATTATAGT TAAGGATCCC TTTGCTGTGA GGGTAGAAAA 2880  
 CCTCACCAAC TGCACCAAGT AGGAAGAAGA CTGCGTGGAT TCATGGGGAG CCTCACAGCA 2940  
 GCCACGCAGC AGGCTCTGGG TGGGGCTGCC GTTAAAGCAC GTTCTTTTCT TACTGGTGCT 3000  
 GATAACAACA GGAACCGTG CAGTGTGCAT TTAAAGACCT GGCTTGAAT AAATACGTTT 3060  
 TGTCTTCCC TC 3072

10  
 Seq ID NO: 14 DNA Sequence  
 Nucleic Acid Accession #: Eos sequence  
 1 11 21 31 41 51  
 | | | | |  
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 TCTGACTGAT GAAGATCCTG AATACCAAAG AGGGCCGCTG AAAGGGCTCT AGGAGTACAC 120  
 15  
 CTTCTAGGAA CCTTAAGCCA GAGAGAGGCT TCATACATC ATGCTTCCTG ACATCTCTCC 180  
 CTTTGAAGAG CAGTCAGACT CCTGCTTTCG TCTTCAGACT TAATTTGGGG GTTTAACAGG 240  
 TGAGGTGTCT GGGGGAACCT TTTTACAACA TCTCTCTGAA AGAATCCGGG CTGCCAGTTT 300  
 CATTGTGTTT GGGTGTCACT AGCATGATGG AAAGACAAAA AAACACAAC TGACATCTGC 360  
 AGAAATGGGT TCAAAATTTA CTGCAACTC ACCAATTCCT TGGCTTTGGT TCAGCAATTA 420  
 20  
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 AATGTGTTTG TGAAGATTAA AAAAGTTAAC ATAAAGAGTT TAGAAGAGTG TCTGGCATAT 540  
 TGTGCTCAAT AAGTGTATTAT TTATTTATTG CTGAATAAAC CAGTAATTTA ATTAGTAT 598

25  
 Seq ID NO: 15 DNA Sequence  
 Nucleic Acid Accession #: Eos sequence  
 Coding sequence: 63..3224  
 1 11 21 31 41 51  
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 AGCAGCAGCC GCAGCAGCAG ACCCGGAGT TTGCAGATGC GGCCCCAGCG GCGCCCGCGG 180  
 CGGGGGAGCT GGGTGTCTCA GTGAACCACC CAGGGAATGA CGAGGTGGCG AGTGAGGATG 240  
 AAGCCACAGT AAAGCGGCTT CGTCGGGAGG AGACGCACGT CTGTGAGAAA TGCTGTGCGG 300  
 AGTTCTTCAG CATCTCTGAG TTCTGGAAC ATAAGAAAAA TTGCATAAAA AATCCACCTG 360  
 35  
 TCCTCATCAT GAATGACAGC GAGGGGCGTG TGCTTCAGA AGACTTCTCG GGAGCTGTAC 420  
 TGAGCCACCA GCCCACCAGT CCCGGCAGTA AGGACTGTCA CAGGGAGAAT GCGGCGAGCT 480  
 CAGAGGACAT GAAGGAGAAG CCGGATGCGG AGTCTGTGGT GTACCTAAAG ACAGAGACAG 540  
 CCCTGCCACC CACCCCCAGC GACATAAGCT ATTTAGCCAA AGGCAAGTG GCCAACACTA 600  
 ATGTGACCTT GCAGGCACCTA CCGGGCAGCA AGGTGGCGGT GAATCAGCGG AGCGCGGATG 660  
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 CACTCCCTGC CCCGTCGCTT GGTGCCAACA GCATCCCGTG GGTCTCTGAG CAGATCTTGT 720  
 GTCTGCAGCA CAGCAGACTA CAGCAGATCC AGCTCACCGA GCAGATCCGC ATCCAGGTGA 780  
 ACATGTGGGC CTCCACGCC CTCCACTCAA CCGGGGAGG GGCCGACACT CTGAAGACCT 840  
 TGGGCAGCAT CATGTCTCAG CAGGTTCTG CAGCTGTGGC TTTGCTCAGC CAGAAAGCTG 900  
 GAAGCCAAGG TCTGTCTCTG GATGCCTTGA AACAAGCCAA GCTACCTCAC GCCAACATCC 960  
 45  
 CTTCGTGCCA CAGCTCCCTG TCCCCAGGGC TGGCACCCCT CACTCTGAAG CCGATGGGA 1020  
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 GCTCGGTGCT CTTCCAGAGC CCTTCTTCCA CTGTGGCGCT AGACACATCC AAGAAAGGGA 1140  
 AGGGGAAGCC ACCGAACATC TCCGCGGTGG ATGTCAAACC CAAAGACGAG GCGGCCCTCT 1200  
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 ACCTCCGCTC CCACACTGGA GAGAGACCTT TCGTGTGCTC TGTCTGTGGT CATCGCTTCA 1320  
 CCACCAAGGG CAACCTCAAG GTGCACTTTC ACCGACATCC CCAGGTGAAG GCAAAACCCC 1380  
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 CCACCTCTGT AGGGCTACCT CAGAATCTTT CTTCGGGGAC TAATCCCAAG GACCTCACGG 1560  
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 CACTCCCTGG GTTGCCAGCA AACTATAATT CCCCAAGGGC TGGTGGCTTC CAAGGGAGTG 1680  
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 AGGCCACCAC TGATCCCAAC GAATGTCTCA TTTGCCACCG AGTCTTAAGC TGTCAAGCT 1800  
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 CCCTCAAGAT GCATTATCGC ACCCACACCG GGGAGAGACC GTTCCAGTGT AAGATCTGTG 1860  
 GCGAGCCCTT TTTACCAAAA GGTAACTTGA AGACACACCT TGGGTTTCC CCAACCAACA 1920  
 CATCCATTAA GACGACAGAT TCGTGCCCA TCTGCCAGAA GAAGTTCACT AATGCCGTGA 1980  
 TGCTGCAGCA ACATATTCGG ATGCACATGG GCGGTCAAGT TCCCAACACG CCCCTGCCAG 2040  
 AGAATCCCTG TGACTTTACG GGTCTGTGAG CAATGACCGT GGGTGAAGAC GGCAGCACCG 2100  
 65  
 CCGCTATCTG CCATGATGAT GTCATCGAAA GCATCGATGT AGAGGAAGTC AGCTCCAGG 2160  
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 CTTTAAACCT GCGAGGCCAG GGCAGCAGAG AAAACGGTTC CTGGAGAGC GATGGCTTGA 2340  
 CCAACGACTC ATCTCGCTG ATGGGAGACC AGGAGTATCA GAGCCGAAGC CCAGATATCC 2400  
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 TGGAAACCA ATCCTTCCAG GCACTCTCCC CGGCCAATAG TCAAGCCGAA AGCATCAAGT 2460  
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 CAGCCAGGCC ACGCGCAGC GCCAAGCAAC ATGGCTGCAC ACGGTGTGGG AAGAACTTCT 2700  
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 CGTCTGCTAG CGCTCTTACG ATCCACGAGC GGACTCACAC TGGAGAGAAG CTTTGTGTG 2760  
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 CTTCACTGAA TGTGGACCTT GTTGTGTGGA ACCAGTACAC CAGCATGCTC AATGGGGCTG 3000  
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 AGTCGGGTAT CAGTGCAGAT GTGGAAAAAC CAAGTGCTAC TGACGGCGTT CCCAAACACC 3180  
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 AAGGAGCAAT GCAGACACAG TGAATCTCT AGAATCTGCT TTGTTTGTGA AGAATCATC 3300  
 TCCCTCTGTT TTCTTTTTCT TACTGATATG CAAATGATGT TTACTACGTT GGTGTGACC 3360

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5 ACAAACCTCAG GCAAGTGCTA CAATCACGAT TGTGTCTATG CTGCTTTGCA AAAAGTTG 3418

Seq ID NO: 16 DNA Sequence

Nucleic Acid Accession #: NM\_005101

Coding sequence: 76..573

1 11 21 31 41 51  
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CCACAGCCCA CAGCCATGGG CTGGGACCTG ACGGTGAAGA TGCTGGCGGG CAACGAATTC 120  
CAGGTGTCCC TGAGCAGCTC CATGTCGGTG TCAGAGCTGA AGGCCAGAT CACCAGAAG 180  
ATTGGCGTGC ACGCCTTCCA GCAGCGTCTG GCTGTCCACC CGAGCGGTGT GCGCTGCAG 240  
GACAGGGTCC CCCTTGCCAG CCAGGGCCTG GGCCCTGGCA GCACGGTCT GCTGGTGGTG 300  
GACAAATGCG ACGAACTCT GAGCATCCTG GTGAGGAATA ACAAGGCCG CAGCAGCACC 360  
TACGAGGTCC GGCTGACGCA GACCGTGCC CACCTGAAGC AGCAAGTGAG CCGGCTGGAG 420  
GGTGTGCAGG ACGACCTGTT CTGGCTGACC TTCGAGGGGA AGCCCCCTGA GGACCAGCTC 480  
CGCTGGGGG AGTACGGGCT CAAGCCCCCTG AGCACCGTGT TCATGAATCT GCGCTGCGG 540  
GGAGGCGGCA CAGAGCCTGG CGGGCGGAGC TAAGGCCCTC CACCAGCATC CGAGCAGGAT 600  
CAAGGGCGGG AAATAAAGGC TGTGTGAAGA GAAT 634

20 Seq ID NO: 17 DNA sequence

Nucleic Acid Accession #: Eos sequence

Coding sequence: 62..895

1 11 21 31 41 51  
| | | | |  
CACTGCTCTG AGAATTTGTG AGCAGCCCTT AACAGGCTGT TACTTCACTA CAACTGAOGA 60  
TATGATCATC TTAATTTACT TATTTCTCTT GCTATGGGAA GACACTCAAG GATGGGGATT 120  
CAAGGATGGA ATTTTTCATA ACTCCATATG GCTTGAACGA GCAGCCGGTG TGTACCACAG 180  
AGAAGCACGG TCTGGCAAAAT ACAAGCTCAC CTACGCAGAA GCTAAGGCGG TGTGTGAATT 240  
TGAAGGCGGC CATCTCGCAA CTTACAAGCA GCTAGAGGCA GCCAGAAAAA TTGGATTTCa 300  
TGTCTGTGCT GCTGGATGGA TGGCTAAGGG CAGAGTTGGA TACCCCATTT TGAAGCCAGG 360  
GCCCAACTGT GGATTTGGAA AACTGGCAT TATTGATTAT GSAATCCGTC TCAATAGGAG 420  
TGAAAGATGG GATGCTTATT GCTACAACCC ACACGCAAGG GAGTGTGGTG GCGTCTTAC 480  
AGATCCAAAG CAAATTTTTA AATCTCCAGG CTTCCTCAAT GAGTACGAAG ATAACCAAA 540  
CTGCTACTGG CACATTAGAC TCAAGTATGG TCAGCGTATT CACCTGAGTT TTTTAGATTT 600  
TGACCTTGAA GATGACCCAG GTTGCTTGGC TGATTATGTT GAAATATATG ACAGTTACGA 660  
TGATGTCCAT GGCTTTGTGG GAAGATACTG TGGAGATGAG CTTCCAGATG ACATCATCAG 720  
TACAGGAATG GTCATGACCT TGAAGTTTCT AAGTGATGCT TCAGTGACAG CTGGAGGTTT 780  
CCAAATCAAA TATGTTTGCAA TGGATCCTGT ATCCAAATCC AGTCAAGGAA AAAATACAA 840  
TACTACTTCT ACTGGAATAA AAAACTTTT AGCTGGAAGA TTAGCCACT TATAAAAAA 900  
AAAAAAGGA TGATCAAAAC ACACAGTGT TATGTTGGA TCTTTTGGAA CTCCTTTGAT 960  
CTCACTGTTA TTATTAACAT TTATTTATTA TTTTCTTAAA TGTGAAAGCA ATACATAATT 1020  
TAGGGAATAA TGGAAATAT AGGAACTTT AAACAGAGAA ATGAAACCTC TCATAATCCC 1080  
ACTGCATAGA AATAACAAGC GTTAACATT TCAATTTTT TTTCTTCAGT CATTTTCTA 1140  
TTTGTGGTAT ATGTATATAT GTACCTATAT GTATTTCAT TTGAAATTTT GGAATCCTGC 1200  
TCTATGTACA GTTTGTATT ATACTTTTTA AATCTTGAAC TTTATAAACA TTTCTGAAA 1260  
TCATTGATTA TTCTACAAAA ACATGATTTT AAACAGCTGT AAAATATTCT ATGATATGAA 1320  
TGTTTTATGC ATTATTTAAG CCTGTCTCTA TTGTTGGAAT TTCAGGT CAT TTTCAAAAT 1380  
ATTGTTGCAA TAAATATCCT TGAACACACA AAAAAAAAAA AA

50 Seq ID NO: 18 DNA sequence

Nucleic Acid Accession #: NM\_007115.1

Coding sequence: 69..902

1 11 21 31 41 51  
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GAATTCGCAC TGCTCTGAGA ATTTGTGAGC AGCCCCTAAC AGGCTGTTAC TTTACTACAA 60  
CTGACGATAT GATCATCTTA ATTTACTTAT TTCTCTTGCT ATGGGAAGAC ACTCAAGGAT 120  
GGGGATTCAA GGATGGAAAT TTTCATAACT CCATATGGCT TGAACGAGCA GCCCGTGTGT 180  
ACCACAGAGA AGCACGGTCT GGCAAAATACA AGCTCACCTA CGCAGAAGCT AAGGCGGTGT 240  
GTGAATTTGA AGGCGGCCAT CTCGCAACTT ACAAGCAGCT AGAGGCAGCC AGAAAAATTG 300  
GATTTATGCT CTGTGCTGCT GGTGGATGAG CTAAGGGCAG AGTTGGATAC CCCATTGTGA 360  
AGCCAGGGCC CAACTGATGA TTTGGAAAAA CTGGCATTAT TGATTATGGA ATCCGCTCTCA 420  
ATAGGAGTGA AAGATGGGAT GCCTATTGCT ACAACCCACA CGCAAAGGAG TGTGGTGGCG 480  
TCTTTACAGA TCCAAAGCGA ATTTTAAAT CTCCAGGCTT CCCAAATGAG TACGAAGATA 540  
ACCAAATCTG CTACTGGCAC ATTAGACTCA AGTATGGTCA GCGTATTAC CTGAGTTTTT 600  
TAGATTTTGA CCTTGAAGAT GACCCAGGTT GCTTGGCTGA TTATGTTGAA ATATATGACA 660  
GTTACGATGA TGTCCATGGC TTTGTGGGAA GATACTGTGG AGATGAGCTT CCAGATGACA 720  
TCATCAGTAC AGGAAATGTC ATGACCTTGA AGTTTCTAAG TGATGCTTCA GTGACAGCTG 780  
GAGGTTTCCA AATCAAAATAT GTTGCAATGG ATCCTGTATC CAAATCCAGT CAAGGAAAAA 840  
ATACAAGTAC TACTTCTACT GGAAATAAAA ACTTTTAGC TGGAAAGATT AGCCACTTAT 900  
AAAAAATAAA AAGGATGATC AAAACACACA GTGTTTATGT TGAATCTTT TGAACCTCT 960  
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ATCCCACTGC ATAGAAATAA CAAGCGTTAA CATTTTCATA TTTTCTTCT TCAGTCAATT 1140  
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CCTGCTCTAT GTACAGTTTT GTATTATACT TTTTAAATCT TGAACCTTAT GAACATTTTC 1260  
TGAAATCATT GATTATTCTA CAAAAACATG ATTTTAAACA CCTGTAAAAT ATTCATATGAT 1320  
ATGAATGTTT TATGCATTAT TTAAGCCTGT CTCTATTGTT GGAATTTTCAG GTCATTTTCA 1380  
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80 Seq ID NO: 19 DNA Sequence

Nucleic Acid Accession #: NM\_006398.1

Coding sequence: 19..516

1 11 21 31 41 51  
| | | | |

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5  
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60

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TGCTCTATCA TCTTACAATA AGTTCAAAAA CAACTGCTTC TCTGATGCCA TTGTGGTTTG 1140
TTTGACAACG TGCTCACTA GCGTGTGTC TGGATTGCT ATTTTCTTA TATTGGGACA 1200
CATGGCCCAT ATATCTGGAA AGGAAGTTTC TCAAGTTGTA AAATCAGGTT TTGATTGGC 1260
ATTCAITGCC TATCCAGAGG CTCTAGCCCA ACTCCCAGGT GGTCCATTTT GGTCCATATT 1320
ATTTTCTTTC ATGCTTTTAA CTTTGGGTCT CGATTCTCAG TTTGCTTCGA TTGAAACGAT 1380
CACAAACACA ATTCAGATT TATTTCCCAA AGTGATGAAG AAAATGAGGG TTCCCATAAC 1440
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TTACTGGGTT CATCTGATTG ACCACTTCTG TGCTGGATGG GGCATTTTAA TTGCAGCTAT 1560
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AATGATGATT GGAGCAAAGA GGTGGATATT CTGGCTATGG TGGAGAGCTT GCTGGTTTGT 1680
AATTAACGCT ATCCCTTTGA TTGCAATATT TATCTGGTCA TTGGTGCAAT TTCATAGACC 1740
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TTTCTGCATT ATTTGGATAC CAATTATGGC TATCATAAAA ATAATTCAGG CTAAGGGA 1860
CATCTTTCAA CGCCTTATAA GTTGCTGCAG ACCAGCTTCT AACTGGGGTC CATACCTGGA 1920
ACAAATCATG GGGGAAAGAT ATAAAGACAT GGTAGATCCT AAAAAAGAGG CTGACCATGA 1980
AATACCTACT GTTAGTGCCA GCAGAAAACC GGAATGAGAT CTCATTGAAA AAAATATATG 2040
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TGCAATATAA AAATGTGAAT CTCTTAATTC TCAGCCATGT GCTTATTATA TTTCTTTTAA 2220
GATTGTCTAT CTGTATAACA CACACACACA CACCTAAGAG TCTCTATTTC ACAATTATAT 2280
TTTTGTAAAT AGTATATGCA TTTTAAATAC ATTGGAGGCT TTATTTTGAA CTAATTTCTT 2340
AGAGAATAGT TATATTTTCT ATTACACAAG TTTAAAAATA TTATTAACCT GTATTTTCTT 2400
AATATACAAAT CTATCTTTTC CACAAATATG AGTGGGAAAT AAATCAGCAC ATTTGAAAGA 2460
AAGTGTAAAC ACTGAAGGCC TCACCTTAAT AGAAACGTGA TAAATATATG GACAAATGGA 2520
CTATACATAC TATAAGAGGA CIGTAGTTTA ATACTTTTGA CCCAATATG TTTAAAAACA 2580
TCGTGCATTT GTTACAGCTC ATGTTTTCTA TATGAACCTA GTCATTAAATG TTTCTTATAA 2640
AAAGTGAAT AAAGATGGAAA AATTAGGATC CTACAGCCAG TACGTGATAA ATCTAGAAAA 2700
TTGAGTTTGG AGTACTCTTT TTCCCATATA CAATCTTCTC TCCTTAGGTA ATTTGGAAGA 2760
AAACTATGAC CCATTTAATT TCTATTGTGT TTCACCAAAAT TCAGTGTGTG TCATTATACC 2820
TCTCTGAAAT ATAGGTTTAA TTTCAAATAG AATATGGACT TAAATGTAA TGAGAAACTG 2880
GCTTTAATCA ATTTAGCAT TTTATTACTG TAATACAGGG CTGATAGAGT GATTTTGCTT 2940
TATATGAGTC AGTTACTACT TACAGGTGAT AACTTGCATA CTATTGGAAG ATAAAGTTGT 3000
CAAACTTGTG AAGAATGAGA AAAGCCAAAT TAGAAAAATC TATGTCTAG TTTCTTACC 3060
AAGGATAATT AAATATATCA CTAAGAGCTT TATATATTGA TTATATATTG TTGACAACTG 3120
GTTTAAAGCAT CATAGCCTAT GATGATAAAC ACTGCCTATA TATGTAATA GCTTTTCATC 3180
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TTGTGCTTGG CAAATGAGTG ACAATAGAAG AAATAATTTT TCTTACACAT TTTAAACGTT 3420
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TTGAACCAACC TCTCTAAGTT ATGTACGTAT ATATAAGCTG AAATTGTGTT TGACATTCTG 3600
45 AGGGTTTCTT TTTTCTTTT CTTTCTTTT TTTTGTGTT GGGGGGCTGG GGGTCAGAGT 3660
CTTGTCTGTG TGCTTGGGCT GGAGTGCAGT GGCATGATCT CAGCTCACTG CAACCTCTGC 3720
CTTCTGGATT CAAGTGATTC TCCTGCCTCA GCCTCTTGAG TAGCTGGGAC TACAGGTGCC 3780
CGCCACCACA CCAGCTAATT TTTGTATTT TAGTAGAGGC GAAGTTTCCC CATGTTGGCC 3840
AGGCTGGTCT TGAACCTCCG ACCTCAAGTG ATCTGTCTAC CTCGGCTTCC TAAAGTGCTG 3900
50 AGATTACAGG TGTGAGCCAC CGTGCCCGGC CCATTCTAAG GGTTTTCTTT GAAGACAGGT 3960
CAAAATGCTG TAGTAAGTTT CAGGAGATTG TTAATTCTCT AGTTATACCA GATTTTATAA 4020
AATATTGAGT AATAGATGCT TAACAAGAGG TTAGAAATAC TTTTCTTAA TTTTAACTCA 4080
CAGTATGTGA CATGCAATTC ACCACTACAT TTTGGTGCTA TTTAAGGTGT GCAATTTTCT 4140
55 ATAGGTGACT TTTGCAATTC AGGGAAGATT TGGGCATATT AAATGAAAGA ATATCTAATT 4200
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GTTTGTGTCA CTATCTTTC AAGTGATGTA AGCAGAGATT TCAACAGAGT GCTTGGCATA 4320
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CATCATTTCTA CATAAATGGA AACATTTACA TCAAAATCCA CTTACTTTAA TGCGAACTTG 4440
60 GAGATAATTT ATGGTATTGT ATTGTAAACC ATTAATGAAA ACTTTTTCAC AGTTGAGTGA 4500
AATTAAATC ACTATATCTC
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Seq ID NO: 23 DNA sequence  
Nucleic Acid Accession #: NM\_006398.1  
Coding sequence: 19..516

65  
70  
75  
80

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1 11 21 31 41 51
| | | | |
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GAGGAATGGG ATTTAATGAC CTTTGATGCC AACCCATATG ACAGCGTGAA AAAAATCAAA 120
GAACATGTCC GTTCTAAGAC CAAGGTTCTT GTGCAGGACC AGSTTCTTTT GCTGGGCTCC 180
AAGATCTTAA AGCCACGGAG AAGCCTCTCA TCTTATGGCA TTGACAAAGA GAAGACCATC 240
CACCTTACCC TGAAGTGGT GAAGCCAGT GATGAGGAGC TGCCCTTGTT TCTTGTGGAG 300
TCAGGTGATG AGGCAAGAG GCACCTCCTC CAGGTGCGAA GGTCAGCTC AGTGGCACA 360
GTGAAGACAA TGATCGAGAC TAAGACGGGT ATAATCCCTG AGACCCAGAT TGTGACTTGC 420
AATGAAAGA GACTGGAAGA TGGGAAGATG ATGGCAGATT ACGGCATCAG AAAGGGCAAC 480
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TCCCAAAATT AATGAGAATG AGATGAGTAG AGTAAGATT GGGTGGGATG GGTAGGATGA 660
AGTATATTGC CCAACTCTAT GTTCTTTGA TTCTAACACA ATTAATTAAAG TGACATGATT 720
TTTACTAATG TATTACTGAG ACTAGTAAAT AAATTTTAA GGCAGAAATAG AGCATTG
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Seq ID NO: 24 DNA sequence  
Nucleic Acid Accession #: XM\_094741.1  
Coding sequence: 1..948

1 11 21 31 41 51

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|    |                                       |             |            |             |            |             |      |
|----|---------------------------------------|-------------|------------|-------------|------------|-------------|------|
|    | ATGAAGGCCA                            | ACTACAGCGC  | AGAGGAGCGC | TTTCTCCTGC  | TGGGTTTCTC | CGACTGGCCT  | 60   |
|    | TCCCTGCAGC                            | CGGTCTCTTT  | CGCCCTTGTC | CTCCTGTGCT  | ACCTCTCGAC | CTTGACGGGC  | 120  |
|    | AACCTCGGCG                            | TGGTGTGCT   | GGCGGTGCGC | GACCCGCGCC  | TGCACACGCC | CATGTACTAC  | 180  |
| 5  | TTCTCTGCCC                            | ACCTGGCCTT  | GGTAGACGCG | GGCTTCACTA  | CTAGCGTGGT | GCCGCCGCTG  | 240  |
|    | CTGGCCAACC                            | TGCGCGGACC  | AGCGCTCTGG | CTGCCGCGCA  | GCCACTTGAC | GGCCCAAGCTG | 300  |
|    | TGCGCATCGC                            | TGGCTCTGGG  | TTGCGCCGAA | TGCGTCTCTC  | TGGCGGTGAT | GGCTCTGGAC  | 360  |
|    | CGCGCGGCGC                            | CAGTGTGCGC  | CCGCTGCGTC | TATGCGGGGC  | TGCTCTCCCC | GCGCCTATGT  | 420  |
|    | CGCACGCTGG                            | CCAGCGCCTC  | CTGGCTAAGC | GGCCTCACCA  | ACTCGGTTGC | GCAAACCGCG  | 480  |
| 10 | CTCTGGCTGG                            | AGCGGCGGCT  | GTGCGCGCCC | CGCCTGCTGG  | ACCACTTCAT | CTGTGAGCTG  | 540  |
|    | CGCGCGTTGC                            | TCAAAGCTGG  | CTGCGGAGGC | GACGGAGACA  | CTACCGAGAA | CCAGATGTTT  | 600  |
|    | GCGCGCGCGC                            | TGGTCTATCT  | GCTGCTGCGC | TTTGCGGTCA  | TCCTGGCCTC | CTACGTTGCC  | 660  |
|    | GTGGCGCGAG                            | CTGTCTGTTG  | CATGCGGTTC | AGCGGAGGCC  | GGAGGAGGGC | GGTGGGCGAG  | 720  |
|    | TGTGGGTCCC                            | ACCTGACAGC  | CGTCTGCGCT | TTCTACGGCT  | CGGCCATCTA | CACCTACCTG  | 780  |
| 15 | CAGCCCGCGC                            | AGCGCTACAA  | CCAGGCACGG | GGCAAGTTGC  | TATCGCTCTT | CTACACCGTG  | 840  |
|    | GTCAACACCTG                           | CTCTCAACCC  | GCTCATCTAC | ACCCTCAGGA  | ATAAGAAAGT | GAAGGGGGCA  | 900  |
|    | GCGAGGAGGC                            | TGCTGCGGAG  | TCTGGGGAGA | GGCAGGCTG   | GGCAGTGA   |             |      |
| 20 | Seq ID NO: 25 DNA Sequence            |             |            |             |            |             |      |
|    | Nucleic Acid Accession #: NM_018685.1 |             |            |             |            |             |      |
|    | Coding sequence: 156..3533            |             |            |             |            |             |      |
|    | 1                                     | 11          | 21         | 31          | 41         | 51          |      |
|    | CTGGAAGCCG                            | AGACGAGAGG  | ACAGCTGGTT | GTGGGAGAGT  | TCCCCCGCCT | CAGACTCCTG  | 60   |
| 25 | GTTTTTTCCA                            | GGAGACACAC  | TGAGCTGAGA | CTCACTTTTC  | TCCTCCTGAA | TTTGAACCAC  | 120  |
|    | CGTTTCCATC                            | GTCTCGTAGT  | CCGACGCGCT | GCGCAGTGA   | TCCGTTTACG | GAGAACTCGC  | 180  |
|    | TGGAGCGAAC                            | CCGTGCCAGG  | CGAGAGAATC | TTCCAGAGAA  | AATGGCTAGG | AGGCCACACG  | 240  |
|    | CAGCTCCAAG                            | GTCTATGACT  | CATGCTAAGC | GAGCTAGACA  | GCCACTTTCA | GAAGCAAGTA  | 300  |
|    | ACCAGCAGCC                            | CCCTCTCGGT  | GGTGAAGAGA | AATCTTGTAC  | AAAAACCATC | CCATCAAAAA  | 360  |
| 30 | AACGCTGTTC                            | TGACACACT   | GAAGTAGAAG | TTTCTAACTT  | GGAAAAATAA | CAACCAAGTTG | 420  |
|    | AGTCGACATC                            | TGCMAAATCT  | TGTTCTCCAA | GTCTGTGTTC  | TCCTCAGGTG | CAGCCACAAG  | 480  |
|    | CAGCAGATAC                            | CATCAGTGAT  | TCGTGTGCTG | TCCCGGCATC  | ACTGCTGGCG | ATGAGGAGAG  | 540  |
|    | GGCTGAATCT                            | AAGATTGGAA  | GCAACTGCAG | CCTCCTCAGT  | TAAAAACAGT | ATGCAAAAAAC | 600  |
|    | TTGCAGAGCA                            | ACGCGCGCGT  | TGGGATAATG | ATGATATGAC  | AGATGACATT | CCTGAAAGCT  | 660  |
| 35 | CACCTCTTCT                            | ACCAATGCCA  | TCAGAGGAAA | AGGCTGCTTC  | CCCTCCCAAA | CCTCTGCTTT  | 720  |
|    | CAAAATGCCTC                           | GGCAACTCCA  | GTGGCAGAA  | GGGGCCGCTC  | GGCCAATCTT | GCTGCAACTA  | 780  |
|    | TTTGCTCTCT                            | GGAAAGATGAT | GTAATCACT  | CATTGTGAAA  | ACAAAACAGT | GTACAAGAAC  | 840  |
|    | AGCCTGGTAC                            | CGCTTGTGTT  | TCCAAATTTT | CCTCTGCAAG  | TGGAGCATCT | CTAGGATCA   | 900  |
|    | ATAGCAGCAG                            | TGTTAAGCAG  | GAAGCTACAT | TCTGTTCCTC  | AAGGGATGGC | GATGCTCTTT  | 960  |
| 40 | TGAATAAAGC                            | CCTATCCTCA  | AGTGTGATG  | ATGCGTCTTT  | GGTTAATGCC | TCAATTTCCA  | 1020 |
|    | GCTCTGTGAA                            | AGCTACTTCT  | TCTCCAGTGA | AATCTACTAC  | ATCTATCACT | GATGCTAAAA  | 1080 |
|    | GTGTGAGGGG                            | ACAAAATCCT  | GAGCTACTTC | CAAAAACCTC  | TATTAGTCTC | CTGAAAACGG  | 1140 |
|    | GGGTATCGAA                            | ACCAATTTGG  | AAGTCAACTT | TATCCCAGAC  | AGTTCCATCC | AAGGGAGAAAT | 1200 |
|    | TAAGTAGAGA                            | AATTTGTCTG  | CAATCTCAAT | CTAAGACAAA  | ATCTACGACA | CCAGGAGGAA  | 1260 |
| 45 | CAGGAATTTA                            | GCCTTTCCCTG | GAAACGTTTG | GAGAGCGTTG  | TCAAGAACAT | AGCAAGAGAA  | 1320 |
|    | GTCCAGCTCG                            | TAGCACACCC  | CACAGAACCC | CCATTATTAC  | TCCAAATACA | AAGGCCATCC  | 1380 |
|    | AAGAAAGATT                            | ATTCAAGCAA  | GACACATCTT | CATCTACTAC  | CCATTAGACA | CAACAGCTCA  | 1440 |
|    | AGCAGGAAGC                            | TCAAAAAGAA  | CTAGCATGTC | TTCTGTGGCG  | ATTTGACAAG | GGCAATATAT  | 1500 |
| 50 | GGAGTGCGAG                            | AAAAGGCGGA  | AACTCAAAAA | GCAACAACT   | AGAAACCAAA | CAGGAACTC   | 1560 |
|    | ACTGTGAGAG                            | CACCTCCCTC  | AAAAAACACC | AAGGTGTTTC  | AAAAACTCAG | TCACTTCCAG  | 1620 |
|    | TAACAGAAAA                            | GGTGACCGAA  | AACCAGATAC | CAGCCAAAAA  | TTCTAGTACA | GAACCTAAG   | 1680 |
|    | GTCTTCACTG                            | ATGCGAAATG  | ACGAAATCTA | GCCTTTTGAA  | AATAACATTG | TTTTTAGAAG  | 1740 |
|    | AGGACAAATC                            | CTTAAAGTA   | ACATCAGACC | CAAAGGTTGA  | GCAGAAAAAT | GAAGTGATAC  | 1800 |
| 55 | GTGAAATTGA                            | GATGAGTGTG  | GATGATGATG | ATATCAATAG  | TTGGAAGTA  | ATTAATGACC  | 1860 |
|    | TCCTTCACTG                            | TGTCCTTAGAG | GAAGGTGAAC | TAGATATGGA  | GAAGAGCCAA | GAGGAGATGG  | 1920 |
|    | ATCAAGCATT                            | ACGAAGAAGC  | AGGAAGATGC | ACTGAATATC  | TCCTCAATGT |             | 1980 |
|    | CTTTACTTGC                            | ACCAATGGCA  | CAACAGTTG  | GTGTGGTAAG  | TCCAGAGAGT | TTAGTGTCCA  | 2040 |
|    | CACCTAGACT                            | GGAAATGAAA  | GACACCAGCA | GAAGTGATGA  | AAGTCCAAAA | CCAGGAAAT   | 2100 |
| 60 | TCCAAAGAAC                            | TGCTGTCCCT  | CGAGCTGAAT | CTGGTGATAG  | CCTTGGTTCT | GAAGATCGTG  | 2160 |
|    | ATCTTCTTTA                            | CAGCATTGAT  | GCATATAGAT | CTCAAGATT   | CAAGAGAAAC | GAACGTCCAT  | 2220 |
|    | CAATAAAGCA                            | GGTGATTGTT  | CGGAAGGAAG | ATGTTACTTC  | AAAACCTGGT | GAAAAAAATA  | 2280 |
|    | ATGCCCTTCC                            | TGTCAAGATT  | AATATCAAAC | AGAAAAATGCA | GGAATCAAT  | AACGAAATAA  | 2340 |
|    | ATATGCAACA                            | GACAGTGATC  | TATCAAGCTA | GCCAGGCTCT  | TAAGTGCTGT | GTGTATGAAG  | 2400 |
| 65 | AACATGGAAA                            | AGGTGCCCTA  | GAAGAAAGCT | AAGCAGAAAG  | ACTTCTTCTA | ATTGCAACTG  | 2460 |
|    | GGAGAGAGAC                            | ACTTTTGATT  | GATGAATTGA | ATAAATTGAA  | GAACGAAGGA | CCTCAGAGGA  | 2520 |
|    | AGRAATAAGC                            | TAGTCCCCAA  | AGTGAATTTA | TGCCATCCAA  | AGGATCAGTT | ACTTTGTGAG  | 2580 |
|    | AAATCCGCTT                            | GCCTCTAAAA  | GCAGATTTTG | TCTGCAGTAC  | GGTTCAGAAA | CCAGATGCCAG | 2640 |
|    | CAAAATACTA                            | TTACTTAATT  | ATACTAAAAG | CAGGAGCTGA  | AAATATGGTA | GCCACACCAT  | 2700 |
| 70 | TAGCAAGTAC                            | TTCAAACTCT  | CTTAAACGGT | ATGCTCTGAC  | ATTCACTACT | ACATTTACTC  | 2760 |
|    | TGCAAGATGT                            | ATCCAATGAC  | TTTGAAATAA | ATATTGAAGT  | TTACAGCTTG | GTGCAAAAGA  | 2820 |
|    | AAGATCCCTC                            | AGGCTTGTAT  | AAGAAGAAAA | AAACATCCAA  | GTCCAAGGCT | ATTACTCCAA  | 2880 |
|    | AGCGACTCCT                            | CACATCTATA  | ACCACAAAAA | GCAACATTCA  | TTCTTCAGTC | ATGGCCAGTC  | 2940 |
|    | CAGGAGGTCT                            | TAGTGCTGTG  | CGAACAGACA | ACTTCGCCCT  | TGTTGGATCT | TACACATTAT  | 3000 |
| 75 | CATTGTCTTC                            | AGTAGGAAAT  | ACTAAGTTTG | TTCTGGACAA  | GGTCCCTTTT | TTATCTTCTT  | 3060 |
|    | TGGAAGGTCA                            | TATTTATTTA  | AAAATAAAAT | GTCAAGTGAA  | TTCCAGTGTT | GAAGAAAGAG  | 3120 |
|    | GTTTTCTAAC                            | CATATTTGAA  | GATGTTAGTG | GTTTTGCTGC  | CTGGCATCGA | AGATGCTGTG  | 3180 |
|    | TTCTTTCTGG                            | AAACTGTGTA  | TCTTATTGGA | CTTATCCAGA  | TGATGAGAAA | CGCAAGAAATC | 3240 |
|    | CCATAGGAAG                            | GATAAACTCG  | GCTAATTGTA | CCAGTCGTCA  | GATAGAAACA | GCCAACAGAG  | 3300 |
|    | AATTTTGTGC                            | AAGACGCAAC  | ACTTTTGAAT | TAATTACTGT  | CCGACCAACA | AGAGAAGATG  | 3360 |
| 80 | ACCGAGAGAC                            | TCTTGTGAGC  | CAATGCAGGG | ACACACTCTG  | TGTTACCAAG | AACTGGCTGT  | 3420 |
|    | CTGCAGATAC                            | TAAAGAAAGG  | CGGGATCTCT | GGATGCAAAA  | ACTCAATCAA | GTTCTTGTGT  | 3480 |
|    | ATATTGCGCT                            | CTGGCAACCT  | GATGCTTGCT | ACAAACCTAT  | TGGAAAGCCT | TAAACCGGGA  | 3540 |
|    | AATTTCCATG                            | CTATCTAGAG  | GTTTTTGATG | TCATCTTAAG  | AAACACACTT | AAGAGCATCA  | 3600 |
|    | GATTTACTGA                            | TGTCATTTTA  | TGCTTTAAGT | ACGAAAGGGT  | TTGTGCCAAT | ATTCACTACG  | 3660 |

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|    |  |             |            |             |             |             |      |
|----|--|-------------|------------|-------------|-------------|-------------|------|
|    | TATTATGCAG   | TATTTATATC  | TTTTGTATGT | AAAACCTTAA  | CTGATTTCTG  | TCATTTCATCA | 3720 |
|    | ATGAGTAGAA   | GTAATATACAT | TATAGTTGAT | TTTGCTAAAT  | CTTAATTTAA  | AAGCCTCATT  | 3780 |
|    | TTCCTAGAAA   | TCATATTATT  | CAGTTATTCA | TGACATATT   | TTTTTAAAG   | TAAGAAATTC  | 3840 |
| 5  | TGAGTTGTCT   | TCTTGGAGCT  | GTAGGTCTTG | AAGCAGCAAC  | GTCTTTCAGG  | GGTTGGAGAC  | 3900 |
|    | AGAAACCCAT   | TCTCCAATCT  | CAGTAGTTTT | TTGCGAAAGGC | TGTGATCATT  | TATTGATCGT  | 3960 |
|    | GATATGACTT   | GTIAC TAGGG | TACTGAAAAA | AATGTCTAAG  | GCCTTTACAG  | AAACATTTTT  | 4020 |
|    | AGTAATGAGG   | ATGAGAACTT  | TTTCAAATAG | CAAATATATA  | TTGGCTTAAA  | GCATGAGGCT  | 4080 |
|    | GTCTTCAGAA   | AAGTGATGTG  | GACATAGGAG | GCAATGTGTG  | AGACTTGGGG  | GTTCAATATT  | 4140 |
| 10 | TTATATAGAA   | GAGTTAATAA  | GCACATGGTT | TACATTTACT  | CAGCTACTAT  | ATATGCCAGTG | 4200 |
|    | TGGTGCACAT   | TTTCACAGAA  | TTCTGGCTTC | ATTAAGATCA  | TTATTTTTCG  | TGCGTAGCCT  | 4260 |
|    | ACAGACTTAG   | CATATTAGTT  | TTTTCTACTC | CTACAAGTGT  | AAATTGAAAA  | ATCTTTATAT  | 4320 |
|    | TAAAAAAGTA   | AAC TGTTATG | AAGCTGCTAT | GTACTAATAA  | TACTTTGCTT  | GCCAAAGTGT  | 4380 |
|    | TTGGGTTTTG   | TTGTTGTTTG  | TTTGTTTGT  | TGTTTTTGGT  | TCATGAACAA  | CAGTGTCTAG  | 4440 |
| 15 | AAACCCATTT   | TGAAAGTGGA  | AAATTATTAA | GTCACCTATC  | ACCTTTAAAC  | GCCTTTTTTT  | 4500 |
|    | AAAATTATAA   | AATATTGTAA  | AGCAGGGTCT | CAACTTTTAA  | ATACACTTTG  | AAC TCTTCT  | 4560 |
|    | CTGAATTATT   | AAAGTCTCTT  | ATGACCTCAT | TTATAAACAC  | TAAATTCTGT  | CACCTCCGT   | 4620 |
|    | CATTTTATTT   | TTTATTCATT  | CAAATGTATT | TTTTCTGTG   | CATATTATAA  | AAATATATTT  | 4680 |
|    | TATGAGCTCT   | TACTCAAATA  | AATACCTGTA | AATGTCTAAA  | GG          |             | 4722 |
| 20 | Seq ID NO: 26 DNA Sequence<br>Nucleic Acid Accession #: NM_018098.4<br>Coding sequence: 29..2680 |             |            |             |             |             |      |
|    | 1  | 11          | 21         | 31          | 41          | 51          |      |
| 25 | AGAGTGCTGA   | TTTGAAGAA   | TACAAATCAT | GGCTGAAAAT  | AGTGTATTAA  | CATCCACTAC  | 60   |
|    | TGGGAGGACT   | AGCTTGGCAG  | ACTCTTCCAT | TTTGTATTCT  | AAAGTTACTG  | AGATTTCCAA  | 120  |
|    | GGAAAACCTTA  | CTTATTGGAT  | CTACTTCATA | TGTAGAAGAA  | GAGATGCCTC  | AGATTGAAC   | 180  |
|    | AAGAGTGATA   | TGGTTCAAG   | AAGCTGGAAA | ACAAGAAGAA  | CTTATAAAG   | CCTTAAAGGA  | 240  |
| 30 | CATTAAAGTG   | GGCTTTGTAA  | AGATGGAGTC | AGTGGAAAGAA | TTTGAAGGTT  | TGGATTCTCC  | 300  |
|    | GGAAATTTGAA  | AATGTATTGT  | TAGTCACGGA | CTTTCAGGAT  | TCTGTCTTTA  | ATGACCTCTA  | 360  |
|    | CAAGGCTGAT   | TGIAGAGTTA  | TTGGACCACC | AGTTGTATTA  | AATTGTTTAC  | AAAAAGGAGA  | 420  |
|    | GCCTTTGCCA   | TTTTCATGTC  | GCCCGTTGTA | TTGTACAAGT  | ATGATGAATC  | TAGTACTATG  | 480  |
|    | CTTTACTGGA   | TTTAGGAAAA  | AAGAAGAACT | AGTCAGTTG   | GTGACATTGG  | TCCATCACAT  | 540  |
| 35 | GGGTGGAGTT   | ATTGCAAAAAG | ACTTTAATTC | AAAAGTTACA  | CATTGGTGGG  | CAAATTGTAC  | 600  |
|    | ACAAGGAGAA   | AAATTCAGGG  | TTGCTGTGAG | TCTAGGTACT  | CCAATTATGA  | AGCCAGAATG  | 660  |
|    | GATTTATAAA   | GCTTGGGAAA  | GGCGGAATGA | ACAGGATTTC  | TATGCAGCAG  | TTGATGACTT  | 720  |
|    | TAGAAATGAA   | TTTAAAGTTC  | CTCCATTTCA | AGATTGTATT  | TTAAGTTTCC  | TGGGATTTTC  | 780  |
|    | AGATGAAGAG   | AAACCCAATA  | TGGAAGAAAT | GACTGAAATG  | CAAGGAGGTA  | AATATTTACC  | 840  |
| 40 | GCTTGGAGAT   | GAAAGATGCA  | CTCACCTTGT | AGTTGAAGAG  | AATATAGTAA  | AAGATCTTCC  | 900  |
|    | CTTTGAACCT   | TCAAAGAAAC  | TTTATGTTGT | CAAGCAAGAG  | TGTTCTGGG   | GAAGCATTCA  | 960  |
|    | AATGGATACC   | CGAGCTGGAG  | AAACTATGTA | TTTATATGAA  | AAGGCAATA   | CTCCTGAGCT  | 1020 |
|    | CAAGAAATCA   | GTGCTCAATG  | TTTCTCTAAA | TACCCTTAAC  | AGCAATCGCA  | AACGACGTGG  | 1080 |
|    | TTTAAAGAAA   | ACACTTGTCT  | AGCTTTCAAG | AGAGACAGAC  | GTGTCAACAT  | TTCCACCCCG  | 1140 |
| 45 | TAAAGCGCCA   | TCAGCTGAGC  | ATTCCTTTTC | CATAGGGTCA  | CTCCTAGATA  | TCTCCAACAC  | 1200 |
|    | ACCAGAGTCT   | AGCAATTAAT  | ATGGAGACAC | CCCAAGTCT   | TGTAATAAGT  | CTTCTAAAAAG | 1260 |
|    | CTCCACTCCA   | GTTCCTTCAA  | AGCAGTCAGC | AAGGTGGCAA  | GTTCGAAAAG  | AGCTTTATCA  | 1320 |
|    | AACTGAAAGT   | AATTTATGTTA | ATATATTGGC | AACAATTATT  | CAGTTATTTC  | AAGTACCATT  | 1380 |
|    | GGAAGAGGAA   | GGACAACGTG  | GTGGACCTAT | CCTTGCACCA  | GAGGAGATTA  | AGACTATTTT  | 1440 |
| 50 | TGGTAGCATC   | CCAGATATCT  | TTGATGTACA | CACTAAGATA  | AAGGATGATC  | TTGAAGACCT  | 1500 |
|    | TATAGTTAAT   | TGGGATGAGA  | GCAAAAGCAT | TGGTGACATT  | TTTCTGAAAT  | ATTCAAARGA  | 1560 |
|    | TTTGGTAAAA   | ACCTACCCTC  | CCTTTGTAAA | CTTCTTTGAA  | ATGAGCAAGG  | AAACAATTAT  | 1620 |
|    | TAAATGTGAA   | AAACAGAAAC  | CAAGATTTC  | TGCTTTTCTC  | AAGATAAACCC | AAGCAAAACC  | 1680 |
|    | AGAATGTGGA   | CGGCGAGGCC  | TTGTTGAAC  | TCTTATCCGA  | CCAGTACAGA  | GTTTACCCAG  | 1740 |
| 55 | TGTTGCATTA   | CTTTTAAATG  | ATCTTAAAG  | GCATACAGCT  | GATGAAAAAT  | CAGACAAAAG  | 1800 |
|    | CACCTTTAGAA  | AAAGCTATTG  | GATCACTGAA | GGAAGTAATG  | ACGCATATTA  | ATGAGGATAA  | 1860 |
|    | GAGAAAACAA   | GAACTCAAAA  | AGCAAAATTT | TGATGTTGTT  | TATGAAGTAG  | ATGGATGCCC  | 1920 |
|    | AGCTAATCTT   | TTATCTTCTC  | ACCGAAGCTT | AGTACAGCGG  | GTGAAACAA   | TTTCTCTAGG  | 1980 |
|    | TGAGCACCCC   | TGTGACAGAG  | GAGAACAAGT | AACTCTCTTC  | CTCTTCAATG  | ATTGCCTAGA  | 2040 |
| 60 | GATAGCAAGA   | AAAGGGCACA  | AGGTTATTGG | CACCTTTTAG  | AGTCCTCATG  | GCCAAACCCG  | 2100 |
|    | ACCCACAGCT   | TCTCTTAAGC  | ATATTCACCT | AATGCCTCTT  | TCTCAGATTA  | AGAAGGTATT  | 2160 |
|    | GGACATAAGA   | GAGACAGAGG  | ATTGCCATAA | TGCTTTTGCC  | TTGCTTGTGA  | GGCCACCAAC  | 2220 |
|    | AGAGCAGGCA   | AATGTGCTAC  | TCAGTTTCCA | GATGACATCA  | GATGAACITC  | CAAAAGAAAA  | 2280 |
|    | CTGGCTAAAG   | ATGCTGTGTC  | GACATGTAGC | TAACACCATT  | TGTAAGCAG   | ATGCTGAGAA  | 2340 |
| 65 | TCTTATTTAT   | ACTGCTGATC  | CAGAATCCTT | TGAAGTAAAT  | ACAAAAGATA  | TGGACAGTAC  | 2400 |
|    | ATTGAGTAGA   | GCATCAAGAG  | CAATAAAAAA | GACTTCAAAA  | AAGGTTACAA  | GAGCATTTCT  | 2460 |
|    | TTTCTCCAAA   | ACTCCAAAAA  | GAGCTCTTCG | AAGGCTCTTT  | ATGACATCCC  | ACGGCTCAGT  | 2520 |
|    | GGAGGGAAGA   | AGTCCTTTCCA | GCAATGATAA | GCATGTAATG  | AGTCGCTCTT  | CTAGCACATC  | 2580 |
|    | ATCATTAGCA   | GGTATCCCTT  | CTCCCTCCCT | TGTCAGCCTT  | CCTTCTCTCT  | TTGAAAGGAG  | 2640 |
| 70 | AAGTCATACG   | TTAAGTAGAT  | CTACAACCTA | TTTGATATGA  | AGCGTTACCA  | AAATCTTAAA  | 2700 |
|    | TTATAGAAAT   | GTATAGACAC  | CTCATACTCA | AATAAGAAAC  | TGACTTAAAT  | GGTACTTGTA  | 2760 |
|    | ATTAGCACTT   | GGTGAAGAGT  | GGAAGGAAGA | TAAATAACAC  | TAAACTATGC  | TATTTGATTT  | 2820 |
|    | TTCTTCTTGA   | AAGAGTAAGG  | TTTACCTGTT | ACATTTTCAA  | GTTAATTCAT  | GTAATAAATG  | 2880 |
|    | ATAGTGATTT   | TGATGTAATT  | TATCTCTTGT | TTGAATCTGT  | CATTCAAAGG  | CCAATAATTT  | 2940 |
| 75 | AAGTTGCTAT   | CAGCTGATAT  | TAGTAGCTTT | GCAACCTTGA  | TAGAGTAAAT  | AAATTTTATG  | 3000 |
|    | GGCGGGTGCC   | AAATACTGCT  | GTGAATCTAT | TTGTATAGTA  | TCCATGAATG  | AATTTATGGA  | 3060 |
|    | AATAGATATT   | TGTGCGCTC   | AATTTATGCA | GAGATTAAAT  | GACATCATAA  | TACTGGATGA  | 3120 |
|    | AAACTTGCAT   | AGAAATCTGA  | TTAAATAGTG | GGTCTGTTTC  | ACATGTGCAG  | TTTGAAGTAT  | 3180 |
|    | TTAAATAACC   | ACTCCTTTCA  | CAGTTTATTT | TCTTCTCAAG  | CGTTTTCAG   | ATCTAGCATG  | 3240 |
| 80 | TGGATTTTAA   | AAGATTTGCC  | CTCATTAACA | AGAATAACAT  | TTAAAGGAGA  | TGTTTCAAAA  | 3300 |
|    | ATATTTTTCG   | AAATTGAGAT  | AAGGACAGAA | AGATTGAGAA  | ACATTGTATA  | TTTTGCAAAA  | 3360 |
|    | ACAAGATGTT   | TGTAGCTGTT  | TCAGAGAGAG | TACGGTATAT  | TTATGGTAAAT | TTTATCCACT  | 3420 |
|    | AGCAAACTCT   | GATTTAGTGT  | GATAGTGTTG | GGAATTTTAT  | TTTGAAGGAT  | AAGACCATGT  | 3480 |
|    | GAAAATTCTG   | GTAAGACTGT  | TTGTACCCT  | TCATGAAATA  | ATTCTGAAGT  | TGCCATCAGT  | 3540 |
|    | TTTACTAATC   | TTCTGTGAAA  | TGCATAGATA | TGCGCATGTT  | CAACTTTTAA  | TTGTGGTCTT  | 3600 |

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5  
ATAATTAAT GTAAATTTGA AAATTCATTT GCTGTTTCAA AGTGTGATAT CTTTCACAAT 3660  
AGCCCTTTT TAGTCAGTAA TTCAGAAATA TCAAGTTCAT ATGGATAAAT GCATTTTTAT 3720  
TTCCATTTTC TTTAGGGAGT GCTACAAATG TTTGTCACTT AAATTTCAAG TTTCTGTTTT 3780  
AATAGTTAAC TGACTATAGA TTGTTTTCTA TGCCATGTAT GTGCCACTTC TGAGAGTAGT 3840  
AAATGACTCT TTGCTACATT TTAAGAGCAA TTGTATTAGT AAGAACTTTG TAAATAAATA 3900  
CCTAAACCC AAGTGT 3916

10 Seq ID NO: 27 DNA Sequence  
Nucleic Acid Accession #: NM\_002497.1  
Coding sequence: 135..1472  
1 11 21 31 41 51  
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GTTCCTGTG CCTGGAGCTC CGCACTTGGC GCGCAACCTG CGTGAGGCAG CGCGACTCTG 120  
15 GCGACTGGCC GGCCATGCCT TCCCGGGCTG AGGACTATGA AGTGTGTAC ACCATTGGCA 180  
CAGGCTCCTA CGGCCGCTGC CAGAAATCC GGAGGAAGAG TGATGGCAAG ATATTAGTTT 240  
GGAAAGAAT TGACTATGGC TCCATGACAG AAGCTGAGAA ACAGATGCTT GTTCTGAAG 300  
TGAATTTGCT TCGTGAACCT AAACATCCAA ACATCGTTTC TTAATATGAT CGGATTATTG 360  
ACCGAGCAAA TACAACACTG TACATTGTAA TGGAATATTG TGAAGGAGGG GATCTGGCTA 420  
20 GTGTAATTAC AAAGGGAACC AAGGAAAGGC AATACTTAGA TGAAGAGTTT GTTCTCGAG 480  
TGATGACTCA GTTGACTCTG GCCCTGAAGG AATGCCACAG ACGAAGTGAT GGTGGTCATA 540  
CCGTATTGCA TCGGGATCTT AAACCGCCA ATGTTTTCTT GGTGGCAAG CAAAACGTCA 600  
AGCTTGGAGA CTTTGGGCTA GCTAGAATAT TAAACCATGA CACGAGTTT GCAAAAACAT 660  
TTGTTGGCAC ACCTTATTAC ATGTCTCCTG AACAATGAA TCGCATGTCC TACAATGAGA 720  
25 AATCAGATAT CTGGTATTG GGCTGCTTGC TGTATGAGTT ATGTGCATTA ATGCCTCCAT 780  
TTACAGCTTT TAGCCAGAAA GAACTCGCTG GGAATTCAG AGAAGGCAAA TTCAGGCGAA 840  
TTCCATACCG TTAATCTGAT GAATTGAATG AAATTATTAC GAGGATGTTA AACTTAAAGG 900  
ATTACACTCG ACCTTCTGTT GAAGAAATTC TTGAGAACCC TTTAATAGCA GATTTGGTTG 960  
30 CAGAGCAGCA AAGAAGAAAT CTTGAGAGAA GAGGCGGACA ATTAGGAGAG CCAGAAAAAT 1020  
CGCAGAGTTC CAGCCCTGTA TTGAGTGAGC TGAACACTGAA GGAATTCAG TTACAGGAGC 1080  
GAGAGCGAGC TCTCAAAGCA AGAGAAGAAA GATTGGAGCA GAAAGAACAG GAGCTTTGTG 1140  
TTGCTGAGAG ACTAGCAGAG GACAACTGGC CTAGAGCAGA AAATCTGTTG AAGAACTACA 1200  
GCTTGCTAAA GGAACGGGAG TTCTGTCTC TGGCAAGTAA TCCAGAACTT CTTAATCTTC 1260  
CATCTCTAGT AATTAGAAG AAAGTTTCAAT TCAGTGGGGA AAGTAAAGAG AACATCATGA 1320  
35 GGAGTGAGAA TTCTGAGAGT CAGCTCACAT CTAAGTCCAA GTGCAAGGAC CTGAAGAAAA 1380  
GGCTTCAGGC TGCCAGGCTG CGGCTCAAG CCCTGTGAGA TATTGAGAAA AATTACCAAC 1440  
TGAAAAGCAG ACAGATCCTG GGCATGCGCT AGCCAGGTAG AGAGACACAG AGCTGTGTAC 1500  
AGGATGTAAT ATTACCAACC TTTAAAGACT GATATTCAAA TGCTGTAGTG TTGAATACTT 1560  
GGCCCCATGA CCATGCCTT TCTGTATAGT ACACATGATA TTTCGGAATT GGTTTTACTG 1620  
40 TTCTTCAGCA ACTATTGTAC AAAATGTTCA CATTTAATTT TTCTTTCTTC TTTAAGAAC 1680  
ATATTATAAA AAGAATACTT TCTTGGTTGG GCTTTTAATC CTGTGTGTGA TTAAGTAGTAG 1740  
GAACATGAGA TGTGACATTC TAAATCTTGG GAGAAAAAAT AATATTAGGA AAAAAATATT 1800  
TATGACAGAA GAGTAGCACT CACTGAATAG TTTTAAATGA CTGAGTGGTA TGCTTACAT 1860  
TGTCATGTCT AGATTTAAAT TTTAAGTCTG AGATTTTAAA TGTTTTTGAG CTTAGAAAAAC 1920  
45 CCAGTTAGAT GCAATTTGGT CATTAAATACC ATGACATCTT GCTTATAAAT ATTCCATTGC 1980  
TCTGTAGTTC AAATCTGTTA GCTTTGTGAA AATTATCATC TGTGATGTTT GTATTTCTTT 2040  
TTTTTTCTG TTTAACAGAA TATGAGCTGT CTGTCAATTA CCTACTTCTT TCCCACTAAA 2100  
TAAAGAATT CTTCACTTA 2119

50 Seq ID NO: 28 DNA Sequence  
Nucleic Acid Accession #: Eos sequence  
1 11 21 31 41 51  
GGGAGTACA ATGTTTTGTC ATTATTCAC TGTAGTGAA AAAGGCAGTG AATTTAATAG 60  
55 AAAATAACTT CGTAGAGCAA AATCTCAGGT GTGTTTTTT AGTGCCGAGC TCTTGGATGA 120  
TGGGTTCCCTA GAAGCTCTCA ACATCTCTTC TTAATTGGAG AAAGTGTTAA GCCCCAAAGT 180  
AGCTGGAGCA GTACATCTTC AATTTTTGAC AAGAAAACAG GAACTTGATT ACTTTGAGTG 240  
CTATTCAATTA GTTCTGCTT TCAATTGAGAA TGCAACAAA GCCAACTAGG CTGCTGCTAA 300  
CTCCTTGCNN NNNNNNNNN NNNNNNNNN NNNNNNNNN NNNNNNNNN NNNNNNNNN 360  
60 CTAGGGAGTC TTTCTCTGT AGTGACTGCT GCACAAATGA TCTTCAAAGC ATTTTAGCCA 420  
CCAGAGGAAT TCTCTGAAA TACCCAAAT CCATCAGTAT CTTGAATCAT GCTGGATTTT 480  
GAAGAATTTT TAACAAGCCA TGTAAGGGG GCTCTCTGGC CTTGAAATAG TGATGTTTTT 540  
TATACAGAAA GGAGAAATGCA GAATGGTCAG ACTACCATGC ACTGTTAAAT TTGATTTCAA 600  
GAAATTCAG GAAACTTTTC CAAAGTTCCA TCTCACAGAA ATTATTTTAA CAAAGAAATC 660  
65 CAAGATAAGT TTAGTTTTAT GGAAGACTTT TATGTGGTTT TTAATCACTC TTCATCTCAG 720  
ACATCAACAG ATGATTACAT CACTTATTTA GCTAGTAAAT TTATTAATAT AAAAATCTAG 780  
AGACATTCCA ATATCCACAT TGCTTACACC ATTAGGCATA GATTGAGTGT CAGCTATGAC 840  
AATTGAAAT AAGCTGTTTT GTGATTTAAA GGTTTAAATTT TCTCTAACCA AACTGCTTGA 900  
70 TCCAGATGCA GGAATGCAAA TGTTAATATT TGTTCTGGAA GAACAATCAA ATAAGACTTA 960  
AGAGGAAAAG GAATGGCCAC AATCCACCTG AAATTTTTTT TTAAGAAAGT TGCAGCCTAC 1020  
TAAATCAGAA TGAAAATAGA AGTACAAGAT TATAACAAA ATGCAATCAA ACTTTTCTTA 1080  
AGCTTACCTA AAGTTATTTC ATCTGAAAAT TTCAAGCAAC TTTGTTCAAC ATTAATTTGA 1140  
CAATCTAAC TAACAAGTCT TTTGAATTTA TGATGGGTAG TAAACATCT CTCTATTAACT 1200  
75 TGTATTACCT AAGGCTAAAC CTAAAATTTT TAAGCAAAAT TAGAAAAATA GTCTTCACTC 1260  
ATCAAAAAAT AAAGTTTGTG ACATTTAGTA TTTTCCCAAG AAAAAAATA AAAAAAATA 1320  
AAAAAATAAG AGAGTCTGTG CAAAATGTCA CTAATAATTA ATTAGCACTA GAAATTTATT 1380  
CTAATAACCA AAAAAAATA AAAAAATGAGA TGGGTTTCCC AAGGAAAACA CTCGCAATCA 1440  
AACAACAAA ACAAGAACA AAAAGAATA GACAAAAAGA 1480

80 Seq ID NO: 29 DNA Sequence  
Nucleic Acid Accession #: Eos sequence  
1 11 21 31 41 51  
TCCCTGCAGC TGTGTTTGA CAGGTCACTT ACCATGCTGT CCTCCAGGT CAACAGTATG 60



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GCTCCAAAGG ATGAAATTTT ATTCTGATTT TCTGGCTGAA GACTATTCTC TTTGTGTATG 120
TCCACCACAG TTACTTTATC CCTTCATCTG TGGATGGGCA GGAAACTCCA AACTGTCCAA 180
GGAGATAGTT CTGTTGTGAT TACTTCATTG AGAAATTTAA CTTATGAGCA GTTGAAAGGA 240
ATGCAAGTTG CTGCAAAATC AGAATGAAGA GTGCAAAACG ASSRAGCTAC AATGTTTTGT 300
CATTATTCAC TCTGATGTGA AAAAGGCAGT GAATTTAATA GAAAATAACT TCGTAGAGYA 360
AAATCTCAGG TGTGTTTTTT TAGTGCCGCA GTCTTGGATG ATGGGTTCCT AGAAGCTCTC 420
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CTGCCACTGT CACAGGAACG GTAATCTCAC TGGACAATTA ACTAGGGAGT CTTTCATCTT 660
GAGTGACTGC TGCACAAATG ATCTTCAAAG CATTTTAGCC ACCAGAGGAA TTCTCTTGAA 720
ATACCCAAAA TCCATCAGTA TCTTGAATCA TGCTGGATTT TGAAGAATTC TTAACAAGCC 780
ATGTAAAGGG GGCTCTCTCG CCTTGAATAA GTGATGTTTT TTATACAGAA AGGAGAATGC 840
AGAATGGTCA GACTACCATG CACTGTTAAA TTTGATTTCA AGAAATTACA GGAAAACTTT 900
CCAAAGTTCC ATCTCACAGA AATTATTTTT ACAAGAAT CCAAGATAAG TTAGTTTTTA 960
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TCACTTATTT AGCTAGTAAA TTTATTAATA TAAAAACTCA GAGACATTCC AATATCCACA 1080
TTGCTTACAC CATTAGGCAT AGATTCACTG TCAGCTATGA CAATTGAAAA TAAGCTGTTT 1140
TGTGATTTAA AGGTTTAAAT TTCTTAACCC AAATCTGCTG ATCCAGATGC AGGACTGCCA 1200
ATGTTAAAT TTTGTTCTGA AGAACAAATCA AATAAGACTT AAGAGGAAAA GGAATGGCCA 1260
CAATCCAGCT GAAATTTTTT TTTTAAAAAG TGTGCAGCCT ACTAAATCAG AATGAAAAAT 1320
GAAGTACAAG ATTATAACCA AATGCAATC AAATCTTTCT TAAGCTTACC TAAAGTTATT 1380
TCATCTGAAA ATTTCAAGCA ACTTTGTTCA ACATTAAATT GACAATCTAA ACTAACAAGT 1440
CTTTGGAATT TATGCAATGT AGTAAACATT CTCTCTATTA ACTTTATTAC CTAAGGCTAA 1500
ACCTAAAAAT TTTAAGCAAA ATTAGAAAAA TAGTCTTCAC TCATCAAAAA ATAAAGTTTG 1560
TTACATTTAG TATTTTCCCA AT 1582

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Seq ID NO: 30 DNA Sequence  
Nucleic Acid Accession #: Eos sequence  
Coding sequence: ..817

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1      11      21      31      41      51
|      |      |      |      |      |
AGATATATCA TACGAAAATG AAAATTATAA TTCTTCTTGG ATTCTGCGGA GCCACATTGT 60
CAGCCCCAGT TTACTTCTTA ATCTTAATAA TGGTCAACTT TTGCCACTAC AACTTCAGGG 120
CCCACTTAAT TCATGGATTC CACCTTTCTC TGGAAATTTA CAACAGCAGC AGCAGGCTCA 180
AATTCAGGTA CTCTCCCACT TCTCTTTATC AGCTCTAGAC CAGTTTGTCTG GACTGCTCCC 240
AAATCAGATA CCCTTAACAG GAGAGGCCAG TTTTGCCCAA GGAGCCCAGG CAGGCCAAGT 300
TGATCCCTTA CAGCTTCAAA CACCGCCTCA GACACAACCA GGCCCCAGTC ACGTGATGCC 360
CTATGTATTG TCCTTCAAAA TGCCCTCAAGA GCAAGGACAG ATGTTTCAAT ACTATCCAGT 420
TTACATGGTC CTACCCCTGG AACAACCTCA GCAAACAGTT CCAAGGTCAC CTCAACAAAC 480
AAGACAGCAA CAGTATGAGG AGCAGATACC ATTCTATGCT CAATTTGGAT ACATTCCACA 540
ACTAGCAGAA CCTGCTATAT CAGGAGGACA GCAGCAACTA GCTTTTGATC CCCAAGTAGG 600
CACAGCTCTT GAAATTGCTG TGATGTCAAC AGGAGAAGAG ATACCATATT TACAAAAAGA 660
AGCGATCAAC TTTAGACATG ACAGTGCAAG AGTTTTTCATG CCTCAACTT CACCAAAACC 720
CAGCACAACC AATGTTTTCA CTTCTGCTGT AGACCAAACCT ATTACCCAG AGCTCCCAGA 780
AGAGAAGGAC AAGACTGACA GCCTAAGGGA ACCATAA 817

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65  
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Seq ID NO: 31 DNA Sequence  
Nucleic Acid Accession #: Eos sequence  
Coding sequence: ..917

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1      11      21      31      41      51
|      |      |      |      |      |
AGAGAGGAAA AGAACACAGA TCTCGCATGG TTCAGATTTT TCTTTTAGG TCCAGGAGTA 60
AGATATATCA TACGAAAATG AAAATTATAA TTCTTCTTGG ATTCTGCGGA GCCACATTGT 120
CAGCCCCACT TATCCCACTG CGTCTCATGT CTGCCAGCAA TAGCAATGAG TTACTTCTTA 180
ATCTTAATAA TGGTCAACTT TTGCCACTAC AACTTCAGGG CCCACTTAAT TCATGGATTC 240
CACCTTTCTC TGGAAATTTA CAACAGCAGC AGCAGGCTCA AATTCAGGTA CTCTCCCACT 300
TCTCTTTATC AGCTCTAGAC CAGTTTGTCTG GACTGCTCCC AAATCAGATA CCCTTAACAG 360
GAGAGGCCAG TTTTGCCCAA GGAGCCCAGG CAGGCCAAGT TGATCCCTTA CAGCTTCAAA 420
CACCGCCTCA GACACAACCA GGCCCCAGTC ACGTGATGCC CTATGTATTG TCCTTCAAAA 480
TGCCCTCAAG GCAAGGACAG ATGTTTCAAT ACTATCCAGT TTACATGGTC CTACCCCTGG 540
AACAACCTCA GCAAACAGTT CCAAGGTCAC CTCAACAAAC AAGACAGCAA CAGTATGAGG 600
AGCAGATACC ATTCTATGCT CAATTTGGAT ACATTCCACA ACTAGCAGAA CCTGCTATAT 660
CAGGAGGACA GCAGCAACTA GCTTTTGATC CCCAAGTAGG CACAGCTCCT GAAATTGCTG 720
TGATGTCAAC AGGAGAAGAG ATACCATATT TACAAAAAGA AGCGATCAAC TTTAGACATG 780
ACAGTGCAAG AGTTTTTCATG CCTCAACTT CACCAAAACC CAGCACAACC AATGTTTTCA 840
CTTCTGCTGT AGACCAAACCT ATTACCCAG AGCTCCCAGA AGAGAAGGAC AAGACTGACA 900
GCCTAAGGGA ACCATAA 917

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75  
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Seq ID NO: 32 DNA Sequence  
Nucleic Acid Accession #: Eos sequence

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1      11      21      31      41      51
|      |      |      |      |      |
TTTTTTTTTT TTTTGTAGA GATGGGGTCT CACTTGTGTT CCATGCTTTT GGCTGCTCTT 60
CAAGATTAGT CACTTCTGAG CTGTTGCTTT TGTCTCCAGT CTACCCCTGAG CAGTTCCTTA 120
GGTGTGTGAA GCAGAAGAAA GAGAAAAGAG GCTTAGGTTA TACTGCTTAG AACCTCCTCT 180
TCAACTAACC TACCGACCCA CCTACCCATA AATCCATACC TACACACACA CCCCTTCTCT 240
TTCTCTGCCC CTGGTTTTGC CTGCGCTGCT TTCAATTGCA CGTGTGTGA GTATAGCCTT 300
TGCCTCTGCC TACTCAGCTC CTTGAACCTG GGGTGAAATT GAGACCCAGA GGAATGSGAT 360
TTACAGCTTC TTGCTTTCTT CTTGCTTGT CTTAGAACTG AAGTACAAAT GGAAGAAGC 420
TTTGATGAAG GAAGACCCCC ATCCAAGRAC ATCTAGTTTT CAGGTGCCAT AACAGCAGAG 480
CAAGTTCA 488

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Seq ID NO: 33 DNA Sequence

WO 03/025138

PCT/US02/29560

| Nucleic Acid Accession #: Eos sequence |                                       |             |             |             |            |             |      |
|--|---------------------------------------|-------------|-------------|-------------|------------|-------------|------|
|  | 1                                     | 11          | 21          | 31          | 41         | 51          |      |
| 5                                      | CTCCCCAGAGT                           | GCTAGGATTA  | CAGGCATGAG  | CCACTGCTCC  | CAGCCTTCCA | GAGGAATTTT  | 60   |
|  | AAGCCCATGT                            | CCAAACATTC  | TGTTTGTATA  | AATATATTCT  | AATTTTAAAA | TAAATAGTTT  | 120  |
|  | CTACTTTTCT                            | GAACCTTTATA | TTTTTCTTGT  | CTATAATGGA  | TTTTTATAAT | CAGAAAAGAT  | 180  |
|  | TAAATTAGTA                            | ATCATGAATT  | GCCTTCAATA  | TTTGGCAGTA  | AGTCAATGAA | ATAATAAGGC  | 240  |
|  | ACTTATATAC                            | CATCTTTGAC  | ATCATTAAAA  | GTATCAAATC  | CCATTAACTT | AAAACCTTCT  | 300  |
| 10                                     | TAAGCATTTT                            | GAAAGCAGAA  | AATGTTTACA  | TGGTCTTTTC  | AGTTCCTCAG | GCTTTTGTTC  | 360  |
|  | TAATGATGCG                            | TGACTTAGGA  | TAAGATTGGA  | ATTAAAGTGCC | CAGCTTGAAA | CATAATAATT  | 420  |
|  | TTTCTGTATA                            | AGCCACAGAT  | CCTCTACCTC  | CTTGTGTGTA  | AAGCCTTTAT | ATGAAAACAT  | 480  |
|  | TAAGTAGAAG                            | CATTCAATAG  | TGTGTCATTA  | ACTGTTTATA  | CTAATAAATG | GATACAGCAC  | 540  |
|  | ATTTTCATGG                            | CCTGTAATGT  | AGAACATACT  | ATATAAAGTT  | CTCAGTTTGG | GGATGACTAG  | 600  |
|  | GTTTCTGGAA                            | GGAATAGAAAT | GCTAAATCAA  | TGGATGGCAT  | TGGGCTGAGA | AACACTGCTG  | 660  |
| 15                                     | CTACTAATCA                            | GCCTTGAATG  | TGTAATGTGA  | ACATGCAAAA  | GAGAACATGC | ATACACTCAA  | 720  |
|  | ATTTGTACAA                            | TGCTATAACT  | GGAAAGTTGA  | GGACTTGAAT  | TTTTATATTG | TGCTATTGTT  | 780  |
|  | ATGTTTTCTG                            | TAATTTGTTA  | TATCTAAGGA  | ATTTTGAAGG  | TAATATAAAA | GAAAAAGAGA  | 840  |
|  | ATAATGAACA                            | ATGATGTGAC  | TGGAGGGTTT  | TTACATTAAA  | TTAGATCATT | TTTCTTCTTA  | 900  |
| 20                                     | TTTCAATATA                            | TAATCTTAAT  | CTTTAAGAAT  | TAATTATAAT  | TAAATATTAT | AATTCTAAT   | 960  |
|  | CTTTAAGAAAT                           | TAATAATTAT  | AATTTAATAT  | TATAATTAAT  | AATCTTTAAG | AATTAAATAAT | 1020 |
|  | ATAATTTAAT                            | ATTATAATTA  | ATAATCTTTA  | AGAAATTAATA | ATTACAATTA | ATAATTAATA  | 1080 |
|  | ATAATCTTAA                            | TCCTTTAAGAA | TTAATAATAA  | TCCTTAATCG  | CAATAATAAT | CGCAAGGAGG  | 1140 |
|  | AGAAGTAAGT                            | CCCTCTCTCT  | TCCTGTATGA  | CTTTTCTCCC  | ACATGCTGCT | GTATGGTTTA  | 1200 |
| 25                                     | GTGAGAGTGA                            | AGTTTCTAAG  | AACATCAATA  | TGATTGGTGG  | GATAATCCAA | AGACATTTTT  | 1260 |
|  | TCAGAAATCAA                           | ATGGCATGTC  | GAAGGTTTGT  | TTCTTGCTATA | TGTATTACTT | GGTCCACAGC  | 1320 |
|  | ACAAAATAAA                            | GTGACCACAT  | ATACATAGGA  | AAGTTGAATT  | TGTACACATA | CAGCATCTGA  | 1380 |
|  | AATGTATCTG                            | ATGTTTCAAG  | TCAAGATTTC  | ACTGAACATT  | GTAGAAATGT | GTATCTTTTG  | 1440 |
|  | CATGTATATT                            | TTACATTGAT  | TTTCTATTTA  | TGTACATCTA  | GAAAGTTTAA | ACCCTAATAA  | 1500 |
| 30                                     | ATAGTTTTGT                            | AAATTTGAAT  | AATAGTGTCA  | GTTTATATGT  | GAGGGAGTAG | AGACAGAGAG  | 1560 |
|  | GTTAGCACTG                            | GATAAATAAT  | AGTAAGGCCA  | AAGGAGAAAA  | TTTCATAGAA | AATATTGTTG  | 1620 |
|  | TTGTCTAAT                             | GAGTACAGCA  | TGAAAGGCTT  | CCTCTACAAG  | ACACTAGTCA | AAGAGTTGAG  | 1680 |
|  | AGCTGCGGTT                            | TCTAATCTTT  | GTCCATTACT  | CCCTTACTCC  | CTATGAGACT | GTGGACCTGT  | 1740 |
|  | CACTTGGCCT                            | CTCTGGTCTT  | CAGTTTTCTC  | ACCAGTAAAA  | CAAGGAACCT | GAACCAAAAT  | 1800 |
| 35                                     | ACCTCTAGTG                            | TTCCCTCTGG  | GTTTAAATGT  | CTATAAATGT  | TCAATGACTA | GAATGTATTG  | 1860 |
|  | CGTTTTCTTT                            | TATTTCTTTT  | GCTTTGAGAA  | AAGAGAATGT  | GATTTAAGAG | TAATAATTTG  | 1920 |
|  | AATACCAATT                            | ATCCACATTA  | AAATTTGTGTC | CTCTATGTGT  | AAGGCATAGC | ACATTTAGCA  | 1980 |
|  | CACATACATA                            | AGCACACTAA  | GCACCTTACA  | AATATCTCTA  | TTTATTCTTT | ACATAATCTT  | 2040 |
|  | TTGAAATTTG                            | TTATGTAATA  | CACACTGTTT  | TTGAACAATT  | GGTGACTTCC | AGCTGTTTAA  | 2100 |
| 40                                     | AACAACTAC                             | AGTATGGTGC  | TTGAGTACTG  | ACTTAGGAGG  | TCAGCATTGG | TTTCACTAGG  | 2160 |
|  | AGCTTCTCAA                            | AGCACGCTGC  | CAACATGCTC  | CCAGTCTCAT  | TGTCAAGGCC | TTAGACCAGG  | 2220 |
|  | CAATCATTAC                            | GGCAGTGGTT  | CTTCAACTTC  | AGCAGCAGCA  | AAACGATCTG | CGCGGGGCTT  | 2280 |
|  | GGTGAAACAG                            | ACTGCTGGGC  | TGACCACCCA  | GAATTTCTCA  | TTTCAAGGGT | CTGGCTGAT   | 2340 |
|  | CACCTGCTAT                            | TCTAATCACT  | TCCAGGTGA   | TGCAGATGTT  | TCTGGTCCAG | GGACCCCACT  | 2400 |
| 45                                     | TTGAGAACCA                            | CTGTATTAAA  | ATTTCTTCTA  | TCTCTATAGA  | AATGGAAAGA | TTTTTTATAA  | 2460 |
|  | GTCTCTAAT                             | TGCTTTTAA   | ATAAATGAGA  | TTTCACTTAA  | TTCTGTTGGA | GAAATTTGTT  | 2520 |
|  | TAAAAATTTG                            | GCTAAAGAAC  | CGAAAATCAC  | TTTATGTTAA  | GGCTCTATT  | ATAGCAAGTG  | 2580 |
|  | AACCTTTTCA                            | GAGTTAATAA  | AGGCCCTCAA  | AAATAATTTT  | GACTGTGAAA | CTAATTAATA  | 2640 |
|  | TCTCTGTGTT                            | TCAATTTAAG  | CATAAACATA  | TTTGAATAAA  | AATAGGTTAA | CAATAATTG   | 2700 |
| 50                                     | GGACATGTAT                            | TCAGTATAAT  | TTTAAGATAA  | TTTTACAAAA  | TATATGTAAC | ATTGCAATTG  | 2760 |
|  | TTTCTGTAAA                            | ATATCTTCGG  | AAAAAGCCTT  | GTTTTCCTCA  | GTGTGTTATT | TGTTGAATTT  | 2820 |
|  | CTTGTTAAAT                            | GTATTTTTTC  | CCATTGAAAA  | AAATGTTTTT  | AATCAATGTG | ATCAATACAG  | 2880 |
|  | CTATCTATAT                            | GCCTGCTTTT  | CACCTGTA    |             |            |             | 2907 |
| 55                                     | Seq ID NO: 34 DNA Sequence            |             |             |             |            |             |      |
|  | Nucleic Acid Accession #: NM_003979.2 |             |             |             |            |             |      |
|  | Coding sequence: 254..1357            |             |             |             |            |             |      |
|  | 1                                     | 11          | 21          | 31          | 41         | 51          |      |
| 60                                     | ATAACAGCAT                            | GAAGTGGCGT  | GGAAGCTGGAA | TAGGCGTGTG  | CTCTCCCTCG | ACCCTCCCCC  | 60   |
|  | TCCTTGCTCC                            | TCTGCTCACC  | CCTCGCTCGT  | TCCCTCCCTC  | CGGCGAGGGC | CGCCTTTATA  | 120  |
|  | ACAACTGTCT                            | AGAGTGGGAG  | GGCGGGATAG  | CTGTCCAAGG  | TCTCCCCCAG | CAGTGGAGG   | 180  |
|  | CTCGCCTGCT                            | GCCTCTTGGC  | GGCGGGGAAG  | CAGCACCAAG  | TTCAAGGCCA | ACGCCTTGGC  | 240  |
|  | ACTAGGGTCC                            | AGAATGGCTA  | CAACAGTCCC  | TGATGGTTGC  | CGCAATGGCC | TGAAATCCAA  | 300  |
| 65                                     | GTACTACAGA                            | CTTTGTGATA  | AGGCTGAAGC  | TTGGGGCATC  | GTCTTAGAAA | CGGTGGCCAC  | 360  |
|  | AGCCGGGGTT                            | GTGACCTCGG  | TGGCCTTCAT  | GCTCACTCTC  | CCGATCCTCG | TCTGCAAGGT  | 420  |
|  | GCAGGACTCC                            | AACAGGCGAA  | AAATGCTGCC  | TACTCAGTTT  | CTCTTCTCTC | TGGGTGTGTT  | 480  |
|  | GGGCATCTTT                            | GGCCTCACTT  | TGCCTTTCAT  | CATCGGACTG  | GACGGGAGCA | CAGGGCCCA   | 540  |
|  | ACGCTTCTTC                            | CTCTTTGGGA  | TCCCTTTTTC  | CTCTGCTCTC  | TCCCTGCTGC | TGGCTCATGC  | 600  |
| 70                                     | TGTCAGTCTG                            | ACCAAGCTCG  | TCCGGGGGAG  | GAAGCCCTTT  | TCCCTGTTGG | TGATTTCTGG  | 660  |
|  | TCTGGCCGTG                            | GGCTTCAGCC  | TAGTCCAGGA  | TGTTATCGTG  | ATTGAATATA | TTGCTCTGAC  | 720  |
|  | CATGAATAGG                            | ACCAACCTCA  | ATGCTTTTTC  | TGAGCTTTCC  | GCTCCTCTGC | GCAATGAAGA  | 780  |
|  | CTTTGTCTCT                            | CTGCTCACTT  | ACGTCTCTCT  | CTTGATGGCG  | CTGACCTTCC | TCATGTCTCT  | 840  |
|  | CTTCACTCTC                            | TGTGGTTTCT  | TCAACGGGCTG | GAAGAGACAT  | GGGGCCCA   | TCTACCTCAC  | 900  |
|  | GATGCTCTCT                            | TCCATTGCCA  | TCTGGGTGGC  | CTGGATCACC  | CTGCTCATGC | TTCTGACTTC  | 960  |
|  | TGACCGCAGG                            | TGGGATGACA  | CCATCCTCAG  | CTCCGCCTTG  | GCTGCCAATG | GCTGGGTGTT  | 1020 |
| 75                                     | CCTGTTGGCT                            | TATGTTAGTC  | CCGAGTTTTC  | GCTGCTCACA  | AAGCAACGAA | ACCCCATGGA  | 1080 |
|  | TTATCTCTGT                            | GAGGATGCTT  | TCTGTAAACC  | TCAACTCGTG  | AAGAAGAGCT | ATGGTGTGGA  | 1140 |
|  | GAACAGAGCC                            | TACTCTCAAG  | AGGAAATCAC  | TCAAGGTTT   | GAAGAGACAG | GGGACACGCT  | 1200 |
|  | CTATGCCCTC                            | TATTTCCACAC | ATTTTCAGCT  | GCAGAAACAG  | CCTCCCCAAA | AGGAATTCTC  | 1260 |
| 80                                     | CATCCCAACG                            | GCCCAACGCT  | GGCCGAGCCC  | TTACAAAGAC  | TATGAAGTAA | AGAAAGAGGG  | 1320 |
|  | CAGCTAACTC                            | TGTCTCTAAG  | AGTGGGACAA  | ATGCAGCCGG  | CGCGCAGATC | TAGCGGGAGC  | 1380 |
|  | TCAAAGGGAT                            | TGGGGCGAAA  | TCTTGAGTCT  | TCTGAGAAAA  | CTGTACAAGA | CAGTACGGGA  | 1440 |
|  | ACAGTTTGCC                            | TCCCTCCAGG  | CCTCAACCAC  | AATTTCTTCA  | TGCTGGGGCT | GATGTGGGCT  | 1500 |
|  | AGTAAGACTC                            | CAGTCTTTAG  | AGGCGCTGTA  | GTATTTTTTT  | TTTTTTGTCT | CATCCTTTGG  | 1560 |

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|                                       |             |             |             |             |             |             |      |
|---------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|------|
|                                       | ATACCTTCTT  | TAAGTGGGAG  | TCTCAGGCAA  | CTCAAGTTTA  | GACCCCTACT  | CTTTTGTIT   | 1620 |
|                                       | GTITTTTGA   | ACAGAGATCT  | GCTCTGTAC   | CCAGGCTTGA  | GTGCAGTGGT  | GCGATCACAG  | 1680 |
|                                       | CCCAGTGCAG  | CCTCGACCAC  | CTGTGCTCAA  | GCAATCCTCC  | CATCTCCATC  | TCCCAAAGTG  | 1740 |
| 5                                     | CTGGGATGAC  | AGGCGTIGAGC | CACAGCTCCC  | AGCCTAGGCC  | CTTAATCTTG  | CTGTATTTT   | 1800 |
|                                       | CCATGGACTA  | AAAGTCTGGT  | CATCTGAGCT  | CACGCTGGCT  | CACACAGCTC  | TAGGGGCTTG  | 1860 |
|                                       | CTCCTCTAAC  | TCACAGTGGG  | TTTTGTGAGG  | CTCTGTGGCC  | CAGAGCAGAC  | CTGCATATCT  | 1920 |
|                                       | GAGCAAAAAT  | AGCAAAAGCC  | TCTCTCAGCC  | CACCTGGCCTG | AATCTACACT  | GGAAAGCCAAC | 1980 |
|                                       | TTGCTGGCAC  | CCCCGCTCCC  | CAACCTTCT   | TGCCTGGGTA  | GGAGAGGCTA  | AAGATCACCC  | 2040 |
| 10                                    | TAAATTTACT  | CATCTCTCTA  | GTGCTGCCCTC | ACATTGGGCC  | TCAGCAGCTC  | CCCAGCACCA  | 2100 |
|                                       | ATTACAGGT   | CACCCCTCTC  | TTCTTGCACT  | GTCCCAAAAC  | TTGCTGTCAA  | TCCGAGATC   | 2160 |
|                                       | TAATCTCCCC  | CTACGCTCTG  | CCAGGAAITC  | TTTCAGACCT  | CACCTAGCACA | AGCCCGGTG   | 2220 |
|                                       | CTCCTTGTC   | GGAGAATTG   | TAGATCATTC  | TCACCTCAAA  | TTCTGGGGC   | TGATACTTCT  | 2280 |
|                                       | CTCATCTTGC  | ACCCCAACCT  | CTGTAAATAG  | ATTTACCGCA  | TTTACGGCTG  | CATTCTGTAA  | 2340 |
| 15                                    | GTGGGCATGG  | TCTCCTAATG  | GAGGAGTGTT  | CATTGTATAA  | TAAGTTATT   | ACCTGAGTAT  | 2400 |
|                                       | GCAATAAAGA  | TGTGTGGGCC  | ACTCTTTCAT  | GGTGGTGCCA  | GCAAAAAAAA  | AAAAAA      | 2456 |
| Seq ID NO: 35 DNA Sequence            |             |             |             |             |             |             |      |
| Nucleic Acid Accession #: NM_032957.1 |             |             |             |             |             |             |      |
| Coding sequence: 1..4203              |             |             |             |             |             |             |      |
| 20                                    | 1           | 11          | 21          | 31          | 41          | 51          |      |
|                                       |             |             |             |             |             |             |      |
|                                       | ATGCCCAAGA  | TAGTCTGTAA  | TGGTGTGACC  | GTAGACTTCC  | CTTCCAGGCC  | CTACAAATGC  | 60   |
|                                       | CAACAGGAGT  | ACATGACCAA  | GGTCTGGAA   | TGTCTGCAGC  | AGAAGGTGAA  | TGGCATCCTG  | 120  |
| 25                                    | GAGAGCCCTA  | CGGGTACAGG  | GAAGACGCTG  | TGCCTGCTGT  | GCACCAAGCT  | GCCCTGGCGA  | 180  |
|                                       | GACACCTCC   | GAGACGGCAT  | CTCTGCCCGC  | AAGATTGCCG  | AGAGGGCGCA  | AGGAGAGCTT  | 240  |
|                                       | TTCCCGGATC  | GGGCTTGTCT  | ATCCTGGGGC  | AACGCTGCTG  | CTGCTGCTGG  | AGACCCCAT   | 300  |
|                                       | GCTTGCTACA  | CGGACATCCC  | AAAGATTATT  | TACGCTTCCA  | GGACCCACTC  | GCAACTCACA  | 360  |
|                                       | CAGGTCATCA  | ACAGGCTTCG  | GAACACCTCC  | TACCGGCCTA  | AGGTGTGTGT  | GCTGGGCTCC  | 420  |
| 30                                    | CGGGAGCAGC  | TGTGTCATCA  | TCCTGAGGTG  | AAGAAACAAG  | AGAGTAACCA  | TCTACAGATC  | 480  |
|                                       | CACCTTGTGC  | GTAAGAAGT   | GGCAAGTCGC  | TCCTGTCAIT  | TCTACAACAA  | CGTAGAAGAA  | 540  |
|                                       | AAAAGCCTGG  | AGCAGGAGCT  | GGCCAGCCCC  | ATCCTGGACA  | TTGAGGACTT  | GGTCAAGAGC  | 600  |
|                                       | GGAAAGCAAGC | ACAGGGTGTG  | CCCTTACTAC  | CTGTCCCGGA  | ACCTGAAGCA  | GCAAGCCGAC  | 660  |
|                                       | ATCATATTCA  | TGCCGTACAA  | TTACTTGTG   | GATGCCAAGA  | GCCGCAGAGC  | ACACAACATT  | 720  |
| 35                                    | GACCTGAAGG  | GGACAGTCGT  | GATCTTTGAC  | GAAGCTCACA  | ACGTGGAGAA  | GATGTGTGAA  | 780  |
|                                       | GAATCGGCAT  | CCITTTGACCT | GACTCCCAT   | GACCTGGCTT  | CAGGACTGGA  | CGTCATAGAC  | 840  |
|                                       | CAGGTGCTGG  | AGGAGCAGAC  | CAAGGCAGCG  | CAGCAGGGTG  | AGCCCCACCC  | GGAGTTCAGC  | 900  |
|                                       | CGGACTCCC   | CCAGCCCAAG  | GCTGAACATG  | GAGCTGGAAG  | ACATTGCAAA  | GCTGAAGATG  | 960  |
|                                       | ATCCTGTCTG  | GGCTGTGAGG  | GGCCATCGAT  | GCTGTTGAGC  | TGCCCTGGAGA | CGACAGCGGT  | 1020 |
| 40                                    | GTCAACAAGC  | CAGGGAGCTA  | CATCTTTGAG  | CTGTTTGCTG  | AAGCCAGAT   | CACGTTTCAG  | 1080 |
|                                       | ACCAAGGGCT  | GCATCTGGGA  | CTCGCTGGAC  | CAGATCATCC  | AGCACCTGGC  | AGGACGTGCT  | 1140 |
|                                       | GGAGTGTTC   | CCAAACACGC  | CGGACTGCAG  | AAGCTGGCGG  | ACATTATCCA  | GATTGTGTTC  | 1200 |
|                                       | AGTGTGGACC  | CCCTCCGAGG  | CAGCCCTGGT  | TCCCCAGCAG  | GGCTGGGGGC  | CTTACAGTCC  | 1260 |
| 45                                    | TATAAGGTGC  | ACATTCATCC  | TGATGCTGGT  | CACCGGAGGA  | CGGCTCAGCG  | GTCTGATGCC  | 1320 |
|                                       | TGGAGCACCA  | CTGCAGCCAG  | AAAGCGAGGG  | AAGGTGCTGA  | GCTACTGGTG  | CTTCAGTCCC  | 1380 |
|                                       | GGCCACAGCA  | TGCACGAGCT  | GGTCCGCCAG  | GGGCTCCGCT  | CCCTCATCCT  | TACCAGCGCG  | 1440 |
|                                       | ACGCTGGCCC  | CGGTGTCTCT  | CTTTGCTCTG  | GAGATGCAGA  | TCCCTTTCCC  | AGTCTGACTG  | 1500 |
|                                       | GAGAACCCAC  | ACATCATCGA  | CAAGCACCCAG | ATCTGGGTGG  | GGGTGCTCCC  | CAGAGGCCCC  | 1560 |
|                                       | GATGGAGCCC  | AGTTGAGCTC  | CGCGTTTGAC  | AGACGGITTT  | CCGAGGAGTG  | CTTATCTCCC  | 1620 |
| 50                                    | CTGGGGAAGG  | CTCTGGGCAA  | CATGCCCCGC  | GTGGTGCCCT  | ATGGGCTCCT  | GATCTTCTTC  | 1680 |
|                                       | CCTTCTCTAT  | CTGTCTATGA  | GAAGAGCCTG  | GAGTTCCTGG  | GGGCCCGCGA  | CTTGGCCAGG  | 1740 |
|                                       | AAGATGGAGG  | CGCTGAAGCC  | GCTGTTTGTG  | GAGCCCAAGG  | GCAAAAGGCAG | CTTCTCCGAG  | 1800 |
|                                       | ACCATCAGTG  | CTTACTATGC  | AAGGTTGGCC  | GCCCTGGGT   | CCACCGGCGC  | CACCTTCTCTG | 1860 |
|                                       | GCGGTCTGCC  | GGGGCAAGGC  | CAGCGAGGGG  | CTGGACTTCT  | CAGACACGAA  | TGGCCGTGGT  | 1920 |
| 55                                    | GTGATTGTCA  | CGGCTCTCCC  | GTACCCCCCA  | CGCATGGACC  | CCCGGTTTGT  | CCTCAAGATG  | 1980 |
|                                       | CAGTTCCTGG  | ATGAGATGAA  | GGGCCAGGGT  | GGGGCTGGGG  | GCCAGTTCCT  | CTCTGGGCGA  | 2040 |
|                                       | GAGTGGTACC  | GGCAGCAGGC  | GTCCAGGGCT  | GTGAACCAAG  | CCATCGGGCG  | AGTGATCCGG  | 2100 |
|                                       | CACCGCCAGG  | ACTACGGAGC  | TGTCTTCTC   | TGTACCACA   | GGTTCGCCTT  | TGCCGACGCA  | 2160 |
|                                       | AGAGCCCAAC  | TGCCCTCTCT  | GCTGCGTCCC  | CACGTCAGGG  | TGTATGACAA  | CTTTGCCCAT  | 2220 |
| 60                                    | GTCACTCCAG  | ACGCTGGCCCA | GTCTTCCGT   | GTGGCCGAGC  | GAACTATGCC  | AGGCGCGGCC  | 2280 |
|                                       | CCCCGGGCTA  | CAGCACCCAG  | TGTGCGTGG   | GAAGATGCTG  | TCAGCGAGGC  | CAAGTCCGCT  | 2340 |
|                                       | GGCCCTTCT   | TCTCCACCCG  | GAAAGCTAAG  | AGTCTGGACC  | TGCATGTCCC  | CAGCCTGAAG  | 2400 |
|                                       | CAGAGGTCCT  | CAGGGTCACC  | AGCTCCCGGG  | GACCCCGAGA  | GTAGCCTGTG  | TGTGGAGTAT  | 2460 |
|                                       | GAGCAGGAGC  | CAGTTCCTGC  | CCGGCAGAGG  | CCCAGGGGGC  | TGCTGGCCGC  | CCTGGAGCAC  | 2520 |
| 65                                    | AGCGAACAGC  | GGGCGGGGAG  | CCCTGGCGAG  | GAGCAGGGCC  | ACAGCTGCTC  | CACCCGTGCC  | 2580 |
|                                       | CTCCTGTCTG  | AGAAGAGGCC  | GGCAGAAGAA  | CCGCGAGGAG  | GGAGGAAGAA  | GATCCGGCTG  | 2640 |
|                                       | GTCAAGCCACC | CGSAGGAGCC  | CGTGGCTGGT  | GCACAGACGG  | ACAGGGCCAA  | GCTCTTCATG  | 2700 |
|                                       | GTGGCCGTGA  | AGCAGGAGTT  | GAGCCAAAGC  | AACCTTGCCA  | CCTTCACCCA  | GGCCCTGCAG  | 2760 |
|                                       | GACTACAAGG  | GTTCGATGA   | CTTCGCGGCC  | CTGGCCGCTT  | GTCTCGGCC   | CCTCTTGTCT  | 2820 |
| 70                                    | GAGGACCCCA  | AGAAGCACAA  | CCTGCTCCAA  | GGCTTCTACC  | AGTTTGTGCG  | GCCCCACCAT  | 2880 |
|                                       | AAGCAGCAGT  | TTGAGGAGGT  | CTGTATCCAG  | CTGACAGGAC  | GAGGCTGTGG  | CTATCGGCCT  | 2940 |
|                                       | GAGCACAGCA  | TTCCCCGAAG  | GCAGCGGGCA  | CAGCCGGTCC  | TGGACCCCA   | TGGAAGAAAG  | 3000 |
|                                       | GCGCCGGATC  | CCAAGCTGAC  | CGTGTCCAAG  | GCTGCAGCCC  | AGCAGCTGGA  | CCCCCAAGAG  | 3060 |
|                                       | CACCTGAACC  | AGGGCAGGCC  | CCACCTGTGC  | CCCAGGCCAC  | CCCCAACAGG  | AGACCTTGGC  | 3120 |
| 75                                    | AGCCAAACCA  | AGTGGGGGTC  | TGGAGTGCCC  | AGAGCAGGGA  | AGCAGGGCCA  | GCACGCGGTG  | 3180 |
|                                       | AGCGCCTACC  | TGCTGTATGC  | CCGACGGGCC  | CTGGGTCCG   | CGGGCTGTAG  | CCAACCTCTG  | 3240 |
|                                       | GCAGCGCTGA  | CAGCCTATAA  | GCAAGACGAC  | GACCTCGACA  | AGGTGCTGGC  | TGTGTGGGCC  | 3300 |
|                                       | GCCCTGAACC  | CTGAAGGCC   | AGAGGACTTC  | CCCCTGCTGC  | ACAGGTTTCA  | CATGTTTGTG  | 3360 |
|                                       | CGTCCACACC  | ACAAGCAGCG  | CTTCTCACAG  | ACGTGCACAG  | ACCTGACCGG  | CCGGCCCTAC  | 3420 |
| 80                                    | CCGGGCTAGG  | AGCCACCGGG  | ACCCAGGAG   | GAGAGGCTTG  | CCGTGCCTCC  | TGTGCTTACC  | 3480 |
|                                       | CACAGGGCTC  | CCCAACCAAG  | CCCCTCACGG  | TCCGAGAAGA  | CCGGGAAGAC  | CCAGAGCAAG  | 3540 |
|                                       | ATCTCGTCTT  | TCTTTAGACA  | GAGGCCAGCA  | GGGACTGTGG  | GGGCGGGCGG  | TGAGGATGCA  | 3600 |
|                                       | GGTCCAGGCG  | AGTCTCTCAG  | ACCTCCCCAC  | GGGCTGCGAG  | CATCTGAGTG  | GGGTGAGCCT  | 3660 |
|                                       | CATGGGAGAG  | ACATCGCTGG  | GCAGCAGGCC  | ACGGGAGCTC  | CGGGCGGGCC  | CCTCTCAGCA  | 3720 |
|                                       | GGCTGTGTGT  | GCCAGGGCTG  | TGGGCGAGAG  | GACGTGGTGC  | CCTTCCAGTG  | CCCTGCCTGT  | 3780 |

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|            |            |            |             |            |            |      |
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| GACTTCCAGC | GCTGCCAAGC | CTGCTGGCAA | CGGCACCTTC  | AGGCCTCTAG | GATGTGCCCA | 3840 |
| GCCTGCCACA | CGCCTCCAG  | GAAGCAGAGC | GTATGCGAGG  | TCTTCTGGCC | AGAGCCCCAC | 3900 |
| AAGGACCATG | AGGCGCTGG  | AGGGGCCAGG | CCTGTGCTGT  | CTGTGCTGTG | TGTTGGCGCT | 3960 |
| GCCTGCCCTG | CTGCGGTGC  | CGGCTGTACG | CGGAGTGGCA  | GAAACACCCA | CCTACCCCTG | 4020 |
| CGGGAGCGCA | GAGACAGGGG | AGCGGCTGGT | GTGTGCCCCAG | TGCCCCCAG  | GCACCTTTGT | 4080 |
| GCAGCGCGCG | TGCCGCCGAG | ACAGCCCCAC | GACGTGTGGC  | CCGTGTCCAC | CGCGCCACTA | 4140 |
| CACGCGAGTC | TGGAATACC  | TGGAGCGCTG | CCGCTACTGC  | AACGTCTCT  | GCGGGGAGCG | 4200 |
| TGAGGAGGAG | GCACGGGCTT | GCCACGCCAC | CCACAACCGT  | GCCTGCCGCT | GCCGCACCGG | 4260 |
| CTTCTTCGCG | CACCGCTGTT | TCTGCTTGA  | GCACGCATCG  | TGTCACCTG  | GTGCGGCGT  | 4320 |
| GATTGCCCCG | GGCACCCCCA | GCCAGAACAC | GCAGTGCCAG  | CCGTGCCCCC | CAGGCACCTT | 4380 |
| CTCAGCGAGC | AGCTCCAGCT | CAGAGCAGTG | CCAGCCCCAC  | CGCAACTGCA | CGGCCCTGGG | 4440 |
| CCTGSCCTTC | AATGTGCCAG | GCTCTTCCTC | CCATGACACC  | CTGTGCACCA | GCTGCACTGG | 4500 |
| CTTCCCCCTC | AGCACCAGGG | TACCAGGAGC | TGAGGAGTGT  | GAGCGTGCCG | TCATCGACTT | 4560 |
| TGTGGCTTTC | CAGGACATCT | CCATCAAGAG | GCTGCAGCGG  | CTGCTGCAGG | CCCTCGAGGC | 4620 |
| CCCGGAGGCG | TGGGTCGGA  | CACCAAGGGC | GGGCCGCGCG  | GCCTTGACAG | TGAAGCTGCG | 4680 |
| TCGGCGGCTC | ACGGAGCTCC | TGGGGGCGCA | GGACGGGGCG  | CTGCTGGTGC | GGCTGTGCA  | 4740 |
| GGCGCTGCGC | TGGCGGAGGA | TGCCCGGGCT | GGAGCGGAGC  | GTCGCTGAGC | GCTTCTCTCC | 4800 |
| TGTGCACTGA | TCCTGGCCCC | CTCTTATTTA | TTCTACATCC  | TTGGCACCCC | ACTTGCACTG | 4860 |
| AAAGAGGCTT | TTTTTTAAAT | AGAAGAAATG | AGGTTTCTTA  | AAGCTTATTT | TTATAAAGCT | 4920 |
| TTTTCATAAA | ACTGTTGTA  | GTTCG      |             |            |            | 4945 |

Seq ID NO: 36 DNA Sequence  
Nucleic Acid Accession #: NM\_016434.1  
Coding sequence: 828..4487

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|            |             |            |            |             |             |      |
|------------|-------------|------------|------------|-------------|-------------|------|
| 1          | 11          | 21         | 31         | 41          | 51          |      |
|            |             |            |            |             |             |      |
| AGTCAGCCCT | GCTGCCAGCC  | AGTGCCGGGT | GCTGGGGACT | CAGGGAGGCC  | CGCCGGGACC  | 60   |
| ACTGCGGGAC | AGTCAGCCGA  | GCAGAAGCTG | GAAGCGCAGG | GAGGAAGGAG  | AGGGGGCGGT  | 120  |
| CAGGGCTCTC | AGGAGCCGGG  | TCCTGGGCAA | GGCGACCCCG | TTTTCAAATT  | TTACGGAAGG  | 180  |
| CGGTGCGCTC | ACACTCGAGC  | AGTAAAAAGA | TGCCTCTGGG | GAGGAGGCC   | GTGCAGCTCT  | 240  |
| CCGGCAATG  | GTGGTGGCTC  | GGCTAGAGA  | GGCGGTAGTG | GAACGCAGAC  | CCTGTTGGGG  | 300  |
| GAATGACATC | AAGGGAGGAG  | ACGGGGCGGA | CCCAGATT   | CTGCCTGTGG  | GCGATGGAAG  | 360  |
| TGAGGTTTAC | TGGCCAGCGG  | AGCCGACAC  | AGAACGCGCA | AAACGCGGTG  | TAGGCTTGA   | 420  |
| GGAGCGAAG  | AGCAGGCGGA  | CCCCCTCCG  | GGGGGAACAG | TTCCGCGCG   | GAGCACAAAG  | 480  |
| CAACGGACCG | GAAGTGGGG   | CGGSAAGTGC | AGTGGGTCA  | GCGCGACTG   | CGCGCTCTG   | 540  |
| CCCGGAAAA  | CTCTGAGCTG  | GCTGACAGCT | GGGACCGGT  | GGCGCCCTC   | GACTGGAGTC  | 600  |
| GGTTGAGTTC | CTGAGGAGCC  | CCGTTCTGG  | AAGGTTGCG  | GCGGAGACAA  | GTGAGCAGTC  | 660  |
| TGTGCCATAG | GATTCTCTGA  | AGAGAACAGC | GTTGTGTCCC | AGTGACATG   | CTCGCATCGC  | 720  |
| TTACCAGAG  | TGCCCGAGAC  | CCTAAGATGT | TCCGAGTGGT | TTTTTCGCAC  | AGACCCGAAT  | 780  |
| AGCCTGCCCC | TCAGCCACGC  | TCTGTGCCCT | TCTGAGAACA | GGCTGATATG  | CCCAAGATAG  | 840  |
| TCCTGAATGG | GTGACCGTA   | GACTTCCCTT | TCCAGCCCTA | CAAAATGCCAA | CAGGAGTACA  | 900  |
| TGACCAAGGT | CCTGGAATGT  | CTGCAGCAGA | AGGTGAATGG | CATCTGGAG   | AGCCCTACGG  | 960  |
| GTACAGGAA  | GACGCTGTGC  | CTGCTGTGCA | CCACGCTGGC | CTGGCGAGAA  | CACCTCCGAG  | 1020 |
| ACGGCATCTC | TGCCCGCAAG  | ATTGCCGAGA | GGGCGCAAGG | AGAGCTTTTC  | CCGATCGGG   | 1080 |
| CCTTGTCTAT | CTGGGCAAC   | GCTGCTGTG  | CTGCTGGAGA | CCCCATAGCT  | TGCTACACGG  | 1140 |
| ACATCCCAAA | GATTATTATC  | GGCTCCAGGA | CCCACCTGCA | ACTCACACAG  | GTATCAACG   | 1200 |
| AGCTTCGAAA | CACCTCTCTAC | CGGCCTAAGG | TGTGTGTGCT | GGGCTCCCGG  | GAGCAGCTGT  | 1260 |
| GCATCCATCC | TGAGGTGAAG  | AAACAAGAGA | GTAACCATCT | ACAGATCCAC  | TTGTGCCGTA  | 1320 |
| AGAAGGTGGC | AAGTCGCTCC  | TGTCATTCTT | ACAACAACGT | AGAAGAAAAA  | AGCCTGGAGC  | 1380 |
| AGGAGCTGGC | CAGCCCCATC  | CTGGACATTG | AGGACTTGGT | CAAGAGCGGA  | AGCAAGCACA  | 1440 |
| GGGTGTGGCC | TTACTACTCTG | TCCCGGAACC | TGAAGCAGCA | AGCCGACATC  | ATATTATGCG  | 1500 |
| CGTACAATTA | CTTGTGGAT   | GCCAAGAGCC | GCAGAGCACA | CAACATTGAC  | CTGAAGGGGA  | 1560 |
| CAGTCGTGAT | CTTTGACGAA  | GCTCAACAAG | TGGAGAAGAT | GTGTGAAGAA  | TCGGCATCCT  | 1620 |
| TTGACCTGAC | TCCCATGAC   | CTGGCTTACG | GACTGGACGT | CATAGACCAG  | GTGCTGGAGG  | 1680 |
| AGCAGACCAA | GGCAGCGCAG  | CAGGGTGAGC | CCCACCCGGA | GTTCAGCGCG  | GACTCCCCCA  | 1740 |
| CGCCAGGGCT | GAACATGGAG  | CTGGAAGACA | TTGCAAAAGT | GAAGATGATC  | CTGCTGCCCC  | 1800 |
| TGGAGGGGGC | CATCGATGCT  | GTTGAGCTGC | CTGGAGACGA | CAGCGGTGTC  | ACCAAGCCAG  | 1860 |
| GGAGCTACAT | CTTTGAGCTG  | TTTGCTGAAG | CCCAGATCAC | GTTTCAGACC  | AAGGCTGCA   | 1920 |
| TCTGTGACTC | GCTGGACAG   | ATCATCCAGC | ACCTGGCAGG | ACGTGCTGGA  | GTGTTCAACA  | 1980 |
| ACACGCGCGG | ACTGCAGAA   | CTGGCGGACA | TTATCCAGAT | TGTGTTCACT  | GTGGACCCCT  | 2040 |
| CCGAGGGCAG | CCCTGGTTCC  | CCAGCAGGGC | TGGGGGCCTT | ACAGTCTTAT  | AAGGTGCACA  | 2100 |
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| CAGCCAGAAA | GCGAGGGAAG  | GTGCTGAGCT | ACTGGTGCTT | CAGTCCCGGC  | CACAGCATGC  | 2220 |
| ACGAGCTGGT | CGCCAGGGC   | GTCCGCTCCC | TCATCCTTAC | CAGCGGCACG  | CTGGCCCCGG  | 2280 |
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| TCATCGACAA | GCACCAAGATC | TGGGTGGGGG | TCGTCCCGAG | AGGCCCGGAT  | GGAGCCAGT   | 2400 |
| TGAGCTCCGC | GTTTGACAGA  | CGGTTTTCCG | AGGAGTGCTT | ATCCTCCCTG  | GGGAAGGCTC  | 2460 |
| TGGGCAACAT | CGCCCGCTG   | GTGCCCTATG | GGCTCCTGAT | CTTCTTCCCT  | TCCTATCCTG  | 2520 |
| TCATGGAGAA | GAGCCTGGAG  | TTCTGGCGGG | CCCGGCACTT | GGCCAGGAAG  | ATGGAGGCGC  | 2580 |
| TGAAGCGCCT | GTTTGTGGAG  | CCCAGGAGCA | AAGGCAGCTT | CTCCGAGACC  | ATCAGTGCTT  | 2640 |
| ACTATGCAAG | GTTTGGCGCC  | CCTGGGTCCA | CCGGCGCCAC | CTTCTTGGCG  | GTGTCGGGG   | 2700 |
| GCAAGGCGAG | CGAGGGGCTG  | GACTTCTCAG | ACACGAATGG | CCGTGGTGTG  | ATTGTACACG  | 2760 |
| GCCTCCCGTA | CCCCCAACGC  | ATGGACCCCC | GGGTGTGCTT | CAAGATGCAG  | TTCTTGGATG  | 2820 |
| AGATGAAGGA | CGAGGCTGGG  | GCTGGGGGCT | AGTTCTCTCT | TGGGCAGGAG  | TGTTACCGGC  | 2880 |
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| CCACCAGGAA | AGCTAAGAGT  | CTGGACCTGC | ATGTCCCCAG | CCTGAAGCAG  | AGGTCTCTCAG | 3240 |
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| TTCTTGCCCC | CGAGAGGCC   | AGGGGGCTGC | TGGCCGCCCT | GGAGCACAGC  | GAACAGCGGG  | 3360 |
| CGGGGAGCCC | TGGCGAGGAG  | CAGGCCACCA | GCTGCTCCAC | CCTGTCCCTC  | CTGTCTGAGA  | 3420 |
| AGAGGCGGGC | AGAAGAACCG  | CGAGGAGGGA | GGAAGAAGAT | CCGGCTGGTC  | AGCCACCCGG  | 3480 |

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Seq ID NO: 37 DNA Sequence  
Nucleic Acid Accession #: NM\_015647.2  
Coding sequence: 246..1883

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Seq ID NO: 38 DNA Sequence  
Nucleic Acid Accession #: NM\_003823.2  
Coding sequence: 101..1003

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GGTGTGCGCC CAGTGCCCCC CAGGCACCTT TGTGCAGCGG CCGTGCGGCC GAGACAGCCC 300
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CTCCCATGAC ACCCTGTGCA CCAGCTGCAC TGGCTTCCCC CTCAGACCA GGGTACCAGG 720  
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GCAGGACGGG GCGCTGTGCT TGGGGCTGCT GCAGGCGCTC CCGTGGCCA GGATGCCCGG 960  
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Seq ID NO: 39 DNA Sequence

Nucleic Acid Accession #: NM\_032945.1

Coding sequence: 435..1337

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AGGGCTCCCC AACAGGCCCT CTCACGGTCC GAGAAGACCG GGAAGACCCA GAGCAAGATC 240  
TCGTCTTCTC TTAGACAGAG GCCACGAGG ACTGTGGGGG CCGGCGGTGA GGATGCAGGT 300  
CCCAGCCAGT CCTCAGGACC TCCCACGGG CCTGCAGCAT CTGAGTGGGG CCTCTAGGAT 360  
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Seq ID NO: 40 DNA Sequence

Nucleic Acid Accession #: NM\_000593

Coding sequence: 165..2591

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Seq ID NO: 41 DNA Sequence  
Nucleic Acid Accession #: NM\_002423.2  
Coding sequence: 48..851

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CCAGATGTGG AGTGCCAGAT GTTGCCAGAA CTCACTATTG TCCAAATAGC CCAAAATGGA 360
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Seq ID NO: 42 DNA Sequence  
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GCTCGCTGCC CAGCCGGGCA GGGGGCATGG GCACTGGCCT GGAGATCATG CTGGACATCC 1080
AGCAGGAGGA GTACCTGCCC ATCTGGAGGG AGACAAATGA GACGTGCTTT GAGGCAGGTA 1140
TTGCGGTGCA GATCCACAGC CAGGAGGAGC CGCCCTACAT CCACCAGCTG GGGTTCGGGG 1200
TGTCCCCAGG CTTCCAGACC TTTGTGCTCT GCCAGGAACA GCGGCTGACC TACCTGCCCC 1260
AGCCCTGGGG CAACTGCCGC GCAGAGAGTG AGCTCAGGGA GCCTGAGCTT CAGGGCTACT 1320
CGGCCTACAG TGTGTCTGCC TGCCGGCTGC GCTGTGAAAA GGAGGCCGTG CTTGAGCGCT 1380
GCCACTGCCG GATGGTGCAC ATGCCAGGCA ATGAGCCAT CTGCCACCA AATATCTACA 1440
TCGAGTGTGC AGACCACACA CTGACTCCC TGGGTGGGGG CCCTGAGGSC CCGTGCTTCT 1500
GCCCCACCCC CTGCAACCTG ACACGCTATG GSAAGAGAT CTCCATGGTC AGGATCCCCA 1560
ACAGGGGCTC AGCCCGGTAC CTGGCGAGGA AGTACAAACG CAACGAGACC TACATACGGG 1620
AGAACTTCCT GGTCTAGAT GTCTTCTTTG AGGCCCTGAC CTCTGAAGCC ATGAGGACAG 1680
GAGCAGCCTA TGGCTGTGCA GCGCTGCTGG GAGACCTCGG GGGACAGATG GGCCTGTTCA 1740
TTGGGGCCAG CATCTCAGC TTGCTGGAGA TCCTCGACTA CATCTATGAG GTGTCTGGG 1800
ATCGACTGAA CCGGTATGG AGGCGTCCCA AGACCCCTCT CCGGACCTCC ACTGGGGCA 1860
TCTCCATTTT GGGGCTCAG GAGCTGAAGG AACAGAGTCC CTGCCCAGC CTGGGCGGAG 1920
CGAGGGCTGG GGGGGTCAG AGTCTGCTCC CCAATCACCA CCACCCCCAC GGTCCCCCAG 1980
GAGGTCTTGT TGAAGATTTT GCTTGCTAGG ACGGTGCTGT GACTGAAAGG ACCCAGGAGT 2040
CTGGGACCCC TCCTGGGATC CCCAGCACAT TCTCTGCTC CTGGGAGAGG CCTGGGGCG 2100
GTGCTCACTG GGAGGGCCAG GACTCAGTTC CTGCTCTCAT CCTCCCCTGC CTGATGTCA 2160
GCTGCTTTGC ACAAAGGTC TTCTTGTTCA CACCCCTTAT CCCCAGGCTG GTGCCCCGG 2220
AGGGCTGGAG ACCAGCCCAT GGGCCCTCAC GGAGAGGAAG GGAAGGAAGG AAGGGAGGG 2280
GGAGGATAGA GCCCATCCCA GCGGGGAGG GGGAGCCCTC TGTACATTTG TAAATATTTA 2340
```

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PCT/US02/29560

5 GGGAAAGCCG GGTGGGGGGA GGGGATACAG ATGTAGAAGG TGGGTAGGGC TACAGGGGTG 2400  
GGTGATTAG GGACAGCCAG GGTCCCAGCC CCAATGTGAG CAGGATAGGG AGAGCCCCAG 2460  
GACTCAGGAG TGCTGGGCTG GTCTACTTTC CTGCCCTCT CCAGGCCAG CTCCCCCTCT 2520  
GGCAGGGGGA GAGGATGGCC CAGCAGGCCT GGGCCAGCTC CCAGTCCCC CTGCACCAGC 2580  
CCCACCCCTA GAGTCCCTTC TATAGGGAGG GGGCAGGAGA CCTTCAGAGC TTCGGCTGAG 2640  
CTTGGAGGGT GGGAAAGGAG CCTTCTCAGT CCTCTCTCCC TCCAGTCTGA TTTTATAAAG 2700  
TGCTGACGAG 2710

Seq ID NO: 43 DNA Sequence  
Nucleic Acid Accession #: AK091016  
Coding sequence: 201..2291

10 1 11 21 31 41 51  
| | | | |  
15 GATCTCAGCT CCTTTTCAGC TAGTGGGTGG AACCCAGGA GGGAAACTC AGGGAAGCCC 60  
AGGAGGAAGT GAAATATACC CATGGAGTGA AGCTTGTGTG CTACCTGGGT TCCGGGCCAG 120  
TGATCCAGCT CTGGGGGGGC ATCAGCCAGC GCCAGGCAGG GGGCAGCTG CCACCAAGAGC 180  
TGAAGGTTCT AGAGGACTTG ATGAGGTGCA GCTCACCTCT ACCTGCCAG AGGCTCAGAA 240  
GGAAGAAAAG GCCATGGTG CAGGGCCCTG CTGGGTGCCA GGTTTTCCAG CCTTCTCCTT 300  
CAGGAGGCAC AGCAGGGGAC CCTGGTGGCC TCTCTGACCC CTCTACCTT CCAAGAAGCG 360  
20 GTTCCTCTGC CCTTGGCGAC CCCAGCTCGG ACCCTGCATG TCCAGAGT GCCCAATGG 420  
AGGCTGAAGA GGATTCTCTT CCGAGCAGC CAGAGGACTC AGCTCAGCTC CAACAGGAGA 480  
AGCCATCCCT GTATATTGGG GTGCGGGCA CTGTTGTCCG TTCATGCGAG GAGGTACTAT 540  
GGACTCGCTC TCGGAGGCTC CCAGACCCAG TGCTGAGTGA GGAGGTGGTG GAGGGCATTG 600  
CTGCTGGGAT TGAGGCAGCC CTCTGGGACC TGACACAAGG CACCAATGGC CGGTACAAGA 660  
25 CCAAGTATCG CAGCCTGCTG TTCAACCTGC GGGACCCAG GAACCTGGAC TTGTTTCTCA 720  
AAGTGGTTCA TGAGATGTTC ACCCCCTACG ACCTGGTGGG GATGAGCTCG ATGCACTGG 780  
CCCCCAGGA GCTGGCCCGC TGGCGGGACC AGGAGGAGAA AAGGGGCTG AATATCATTG 840  
AGCAGCAACA GAAGGAGCCG TGCAAGCTTC CAGCCTCCAA AATGACCCAC AAGGGCGAAG 900  
TGGAGATTCA GCGGGACATG GACCAGACAC TGACCTCGGA GGATCTGGTG GGACCGCAGA 960  
30 GTTTCATGGA CTGCAGCCCA CAGGCCCTGC CCATCGCATC AGAGGACACC ACGGGGCAGC 1020  
ATGACCACCA CTCTTAGAC CCCAACTGCC ACATCTGCAA GGACTGGGAG CCCTCGAATG 1080  
AGCTGCTAGG CTCTTCGAA GCCGCCAAGA GCTCGGGGGA CAATATCTTC CAGAAAGCCC 1140  
TAAGCCAAAC TCCTATGCCCT GCTCCAGAGA TGCCCAAAAC CAGGGAGTTG TCTCCACGG 1200  
AACCACAGGA CAGGCTCCCT CCATCTGGGC TCCATGTGCC TGCTGCACCC ACAAGGGCCC 1260  
35 TGCCCTGCCT GCCACCTGG GAAGGTGTTT TGGACATGTT CTCCATCAAG CGGTTCCGGG 1320  
CCAGGGCCCA GCTGGTCTCG GGACACAGCT GTCGGCTTGT CCAGGCTCTG CCCACCGTGA 1380  
TCCGCTCGGC AGGCTGCATC CCCTCCAACA TTGTCTGGGA CCTTCTGGCC AGCATCTGCC 1440  
CAGCCAAAGC CAAGGACGTC TGCGTGGTCA GACTGTGCCC ACATGGGGCC CGGGACACC 1500  
AGAATCGCG CCGCTCTAC TCATACCTCA ATGATAGGCA GCGCCACGGG CTGGCCTCTG 1560  
40 TGGAGCACAT GGGGATGGTC CTGCTGCCCC TGCTTGCCCT CCAGCCCTG CCCACAGGC 1620  
TGCGCCCTTT GCGGGGCCCA GGTCTGGAGG TCACTCACTC AAGTCTGTTG CTGGCTGTGC 1680  
TGCTCCCCAA GGAAGGGGCT CCAGACACAG CAGGCTCCAG CCCCTGGTTG GGAAGGGTTT 1740  
AAAAGATGGT CTCTTCAAC AGTAAGGTGG AGAAGAGATA CTATCAGCCA GATGACAGGA 1800  
45 GGCCGAATGT GCCCTGAAG GGCACCCCTC CCCAGGAGG TGCTGGCAG CAGAGCCAGG 1860  
GCAGGGGAGC TATAGTCCA AGGGGAATCT CTGCTGGCA GAGGCCCCCC AGAGGCAGGG 1920  
GAGGGCTCTG GCCAGAGCCT GAAAACCTGC AGCATCTCTG GCGAGGGCAG TGGCCCCAG 1980  
AGCCAGGCTT GCGCAGTCC CAGCATCCCT ATTCACTAGC ACCAGCTGGT CATGGCTTTG 2040  
GCCGTGGCCA GCATCTCCAC AGGGACTCCT GTCCCAACCA AGCCCTGCTC CGSCACCTCG 2100  
AATCCCTGGC GACCATGAGT CACCAGCTCC AAGCCTTACT GTGCCCCAG ACCAAGAGCT 2160  
50 CCATCCCCCG CCCTCTGCAG CGTTTGTCTA GCGCCCTTGC AGCTCCAGAG CCCCTGGCC 2220  
CAGGCCCTGA CTCTCTTTTG GGGCCTACAG ATGAAGCTGG CTCTGAGTGT CCCTTCCTTA 2280  
GAAAGGCCTG ACCCTCCTTA CCCACCAGAA CAGGGGTTTT GATGCCCTCA CTAGTGTGA 2340  
AGCCTGTTCC AGAGAGAGGT GGGACTGCAA GGAGAGGATG GTCAGCCCTA CCCACCTGCC 2400  
CTGTTTGAAC TTCTGTTTG ACAATGTATT CTGTTGATT TTTGTTCAAT AAAGAATTGG 2460  
55 GT 2462

Seq ID NO: 44 DNA Sequence  
Nucleic Acid Accession #: NM\_005291  
Coding sequence: 75..1178

60 1 11 21 31 41 51  
| | | | |  
65 CCGACACCCA CGGGCGGAGA TCACCTGCTG CCCCAGCAGC CCCTGTCCCT TCCTCCCGGA 60  
CCAGCAGCTA GAGGATGTCC AAACGGAGTT GGTGGGCTGG ATCCAGAAAG CCCCCAAGAG 120  
AGATGCTGAA ACTCTCAGGC TCTGACTCCA GCCAAAGCAT GAATGGCCTT GAAGTGGCTC 180  
CCCCAGGTCT GATCACAAC TTCTCCCTGG CCACGGCAGA GCAATGTGGC CAGGAGACGC 240  
CACTGGAGAA CATGCTGTTC GCCTCCTTCT ACCTTCTGGA TTTTATCTCT GCTTTAGTTG 300  
GCAATACCTT GGCTCTGTGG CTTTTCATCC GAGACCACAA GTCCGGGACC CCGGCCAAGC 360  
TGTTCCCTGAT GCATCTGGCC GTGGCCGACT TGTGCTGGT GCTGGTCCCTG CCCACCGGCC 420  
70 TGTTCTACCA CTCTCTGGG AACCCTGGC CATTTGGGGA AATCGCATGC CGTCTCACCG 480  
GCTTCTCTCT CTACCTCAAC ATGTACGCCA GCATCTACTT CCTCACCTGC ATCAGCGCCG 540  
ACCGTTTCTT GGCCATTGTG CACCCGGTCA AGTCCCTCAA GCTCCGCAGG CCCCTCTACG 600  
CACACCTGGC CTGTGGCTTC CTGTGGGTGG TGTTGGCTGT GGCCATGGCC CCGCTGCTGG 660  
TGAGCCCAAC GACCGTGACG ACCAACCACA CGGTGGTCTG CCTGCAGCTG TACCGGAGGA 720  
75 AGGCTCCCCA CATGCGCCTG GTGTCCCTGG CAGTGGCCTT CACCTTCCCG TTCTATACCA 780  
CGGTACCTG CTACCTGCTG ATCATCCGCA GCCTGCGGCA GGGCCTGCGT GTGGAGAAGC 840  
GCCTCAAGAC CAAGGCAGTG CGCATGATCG CCATAGTGCT GGCCATCTTC CTGGTCTGCT 900  
TCGTGCCCTA CCACCTCAAC CGCTCCGTCT ACGTGTGCTA CTACCCGAGC CATGGGCCCT 960  
CCTGGCCGAC CCAGCGCATC CTGGCCCTGG CAAACCGCAT CACCTCCTGC CTACCCAGCC 1020  
80 TCAACGGGGC ACTCGACCCC ATCATGTATT TCTTCGTGGC TGAGAAGTTC CGCCACGCC 1080  
TGTGCAACTT GCTCTGTGGC AAAAGGCTCA AGGGCCCGCC CCCAGCTTC GAAGGGAAAA 1140  
CCAACGAGAG CTCGCTGAGT GCCAAGTCAG AGCTGTGAGC GGGGGGGCGC GTCCAGGCCG 1200  
AGCGCAGACT GTTTAGGACT CAGCAGACCC AGCAAGAGGC ATCTGCCCTT TCCCCAGCCA 1260  
CCTCCCCAGC AAGCAACCTG AAATCTCAGC AGATGCCAC CATTTCTCTA GATCGCCTAG 1320  
TCTCAACCCA TAAAAGGAA GAACTGACAA AGGGATCCCA TCGCCACCC CTCTGCAGGG 1380



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GCTTGTGATG GCTACAATGG CTCCTAGACA CTCAACGACT TCATCTGTGG CAGGGAGAGA 1440  
GGAGGCCGGA AGAACAAACC CTGAACAATG GAGGCCCTTC TTTCGGCTA GGCTCCCAGC 1500  
CTCCTTCCCG CTACAGAATC GGTATCCGGC GAGGCTCAGC AGAAAGACCC TGAAGGCAGG 1560  
CTGCARAATGA CCCAGAAGAG GACCTGGGA GTCTGTGGTGG GGACGGGGAG GGAGTCTCAA 1620  
TACTCCTTTG CAGCGCAAGG TACTCTGAGT CCCCTCTGTA GTGCTCTGTC CAGACACACA 1680  
CTGCTGAGT TGAAGAGACA CAGGCCACAC ATTTCAGGCT GGTGCGCAGC GGACGTCAGC 1740  
ACTCACGGCC TGCGGGGACT CAGCACAGCT CTGGATTCTG GATCTCTCCT GCTGTAACCC 1800  
CACGCACAAG CCTGCAACCC CCAGAGCTCT TTGACAGGCT CCCAGGCCCT CCAGTCTCTG 1860  
ACAAAGCATGT GCAGTCAAGG GAGCTCAGCT CAGGCCAGGG CTGGGCTGTG CACCTGCCTC 1920  
CCACTGACCC AGACCCACTT CCTCCAGAGA GGCTCTCTC CGCCTGAGCT ATTTCCCTTG 1980  
CTAGTGTGCA GATATTTCCC TAACATGTCC TTTTGTGTAT TTGTTGTAC GGACCATAAA 2040  
TATAACTGTA GCTTTAAGAC TAAAAAATAA 2070

Seq ID NO: 45 DNA Sequence  
Nucleic Acid Accession #: NM\_018643  
Coding sequence: 48..752

1 11 21 31 41 51  
| | | | |  
CTACTACTAC TAAATTCGCG GCCGGTCGAC GCTGGTGCAC AGGAAGGATG AGGAAGACCA 60  
GGCTCTGGGG GCTGCTGTGG ATGCTCTTTG TCTCAGAACT CCGAGCTGCA ACTAAATTAA 120  
CTGAGGAAAA GTATGAACCTG AAGAGAGGGC AGACCCCTGA TGTGAAATGT GACTACACGC 180  
TAGAGAAATT TGCCAGCAGC CAGAAAGCTT GGCAGATAAT AAGGACCGGA GAGATGCCCA 240  
AGACCCCTGC ATGCACAGAG AGGCCCTCAA AGAATTCCCA TCCAGTCCAA GTGGGGAGGA 300  
TCATACTAGA AGACTACCAT GATCATGGTT TACTGGCGGT CCGAATGGTC AACCTTCAAG 360  
TGGAAGATTC TGGACTGTAT CAGTGTGTGA TCTACCAGCC TCCCAAGGAG CCTCACATGC 420  
TGTTGGATCG CATCCGCTTG GTGGTGACCA AGGGTTTTTC AGGGAACCCCT GGCTCCAATG 480  
AGAATTCTAC CCAGAATGTG TATAAGATTG CTCTACCAC CACTAAGGCC TTGTGCCCAT 540  
TCTATACCAG CCCAGAACT GTGACCCAG CTCCACCCAA GTCAACTGCC GATGTCTCCA 600  
CTCCTGACTC TGAATCAAC CTTCACAAATG TGACAGATAT CATCAGGGTT CCGGTGTTCA 660  
ACATTGTGAT TGGCTGGCT GTGGGATTCC TGAGTAAGAG CCGTGTCTTC TCTGTCTCTG 720  
TTGCTGTGAC GCTGAGGTCA TTTGTACCTT AGGCCACGA ACCCACGAGA ATGTCTCTCTG 780  
ACCTCCAGCC ACATCCATCT GGCAGTTGTG CCAAGGGAGG AGGGAGGAGG TAAAAGGCAG 840  
GGAGTTAATA ACATGAATTA AATCTGTAAT CACCAGCTAT TTCT 884

Seq ID NO: 46 DNA Sequence  
Nucleic Acid Accession #: NM\_003467  
Coding sequence: 1..1059

1 11 21 31 41 51  
| | | | |  
ATGGAGGGGA TCAGTATATA CACTTCAGAT AACTACACCG AGGAAATGGG CTCAGGGGAT 60  
TATGACTCCA TGAAGGAACC CTGTTTCCGT GAAGAAAATG CTAATTTCAA TAAATCTTC 120  
CTGCCACACA TCTACTCCAT CATCTTCTTA ACTGGCATTG TGGCAATGG ATTGGTCATC 180  
CTGGTCAATG GTTACCAGAA GAAACTGAGA AGCATGACGG ACAAGTACAG GCTGCAACCTG 240  
TCAGTGGCCC ACCTCTCTTT TGTCTACAG CTTCCTTCTT GGGCAGTTGA TGCCGTGGCA 300  
AACTGGTACT TTGGGAACCT CCTATGCAAG GCAGTCCATG TCATCTACAC AGTCAACCTC 360  
TACAGCAGTG TCCTCATCCT GGCCTTCATC AGTCTGGACC GCTACCTGGC CATCGTCCAC 420  
GCCACCAACA GTCCAGAGCC AAGGAAGCTG TTGGCTGAAA AGGTGGTCTA TGTGGCGTC 480  
TGCATCCCTG CCTCTGCTGT GACTATTCCC GACTTCATCT TTGCCAACGT CAGTGAGGCA 540  
GATGACAGAT ATATCTGTGA CCGCTTCTAC CCCAATGACT TGTGGTGGT TGTGTTCCAG 600  
TTTCAGCACA TCATGTTTGG CCTTATCCTG CCGTGTATTG TCATCTGTG CTGCTATTGC 660  
ATTATCATCT CCAAGCTGTC ACACCTCAAG GGCCACCAGA AGCGCAAGGC CCTCAAGACC 720  
ACAGTCATCC TCATCTGCTG TTTCTTCGCC TGTGGCTGTC CTACTACAT TGGGATCAGC 780  
ATCGACTCCT TCATCTCTCT GGAAATCATC AAGCAAGGGT GTGAGTTTGA GAACACTGTG 840  
CACAAAGTGA TTTCCATCAC CGAGGCCCTA GCTTTCTTCC ACTGTGTGCT GAACCCATC 900  
CTCTATGCTT TCCTTGGAGC CAAATTTAAA ACCTTCGCC AGCAGCACT CACCTCTGTG 960  
AGCAGAGGGT CCAAGCTCAA GATCCTCTCC AAAGGAAGC GAGGTGGACA TTCATCTGTT 1020  
TCCACTGAGT CTGAGTCTC AAGTTTTCAC TCCAGCTAA 1059

Seq ID NO: 47 DNA Sequence  
Nucleic Acid Accession #: Eos sequence

1 11 21 31 41 51  
| | | | |  
GTGTGTAGTC GGGTATGAGA ACGATTGCAA GCAAAAGCAG CTGAGGGACG CTGTCCAAGG 60  
AGTAGGCTCA GTAGCAGGAA CTGCAAAATAC TTGAGAAGGG AAAAGTTTCA CCTTGTGCTG 120  
GAAAGTGGTT TAGCATGCTG GAGCTGGTTT TCTGCTTGGT AGCCCTACAA CTTTGGCCCA 180  
ACTACTTGGC CTCTGGGACT CAGATTCTCT CTCTTTAAAA TGTGCTAAT AATAGCACCC 240  
ACCTCTGTG AGGAGGATGC TGTGAGGACA AAATGAGATC ATCCACATAA GCCGTGAACC 300  
CTGTTCTCTG TAAGCTCTCT GAAAGAAGTC TATGGATTAT ACTCAACCTA CACTCCAGTT 360  
AAAGGAACAT CTACACACAG AGGAAATGAA TAACATGAAG TGAAGTCTTC ATCTCCATTC 420  
CCAACAGTCC CCATTCTACT TGCAGAAAGG TTGCTTACAC TGAATATCAG TTTATTTTCC 480  
CCTGGTGCAA AGAACAGTCG TTTCTCCAAA ACTGAAGCTG GAAATTATCT GAAATATCAG 540  
GTCTCCGGA AAAGGGACGT GRAGCCCCCT TTGTAATTTT TGCATTAGCG TGCTCTCCTG 600  
GCAAGCAGGA AACCTCATCA GAGAAGTCAG CCAAGGAAGG TCTTTAAATG GAAATGTGTC 660  
AAACGAGGAG CAAATGCATT AAAAAGTTGC TGACGGGCAT GAAATGCTTT GATGTGAAGA 720  
CGGAAACTC CAAGCAGGAA GGATTTTAAC AITTTGAATC TGATTGACTC TGTGGTTTCT 780  
CAGCACAGTT ATTCATGGG CTAAAAATAA TGCAGAAATG GTACTTTCAG ACCACAGCTG 840  
CAGAGGGGAT CGTGGTGAAT TTCAATGAAA ATCCATTGA ATCTTGAGGT TCAGATCTTA 900  
AAAAAGCAAA GGACATGAGA GAAGTAATAT TGTGCTTGA AATTTCAATG CTTATATCTA 960  
AAAGAACTC CTATTTTAAA GAGAAATGTT GAATCTTTG AACGTGGTAG ACGTCCCATC 1020  
AAAACCTTCT CCTGAAATAG GAGATAAATG TTGAAAGAG CCAATGTATT GAGTATGCTG 1080  
ATAGAGGTGG AGTTCAGAGA CAGGCAAGCA TACATAAGAG TCAGGATGTT TTTCACTATT 1140  
ATCTTTTACA ATGAGTTTCT TACAGTGGTC AATGACAAAC CAATTTTCAIT CAAAGCTTGC 1200  
TTCAATAGGC AATGGTTTGA TGCCAATATG TTAGCTATTT ACTTTGACCA CGCATTTGCAT 1260  
TAAAAAGAAG AAAAATTAAG AATACTCAAG CAGAACCTCC AACTTAGATA GCATTTCCA 1320

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CAAAAAGTAA TGGAGGGATA GACTGAAGTT AAATGGGATC AGGTATGTGA TGAGATCTCA 1380  
GAAGTGTTTG CACAATAATG CAGATACTCA TTTTAAACAG AGTCATAAGG ATTGGAACATA 1440  
ATAAAAAATA TAGAATAAAA TACCGATCAA GAATGTGTCC TCCTGCGTAT CTGGGTTTTG 1500  
AATTCTGGCT CCACAGAACT TGTCAGATAT ATGACATTAA AC 1542

Seq ID NO: 48 DNA Sequence

Nucleic Acid Accession #: Eos sequence

Coding sequence: 52..1131

1 11 21 31 41 51  
| | | | |  
10 | | | | |  
ATGCATCCTC AAGTGGTCAT CTTAAGCCTC ATCCTACATC TGGCAGATTC TGTAGCTGGT 60  
TCTGTAAAGG TTGGTGGAGA GGCAGGTCCA TCTGTACAC TACCCTGCCA CTACAGTGGG 120  
GCTGTACAT CAATGTGCTG GAATAGAGGC TCATGTTCTC TATTCACATG CCAAAATGGC 180  
ATTGTCTGGA CCAATGGAAC CCACGTCACC TATCGGAAGG ACACACGCTA TAAGCTATTG 240  
15 GGGGACCTTT CAAGAAGGGA TGTCTCTTTG ACCATAGAAA ATACAGCTGT GTCTGACAGT 300  
GGCGTATATT GTTGCCGTGT TGAGCACCGT GGGTGGTTCA ATGACATGAA AATCACCGTA 360  
TCATTGGAGA TTGTGCCACC CAAGGTCAAG ACTACTCCAA TTGTCACAAC TGTTCCAAAC 420  
GTCCAGACTG TTGGAACGAG CACCACTGTT CCAACGACAA GACTGTCTCC AACGACAAC 480  
GTTCCAACAA CAATGAGCAT TCCAACGACA ACGACTGTT CGACGACAAT GACTGTTTCA 540  
20 ACGACAACGA GCGTTCCAA GACAACGAGC ATTCACAAAC CAACAAGTGT TCCAGTGACA 600  
ACAAACGCTT CTACCTTTGT TCCTCCAATG CCTTGGCCCA GGCAGAACCA TGAACAGTA 660  
GCCACTTCA CACTTCTACC TCAGCCAGCA GAAACCCACC CTACGACACT GCAGGGAGCA 720  
ATAAGGAGAG AACCACACAG CTCACATTG TACTCTTACA CAACAGATGG GAATGACACC 780  
GTGACAGAGT CTTGAGATGG CCTTTGGAAT AACAATCAAA CTCAACTGTT CCTAGAACAT 840  
25 AGCTTACTGA CGGCCAATAC CACTAAAGGA ATCTATGCTG GAGTCTGTAT TTCTGTCTTG 900  
GTGCTTCTTG CTCTTTTGGG TGTCTATCT GCCAAAAAGT ATTTCTTCAA AAAGGGAGTT 960  
CAACCACTAA GTGTTTCTAT TAGCAGCCTT CAAATTAAAG CTTTGCATAA TGCAGTTGAA 1020  
AAGGAAGTCC AAGCAGAAGA CAATATCTAC ATTGAGAATA GTCTTTATGC CACGGAATAA 1080

Seq ID NO: 49 DNA Sequence

Nucleic Acid Accession #: NM\_004932.2

Coding sequence: 327..2699

1 11 21 31 41 51  
| | | | |  
35 | | | | |  
ACTTCATCCA CTTGCAAAATC AGTGTGTGCC CACAAGAGCC AGCTCTCCCG AGCCCGTAAC 60  
CTTCGCATCC CAAGAGCTGC AGTTTCAGCC GCGACAGCAA GAACGGCAGA GCCCGCGACC 120  
GCGCGCGCGG CGCGCGCGGA GGCAGGAGCA GCCTGGGCGG GTCCGAGGGT CTCCGCGGGC 180  
GAGGAAGGC GAGCAGAGAT ATCCTCTGAG AGCCCAAGCAA AGAACATTAA GGAAGGAAGG 240  
40 AGGAATGAGG CTGGATACGG TGCACTGAAA AAGGCATCTC CAAGAGTGGG GCACTCACTA 300  
CGCACAGACT CGACGGTGCC ATCAGCATGA GAACTTACCG CTACTCTCTG CTGCTCTTTT 360  
GGGTGGGCCA GCCCTACCCA ACTCTCTCAA CTCCACTATC AAAGAGGACT AGTGGTTTCC 420  
CAGCAAGAAA AAGGCGCCCTG GAGCTCTCTG GAAACAGCAA AAATGAGCTG AACCGTTCAA 480  
AAAGGAGCTG GATGTGGAAT CAGTTCTTTC TCCTGGAGGA ATACACAGGA TCCGATTATC 540  
45 AGTATGTGGG CAAGTTACAT TCAGACCAAG ATAGAGGAGA TGGATCACTT AAATATATCC 600  
TTTCAGGAGA TGGAGCAGGA GATCTCTTCA TTATTAATGA AAACACAGGC GACATACAGG 660  
CCACCAAGAG GCTGGACAGG GAAGAAAAAC CCGTTTACAT CCTTCGAGCT CAAGCTATAA 720  
ACAGAAGGAC AGGAGAGCCC GTGGAGCCCG AGTCTGAATT CATCATCAAG ATCCATGACA 780  
TCAATGACAA TGAACCAATA TTCACCAAGG AGGTTTACAC AGCCACTGTC CCTGAAATGT 840  
50 CTGATGTCCG TACATTTGTT GTCCAAGTCA CTGCGACGGA TGCAGATGAT CCAACATATG 900  
GGAACAGTGC TAAAGTTGTC TACAGTATTC TACAGGGACA GCCCTATTTT TCAGTTGAAT 960  
CAGAAACAGG TATTATCAAG ACAGCTTTGC TCAACATGGA TCGAGAAAAC AGGGAGCAGT 1020  
ACCAAGCTGT GATTCAAGCC AAGGATATGG GCGGCCAGAT GGGAGGATTA TCTGGGACCA 1080  
CCACCGTGAA CATCACTAG ACTGATGTCA ACGACAACCC TCCCGGATTC CCCAGAGTA 1140  
55 CATACAGT TAAAACTCCT GAATCTTCTC CACCGGGGAC ACCAATTGGC AGAATCAAAG 1200  
CCAGCAGCCG TGATGTGGGA GAAAATGCTG AAATTGAGTA CAGCATCACA GACGGTGAGG 1260  
GGCTGGATAT GTTTGATGTC ATCACCGACC AGGAAACCCA GGAAGGGATT ATAACGTICA 1320  
AAAAGCTCTT GGCCTTTGAA AAGAAGAAAG TGTATACCTT TAAAGTGGAA GCCTCCAATC 1380  
CTTATGTTGA GCACTGATT CTCTACTTGG GGCCTTCAA AGATTAGGCC CATTGTAGAA 1440  
60 TTGTGTTGGA GGATGTAGAT GAGCCACCTG TCTTCAGCAA ACTGCGCTAC ATCTTACAAA 1500  
TAAGAGAAGA TGCTCAGATA AACACCACAA TAGGCTCCGT CACAGCCCAA GATCCAGATG 1560  
CTGCCAGGAA TCCTGTCAAG TACTCTGTAG ATCGACACAC AGATATGGAC AGAATATTCA 1620  
ACATTGATTC TGGAAATGGT TCGATTTTTA CATCGAAACT TCTTGACCGA GAAACACTGC 1680  
TATGGCACA CATTACAGTG ATAGCAACAG AGATCAATAA TCCNAAGCAA AGTAGTCCAG 1740  
65 TACCTCTATA TATTAAAGTT CTAGATGTCA ATGACAACGC CCCAGAAATT GCTGAGTTCT 1800  
ATGAACTTT TGTCTGTGAA AAAGCAAAGG CAGATCAGTT GATTACAGCC CTGCATGCTG 1860  
TTGACAAGGA TGACCTTAT AGTGGACACC AATTTTCGTT TTCTTGGGCC CCTGAAGCAG 1920  
CCAGTGGCTC AAACCTTACC ATTCAAGACA ACAAGACAA CACGGCGGGA ATCTTAACTC 1980  
GGAAAAATGG CTATAATAGA CACGAGATGA GCACCTATCT CTTCGCTGTG GTCATTTTCA 2040  
70 ACAACGACTA CCCAGTTCAA AGCAGCACTG GGACAGTGAC TGTCCGGGTC TGTGCATGTG 2100  
ACCACCACGG GAACATGCAA TCCTGCCATG CCGAGGCGCT CATCCACCCC ACGGGACTGA 2160  
GCACGGGGGC TCTGGTTGCC ATCCTTCTGT GCATCGTGAT CCTACTAGTG ACAGTGGTGC 2220  
TGTTTGCAGC TCTGAGGCGG CACCGAAAAA AAGAGCCTTT GATCATTTCC AAAGAGGACA 2280  
TCAGAGATAA CATTGTCACT TACAACGACG AAGGTGGTGG AGGAGGAGAC ACCCAGGCTT 2340  
75 TTGATATCGG CAGCTGAGG AATCCTGAAG CCATAGAGGA CAACAAATTA CGAAGGGACA 2400  
TTGTGCCCGA AGCCCTTTTC CTACCCCGAC GGAACCTCA AGCTCGCGAC AACACCGGAT 2460  
TCAGAGATT CATTAAACAA AGGTTAAAGG AAAATGACAC GGACCCCACT GCCCGCCAT 2520  
ACGACTCCTT GGCCACTTAC GCCTATGAAG GCACTGGCTC GTGGGGGAT TCCCTGAGCT 2580  
CGCTGGAGCT AGTGACCACG GATGCAGATC AAGACTATGA TTACCTTAGT GACTGGGGAC 2640  
80 CTCGATTCAA AAAGCTTGCA GATATGTATG GAGGAGTGA CAGTGACAAA GACTCCTAAT 2700  
CTGTTGCCTT TTTCTTTTTC CAATACGACA CTGAAATATG TGAAGTGGCT ATTTCTTTAT 2760  
ATTTATCCAC TACTCCGTGA AGGCTTCTCT GTTCTACCCG TTCCAAAGAC CAATGGCTGC 2820  
AGTCCGTGTG GATCCAATGT TAGAGACTTT TTTCTAGTAC ACTTTTATGA GCTTCCAAGG 2880  
GGCAAAITTT TATTTTITAG TGATCCAGT TAACCAAGTC AGCCCAACAG CGAGTGCCG 2940  
GAGGGGAGGA CAGGGAAACAG TATTTCCACT GTTCTCAGG GCACCGTGCC GCCTTCCGCT 3000

WO 03/025138

PCT/US02/29560

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GTCCTGGTGT TTTACTACAC TCCATGTGAC GTCAGCCAAC TGCCCTAACT GTACATTTCa 3060
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GAATTAAAA TAACACTTGC CCATGCTATT TGTCTTCAA GAACCTTCTC TGCCATCAAC 3240
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ATCCAGAGGA CCCAAGTGA CTGAAGTAAT CCTTCTGGCA GATTCAAAATC GTTTATTTCa 4200
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Seq ID NO: 50 DNA Sequence  
Nucleic Acid Accession #: Eos sequence

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Seq ID NO: 51 DNA Sequence  
Nucleic Acid Accession #: Eos sequence  
Coding sequence: 640..2313

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CGGCGTGTCT GTCGGGCCGC CCCTCCCCGC TCACTCCCTC CGCCTCGTGC TCCTCCGGG 240
GTGCTTGGCA CAGCCTCGGA TTCTCCCTC TCGCTGCTCG AGTCAGTTTC CCTATCGGCG 300
GCAGCGGGCA AGCGGGGCG GGCGGCGGCG GCAGCCGCGG TGGCGGCTG GGGAACTCT 360
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|    | CCCTGCCACG  | TTTCGGGTG  | CCCTGCACCC | CCCACCCAGG | CTCGCTTCTC | TTCGAAGCGG  | 480  |
|    | GAAGGGCGCC  | TTGCAGGATC | CTGCCGCCCC | TCCAACCGGA | TCCTGGGTCT | AGAGCTCCCC  | 540  |
|    | AGAGCGAGGC  | GCTCGCCAGG | ACTCCTGCCC | CGCAACCCCT | GACCGCCGGG | GGGTGCCCCC  | 600  |
|    | GGGACGTAGC  | CGCGCGGAGA | GGAAGCGGCA | AGGGGACCA  | TGCGGCGCCT | GACTCGTCGG  | 660  |
| 5  | CTGGTTCTGC  | CAGTCTTCGG | GGTGTCTG   | ATCACGGTGC | TGCTGTCTT  | CTGGGTAACC  | 720  |
|    | AAGAGGAAGT  | TGAGGTGCC  | GACGGGACCT | GAAGTGCAGA | CCCCAAGGT  | TTGGTCTTGG  | 780  |
|    | TTTTTCAAGG  | TGGCTGGGAT | GAGCCCTTGG | CGCCTCAGG  | TGCTGTATC  | ACCCACTCCT  | 840  |
|    | CCCTACCAAA  | GAGGGCATCT | TCCTACAGGA | GGACACCTTG | CTGTATGTCA | TTTCCCATGT  | 900  |
|    | CTCTTGCAAG  | AAGCTCAGTT | CCATTGCGAG | ACTCAGGTCT | TTCTTCAAGT | CAGATGCACA  | 960  |
| 10 | CTGCTGGTGT  | ATTGCACGGA | CCTTCCACCC | ACTAGCATCA | TCATCACCTT | CCACAACGAG  | 1020 |
|    | GCCCGCTCCA  | CGCTGCTCAG | GACCATCCGC | AGTGTATTAA | ACCGCACCCC | TACGCATCTG  | 1080 |
|    | ATCCGGGAAA  | TCATATTAGT | GGATGACTTC | AGCAATGACC | CTGATGACTG | TAAACAGCTC  | 1140 |
|    | ATCAAATTGC  | CCAAGGTGAA | ATGCTTGCGC | AATAATGAAC | GGCAAGGTCT | GGTCCGGTCC  | 1200 |
|    | CGGATTCCGG  | GCGCTGACAT | CGCCACGGGC | ACCACTCTGA | CTTTCCTCGA | CAGCCACTGT  | 1260 |
| 15 | GAGGTGAACA  | GGGACTGGCT | CCAGCCTCTG | TTGCACAGGG | TCAAAGAGGA | CTACACGCGG  | 1320 |
|    | TGSGTGTGCC  | CTGTGATCGA | TATCATTAAC | CTGGACACCT | TCACCTACAT | CGAGTCTGCC  | 1380 |
|    | TGCGAGCTCA  | GAGGGGGTGT | TGACTGGAGC | CTCCACTTCC | AGTGGGAGCA | GCTCTCCCCA  | 1440 |
|    | GAGCAGAAGG  | CTCGGCGCCT | GGACCCACCG | GAGCCCATCA | GGACTCCTAT | CATAGCTGGA  | 1500 |
|    | GGGCTCTTCG  | TGATCGACAA | AGCTTGGTTT | GATTACCTGG | GGAAATATGA | TATGGACATG  | 1560 |
| 20 | GACATCTGGG  | GTGGGGAGAA | CTTTGAAATC | TCCTTCCGAG | TGTGGATGTG | CGGGGGCAGC  | 1620 |
|    | TTAGAGATGC  | TCCCTCTCAG | CCGAGTGGGG | CACGTCTTCC | GGAGAAGACA | CCGCTACGTT  | 1680 |
|    | CTCCCTGATG  | GAATGCCCAA | CACGTATATA | AAGAACACCA | AGCGGACAGC | TGAAGTGTGG  | 1740 |
|    | ATGGATGAAT  | ACAAGCAATA | CTATTACGCT | GCCCGGCCAT | TGCGCCTGGA | GAGGCCCTTC  | 1800 |
|    | GGGAATGTTG  | AGAGCAGATT | GGACCTGAGG | AAGAATCTGC | GCTGCCAGAG | CTTCAAGTGG  | 1860 |
| 25 | TACCTGGAGA  | ATATCTACCC | TGAACCTCAG | ATCCCAAGG  | AGTCTCTCAT | CCAGAAGGGC  | 1920 |
|    | AATATCCGAC  | AGAGACAGAA | GTGCCTGGAA | TCTCAAAGGC | AGAACAAACA | CCAGACCCCA  | 1980 |
|    | AACTAAAGT   | TGAGCCCTTG | TGCCAAGGTC | AAAGGCGAAG | ATGCAAAGTC | ACAGGTATGG  | 2040 |
|    | GCCTTCACAT  | ACACCCAGCA | GATCCTCCAG | GAGGAGCTGT | GCCTGTCACT | CATCACCTTG  | 2100 |
|    | TTCCCTGGCG  | CCCCAGTGT  | TCTTGTCTT  | TGCAAGAATG | GAGATGACCG | ACAGCAATGG  | 2160 |
| 30 | ACCAAACTG   | GTTCACACAT | CGAGCACATA | GCATCCCACT | TCTGCTCGA  | TACAGATATG  | 2220 |
|    | TTGCGTGTATG | GCAACGAGAA | CGGCAAGGAA | ATCGTCTGCA | ACCATGTGTA | GTCTCTCACTC | 2280 |
|    | ATGAGCCAGC  | ACTGGGACAT | GGTGAGCTCT | TGAGGACCCC | TGCCAGAAGC | AGCAAGGGCC  | 2340 |
|    | ATGGGGTGGT  | GCTTCCCTGG | ACCAGAACAG | ACTGGAAACT | GGGCAGCAAG | CAGCCTGCAA  | 2400 |
|    | CCACCTCAGA  | CATCTGGGAC | TGGGAGGTGG | AGGCAGAGCC | CCCCAGGACA | GGAGCAACTG  | 2460 |
| 35 | TCTCAGGAG   | GACAGAGGAA | AACATCACAA | GCCAATGGGG | CTCAAAGACA | AATCCACAT   | 2520 |
|    | GTCTCTCAAG  | CCGTTAAGTT | CCAGTCTCTG | CCAGTCATTC | CCTGATTGGT | ATCTGGAGAC  | 2580 |
|    | AGAAACCTTAA | TGGGAAGTGT | TTATTGTTCC | TTTTCCTACA | AAGGAAGCAG | TCTCTGGAGG  | 2640 |
|    | CCAGAAAGAA  | AAGCCTTCTT | TTTCACTAGG | CCAGGACTAC | ATTGAGAGAT | GAAGAATGGA  | 2700 |
| 40 | GGTTGTTTCC  | AAAAGAAATA | AAGAGAAACT | TAGAAGTTGT | CTCTCG     |             | 2746 |

Seq ID NO: 52 DNA Sequence  
Nucleic Acid Accession #: Eos sequence  
Coding sequence: 641..2299

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|    | GAGCTGCGCC | CAGGGCTTGG | CGCTGGCGGC | CCCGCAACAG | CACCGAGCGT | TTGGTTCGGC | 120  |
|    | GGCGCGCGGT | AGCGCCCCCT | CTCAGAGCCC | CGCTCACTCC | CACCTGGGCT | CGCTCCGAGT | 180  |
|    | CGGCCTGTCT | GTGCGGCCCC | CCCTCCCCGC | TCACTCCCTC | CGCCCTCGTG | CTCCTCCCGG | 240  |
| 50 | GGTGCTTGGC | ACAGCTCTCG | ATTCTCTCCT | CTCGCTGTCT | GAGTCAGTTT | CCCTATCGGC | 300  |
|    | GGCAGCGGGC | AAGCGGCGGC | CGCGCGCGGC | GGCAGCCGCG | GTGGCGGCGT | GGGGAACATC | 360  |
|    | TGCGCAGCCA | CCGCGTCTCT | CCGCTGGAG  | CGGCGTCCA  | GCTTGGCTGC | CCTCGTCTCT | 420  |
|    | TCCTTGCCAC | GTTCGCGGTC | GCCCTGCACC | CCCCACCCAG | GCTCGCTTCT | CTTCGAAGCG | 480  |
|    | GGAAAGGGCG | CTTGACGAGT | CCTGCCGCCC | CTCCAACCGG | ATCCTGGGTC | TAGAGCTCCC | 540  |
| 55 | CAGAGCGAGC | CGCTCGCCAG | GACTCCTGCC | CCGCCAACCC | TGACCGCCGG | GGGGTGCCCC | 600  |
|    | CGGGAAGTAG | CGCGCGGAG  | AGGAAGCGGC | AAAGGGGACC | ATGCGGCGCC | TGACTCGTGC | 660  |
|    | GCTGGTCTCT | CCAGTCTTCG | GGGTGCTCTG | GATCACGGTG | CTGCTGTTCT | TCTGGGTAAC | 720  |
|    | CAAGAGGAAG | TTGAGGTGTC | CGACGGGACC | TGAAGTGCGC | ACCCCTAAGC | CTTCGGACGC | 780  |
|    | TGACTGGGAC | GACCTGTGGG | ACCAAGTTGA | TGAGCGGCGG | TATCTGAATG | CCAAAAAGTG | 840  |
| 60 | GCGCGTTGGT | GACGACCCCT | ATAAGCTGTA | TGCTTTCAAC | CAGCGGAGAG | GTGAGCGGAT | 900  |
|    | CTCCAGCAAT | CGGGCCATCC | CGGACACTCG | CCATCTGAGA | TGCACACTGC | TGGTGTATTG | 960  |
|    | CACGGACCTT | CCACCCACTA | GCATCATCAT | CACCTTCCAC | AACGAGGCCC | GCTCCACGCT | 1020 |
|    | GCTCAGGACC | ATCCGCAAGT | TATTAACCCG | CACCCCTACG | CATCTGATCC | GGGAAATCAT | 1080 |
|    | ATTAGTGGAC | GACTTCAGCA | ATGACCTTGA | TGACTGTAAA | CAGCTCATCA | AATTGCCCAA | 1140 |
| 65 | GGTGAAATGC | TTGCGCAATA | ATGAACGGCA | AGGTCTGGTC | CGGTCCCGGA | TTGCGGGCGC | 1200 |
|    | TGACATCGCC | CAGGGCACCA | CTCTGACTTT | CCTCGACAGC | CAGTGTGAGG | TGAACAGGGA | 1260 |
|    | CTGGCTCCAG | CCTCTGTTCG | ACAGGGTCAA | AGAGGACTAC | ACCGGGGTGG | TGTGCCCTGT | 1320 |
|    | GATCGATATC | ATTAACTTGG | ACACCTTCAC | CTACATCGAG | TCTGCCTCGG | AGCTCAGAGG | 1380 |
|    | GGGGTTTGAC | TGGAGCCTCC | ACTTCCAGTG | GGAGCAGCTC | TCCCCAGAGC | AGAAGGCTCG | 1440 |
| 70 | GCGCCTGGAC | CCCACGGAGC | CCATCAGGAC | TCCTATCATA | GCTGGAGGGC | TCTTCTGTAT | 1500 |
|    | CGACAAAGCT | TGGTTTGATT | ACCTGGGGAA | ATATGATATG | GACATGGACA | TCTGGGGTGG | 1560 |
|    | GGAGAACTTT | GAATCTCTCT | TCCGAGTGTG | GATGTGCGGG | GGCAGCTTAG | AGATCGTCCC | 1620 |
|    | CTGCAGCCGA | GTGGGGCAGC | TCTTCCGGAA | GAAGCACCCC | TACGTTTTCC | CTGATGGAAA | 1680 |
|    | TGCCAACAGC | TATATAAAGA | ACACCAAGCG | GACAGCTGAA | GTGTGGATGG | ATGAATACAA | 1740 |
| 75 | GCAATACTAT | TACGCTGCCC | GGCCATTCCG | CCTGGAGAGG | CCCTTCGGGA | ATGTTGAGAG | 1800 |
|    | CAGATTGGAC | CTGAGGAAGA | ATCTGCGCTG | CCAGAGCTTC | AAGTGGTACC | TGGAGAATAT | 1860 |
|    | CTACCTGGAA | CTCAGCATCC | CCAAGGAGTC | CTCCATCCAG | AAGGGCAATA | TCCGACAGAG | 1920 |
|    | ACAGAAAGTG | CTGGAATCTC | AAAGGCAGAA | CAACCAAGAA | ACCCCAAAAC | TAAAGTTGAG | 1980 |
|    | CCCTCTGTCC | AAGGTCAAAG | GCGAAGATGC | AAAGTCCAG  | GTATGGGCTT | TCACATACAC | 2040 |
| 80 | CCAGCAGATC | CTCCAGGAGG | AGCTGTGCCT | GTCACTCATC | ACCTTGTTC  | CTGGCGCCCC | 2100 |
|    | AGTGGTCTT  | GTCTTTTGCA | AGAATGGAGA | TGACCGACAG | CAATGGACCA | AACTGGTTC  | 2160 |
|    | CCACATAGAG | CACATAGCAT | CCCACCTCTG | CCTCGATACA | GATATGTTCC | GTGATGGCAC | 2220 |
|    | CGAGAACGGC | AAGGAAATCG | TGCTCAACCC | ATGTGAGTCC | TCACTCATGA | GCCAGCACTG | 2280 |
|    | GGACATGGTG | AGCTCTTGAG | GACCCCTGCC | AGAAGCAGCA | AGGCGCATAG | GCTGGTGCTT | 2340 |

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PCT/US02/29560

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 65 GGTGCTTGGC ACAGCCCTGG ATTCTCCCT CTCGCTGCTC GAGTCAGTTT CCTATCGGC 300  
 GGCAGCGGGC AAGCGCGCGG CGCGCGCGGC GGCAGCGCGG GTGGCGGCGT GGGGAACATC 360  
 TCGGCAGCCA CCGCGCTTCT CCGCTGGAG CGGCGTCCA GCTTGGCTGC CCTCGGTCTC 420  
 TCCCTGCCAC GTTTCGGGTC GCCCTGCACC CCCCACCCAG GCTCGCTTCT CTTCGAAGCG 480  
 GGAAGGGCGC CTTGCAGGAT CCTGCCGCC CTCCAACCGG ATCCTGGGTC TAGAGCTCCC 540  
 70 CAGAGCGAGG CGCTCGCCAG GACTCCTGCC CCGCAACCC TGACCGCCGG GGGGTGCCCC 600  
 CGGACGCTAG CGCCCGCGAG AGGAAGCGGC AAGGGGACC ATGCGGCGCC TGACTCGTCG 660  
 GCTGGTTCTG CCAGTCTTCG GGGTGCTCTG GATCAGTGC TGCTGTTCTT CTGGGTAACC 720  
 AAGAGGAAGT GAGGTTGCCG ACGGACCTG AAGTGCAGAC CCTAAGGGT TCTTCCCAA 780  
 GTTAGTGACG CTAACACCCA GGATTGAACA AAGACAGCTT GGAAGTTAGA AGCAAGATGG 840  
 75 AGTCTGTTAG CTTCTCGAGC CTGACTGGGA CGACCTGGG GACCAGTTTG ATGACGGCG 900  
 GTATCTGAAT GCCAAAAGT GCGCGTTGG TGACGACCCC TATAAGCTGT ATGCTTCAA 960  
 CCAGCGGGAG AGTGAGCGGA TCTCCAGCAA TCGGGCCATC CCGGACACTC GCCATCTGAG 1020  
 ATGCACATG CTGTGTATT GCACGGACCT TCACCCACT AGCATCATCA TCACCTTCCA 1080  
 CAACGAGGCC CGCTCCAGCG TGCTCAGGAC CATCCGAGT GTATTAAACC GCACCCCTAC 1140  
 80 GCATCTGATC CGGGAATCA TATTAGTGA TGACTTCAGC AATGACCTG ATGACTGTAA 1200  
 ACAGCTCATC AAGTTGCCCA AGGTGAAATG CTTGCGCATA ATGAACGGCA AGGTCTGGTC 1260  
 CGGTCCCGGA TTGCGGGCGC TGACATCGCC CAGGGCACAC TCTGACTTTC TCGACAGCCA 1320  
 CTGTGAGGTG AACAGGACT GGCTCCAGCC TCTGTTGCAC AGGGTCAAAG AGGACTACAC 1380  
 GCGGGTGGTG TGCCCTGTGA TCGATATCAT TAACCTGGAC ACCTTCACT ACATCGAGTC 1440  
 TGCCTCGGAG CTCAGAGGGG GGTGTTGACT GAGCTCCAC TTCCAGTGGG AGCAGCTCTC 1500

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CCCAGAGCAG AAGGCTCGCG GCCTGGACCC CACGGAGCCC ATCAGGACTC CTATCATAGC 1560
TGGAGGGCTC TTGCTGATCG ACAAAAGCTTG GTTTGATTAC CTGGGGAAAT ATGATATGGA 1620
CATGGACATC TGGGGTGGGG AGAACTTTGA AATCTCCTTC CGAGTGTGGA TGTGCGGGGG 1680
CAGCCTAGAG ATCGTCCCCT GCAGCCGAGT GGGGCACGTC TTCCGGAAGA AGCACCCCTA 1740
CGTTTTCCCT GATGGAAATG CCAACAAGTA TATAAAGAAC ACCAAGCGGA CAGCTGAAAT 1800
GTGGATGGAT GAATACAAGC AATACTATTA CGCTGCCCGG CCATTGCCCC TGGAGAGGCC 1860
CTTCGGGAAT GTTGAGAGCA GATTGGACCT GAGGAAGAAT CTGCGCTGCC AGAGCTTCAA 1920
GTGGTACCTG GAGAATATCT ACCCTGAAC TACGATCCCC AAGGAGTCCCT CCATCCAGAA 1980
GGGCAATATC CGACAGAGAC AGAAGTGCC TGAATCTCAA AGGCAGAACCA ACCAAGAAAC 2040
CCCAAACTTA AAGTTGAGCC CCTGTGCCAA GGTCAAAGGC GAAGATGCAA AGTCCCAGGT 2100
ATGGGCTCTC ACATACACCC AGCAGATCCT CCAGGAGGAG CTGTGCTGTG CAGTTCATCAC 2160
CTTGTTCCTT GGGCCCGCAG TGGTTCCTGT CCTTTGCAAG AATGGAGATG ACCGACAGCA 2220
ATGGACCAAA ACTGGTTCCT ACATCGAGCA CATAGCATCC CACCTCTGCC TCGATACAGA 2280
TATGTTCCGT GATGGCACCG AGAAGCGCAA GGAAATCGTC GTCAACCCAT GTGAGTCCCT 2340
ACTCATGAGC CAGCACTGGG ACATGGTGAG CTCTTGAGGA CCCCTGCCAG AAGCAGCAAG 2400
GGCCTATGGG TGGTGTCTCC CTGGACCAAG ACAGACTGGA AACTGGGCAG CAAGCAGCCT 2460
GCAACCACTC CAGACATCCT GGACTGGGAG GTGGAGGCAG AGCCCCCAG GACAGGAGCA 2520
ACTGTCTCAG GGAGGACAGA GGAACACATC ACAAGCCAAT GGGGCTCAA GACAAATCCC 2580
ACATGTTCTC AAGGCGGTTA AGTTCAGTC CTGGCCAGTC ATTCCCTGAT TGGTATCTGG 2640
AGACAGAAAC CTAATGGGAA GTGTTTATTG TTCCTTTTCC TACAAAGGAA GCAGTCTCTG 2700
GAGGCCAGAA AGAAAGCCCT TCTTTTTCAC TAGGCCAGGA CTACATTGAG AGATGAAGAA 2760
TGGAGGTGTT TTCCAAAGA AATAAAGAGA AACTTAGAAG TTG 2803

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Seq ID NO: 55 DNA Sequence
Nucleic Acid Accession #: NM_001218
Coding sequence: 1..1080
1      11      21      31      41      51
|      |      |      |      |      |
GTACTCGCCA CGGCACCCAG GCTGCGCGCA CGCGTCCCG GTGTGCAGCT GGAGAGCGAG 60
CGGCGACCGG GAGCCCCCGG CACAGCCCGC GCCGCCCCCG CAGGAGCCCC CGAAGATGCC 120
CCGCGCAGCG CTGCAGCGCG CGGCCGTGCT CCTGCTGGTG ATCTTAAAGG AACAGCCTTC 180
CAGCCCGCGC CCAGTGAAGG GTTCCAAGTG GACTTATTTT GGTCTGATG GGGAGAATAG 240
CTGGTCCAAG AAGTACCCGT CGTGTGGGGG CCTGCTGCAG TCCCCCATAG ACCTGCACAG 300
TGACATCCTC CAGTATGACG CCAGCCTCAC GCCCTCGAG TTCCAAGGCT ACAATCTGTC 360
TGCCAAACAAG CAGTTTCTCC TGACCAACAA TGGCCATTCA GTGAAGCTGA ACCTGCCCTC 420
GGACATGCAC ATCCAGGGCC TCCAGTCTCG CTACAGTGCC ACGCAGCTGC ACCTGCACATG 480
GGGGAACCCG AATGACCCGC ACGGCTCTGA GCACACCGTC AGCGACAGC ACTTCGCCGC 540
CGAGCTGCAC ATTGTCCATT ATAACCTAGA CCTTTATCCT GACGCCAGCA CTGCCAGCAA 600
CAAGTCAGAA GGCCTGCTGT TCCTGGCTGT TCTCATTGAG ATGGGCTCCT TCAATCCGTC 660
CTATGACAAG ATCTTCAGTC ACCTTCAACA TGTAAAGTAC AAAGGCCAGG AAGCATTCGT 720
CCCGGATTTC AACATTGAAG AGCTGCTTCC GGAGAGGACC GCTGAATATT ACCGCTACCG 780
GGGGTCCCTG ACCACACCCC CTGCAACCCC CACTGTGCTC TGGACAGTTT TCGGAAACCC 840
CGTGCAAAAT TCCAGGAGC AGCTGCTGGC TTTGGAGACA GCCCTGTACT GCACACACAT 900
GGACGACCC TCCCCAGAG AAATGATCAA CAACTTCCGG CAGGTCCAGA AGTTCGATGA 960
GAGGCTGGTA TACACTCCT TCTCCCAAGT GCAAGTCTGT ACTGCGGAG GACTGAGTCT 1020
GGGCATCATC CTCTCACTGG CCCTGGCTGG CATTCTTGGC ATCTGTATTG TGGTGGTGGT 1080
GTCCATTGCG CTTTTCAGAA GGAAGAGTAT CAAAAAAGGT GATAACAAGG GAGTCATTTA 1140
CAAGCCAGCC ACCAAGATGG AGACTGAGGC CCACGCTTGA GGTCCCGGGA GCTCCCGGCG 1200
ACATCCAGGA AGGACCTTGC TTTGGACCCT ACACACTTCG GCTCTCTGGA CACTTGCAGC 1260
ACCTCAAGGT GTTCTCTGTA GCTCAATCTG CAAACATGCC AGGCTCAGG GATCCTCTGC 1320
TGGGTGCCTC CTGCTCTTGG GACCATGGCC ACCCCAGAGC CATCCGATCG ATGGATGGGA 1380
TGCACTCTCA GACCAAGCAG CAGGAATTCA AAGCTGCTTG CTGTAAGTGT GTGAGATTGT 1440
GAAGTGTGCT TCCATCTGGA ATCACAACC AAGCCATGCT GGTGGGCCAT TAATGGTTGG 1500
AAAAACATTT CATCCGGGGC TTTGCCAGAG CGTGCTTCA AGTGTCTGG AAAGTCTGCT 1560
GCTTCTCCAA GCTTTCAGAC AAGAATGTGC ACTCTCTGCT TAGGTTTTGC TTGGGAAACT 1620
CAACTTCTTT CCTCTGAGA CGGGGCATCT CCTCTGATT TCCTTCTGCT ATGACAAAAC 1680
CTTTAATCTG CACCTTACAA CTCGGGGACA AATGGGGACA GGAAGGATCA AGTTGTAGAG 1740
AGAAAAAAGA AAACAAGAGA TATACATTGT GATATATTAG GGACACTTTC ACAGTCTGTG 1800
CCTCTGGATC ACAGACACTG CACAGACCTT AGGGAATGGC AGGTTCAAGT TCCACTTCTT 1860
GGTGGGGATG AGAAGGGAGA GAGAGCTAGA GGGACAAAGA GAATGAGAAG ACATGGATGA 1920
TCTGGGAGAG TCTCACTTTG GAATCAGAA TGGAAATACA TTCTGTTTAT CAAGCCATAA 1980
TGTAAGGACA GAATAATACA ATATTAAGTC CAAATCCAAC CTCCTGTGAG TGGAGCAGTT 2040
ATGTTTATA CTCTACAGAT TTTACAAATA ATGAGGCTGT TCCTTGAAAA TGTTGTTGTT 2100
CTGTGTCCTG GAGGAGACAT GAGTTCGAG ATGACCCAA CTGCCCTTGA ATCTGGAGGA 2160
AATAGGCAGA AACAAAATGA CTGTAGAACT TATTCTCTGT AGGCCAAATT TCATTTTCAG 2220
CACTTCTGCA GGATCCCTAC TGCCAAACCTG GAATGGAGAC TTTTATCTAC TTCTCTCTCT 2280
CTGAAGATGT CAAATCTGTG TTTAGATCAA ATATATTCCA AGCTATAAAA GCAGGAGGTT 2340
ATCTGTGCAG GGGGCTGGCA TCATGTATTT AGGGGCAAGT AATAATGGAA TGCTACTAAG 2400
ATACTCCATA TTCTTCCCCG AATCACACAG ACAGTTTCTG ACAGGCGCAA CTCCTCCATT 2460
TTCCTCCCGC AGGTGAGAAC CCTGTGGAGA TGAGTCAAGT CCATGACTGA GAAGGAACCG 2520
ACCCCTAGTT GAGAGCACCT TGCAAGTCCC CGAGAACTTT CTGATTACCA GTCTCATTTT 2580
GACAGCATGA AATGTCTCTT TGAAGCATAG CTTTTTAAAT ATCTTTTCCC TTCTACTCCT 2640
CCCTCTGACT CTAAGAATTC TCTTCTCTGG AATCGCTTGA ACCCAGGAGG GGGAGGTTGC 2700
AGTAAGCCAA GGTCAATGCCA CTGCACTCTA GCCTGGGTGA CAGAGCGAGA CTCCTCTCA 2760
AAAAAATAAA AAAAA 2775

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Seq ID NO: 56 DNA Sequence  
Nucleic Acid Accession #: BC000278  
Coding sequence: 113..1144

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1      11      21      31      41      51
|      |      |      |      |      |
CTCGCCACGG CACCCAGGCT GCGCGCACGC GGTCCCGGTG TGCAGCTGGA GAGCGAGCGG 60
CCACCGGGAG CCCCAGGAC AGCCCGCGCC CGCCCGCAG GAGCCGCGA AGATGCCCGG 120
GCGCAGCTG CACGCGGCG CCGTGCTCCT GCTGGTATC TTAAAGGAAC AGCTTCCAG 180

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|             |            |            |            |            |             |      |
|-------------|------------|------------|------------|------------|-------------|------|
| CCCGGCCCCA  | GTGAACGGTT | CCAAGTGGAC | TTATTTTGGT | CCTGATGGGG | AGAATAGCTG  | 240  |
| GTCCAAGAAG  | TACCCGTCGT | GTGGGGGCCT | GCTGCAGTCC | CCCATAGACC | TGCACAGTGA  | 300  |
| CATCCTCCAG  | TATGACGCCA | GCCTCACGCC | CCTCGAGTTC | CAAGGCTACA | ATCTGTCTGC  | 360  |
| CAACAAGCAG  | TTTCTCTCGA | CCAACAATGG | CCATTCACTG | AAGCTGAACC | TGCCCTCGGA  | 420  |
| CATGCACATC  | CAGGGCTCC  | AGTCTCGCTA | CAGTGCCACG | CAGCTGCACC | TGCACTGGGG  | 480  |
| GAACCCGAAT  | GACCCGACAG | GCTCTGAGCA | CACCGTCAGC | GGACAGCACT | TCGCCGCCGA  | 540  |
| GCTGCACATT  | GTCCATTATA | ACTCAGACCT | TTATCCTGAC | GCCAGCACTG | CCAGCAACAA  | 600  |
| GTCAAGAGGC  | CTCGCTGTCC | TGGCTGTTCT | CATTGAGATG | GGCTCCTTCA | ATCCGTCTCTA | 660  |
| TGACAAGATC  | TTCACTCACC | TTCAACATGT | AAAGTACAAA | GGCCAGGAAG | CATTGCTCCC  | 720  |
| GGGATTCAAC  | ATTGAAGAGC | TGCTTCCGGA | GAGGACCGCT | GAATATTACC | GCTACCGGGG  | 780  |
| GTCCCTGACC  | ACACCCCTTT | GCAACCCAC  | TGTGCTCTGG | ACAGTTTTC  | GAACCCCGT   | 840  |
| GCAAAATTTCC | CAGGAGCAGC | TGCTGGCTTT | GGAGACAGCC | CTGTACTGCA | CACACATGGA  | 900  |
| CGACCCCTCC  | CCCAGAGAAA | TGATCAACAA | CTTCCGGCAG | GTCCAGAAAT | TCGATGAGAG  | 960  |
| GCTGGTATAC  | ACCTCCTTCT | CCCAAGGCAT | CATCCTCTCA | CTGGCCCTGG | CTGGCATTCT  | 1020 |
| TGGCATCTGT  | ATTGTGGTGG | TGGTGTCCAT | TTGGCTTTTC | AGAAGGAAGA | GTATCAAAAA  | 1080 |
| AGGTGATAAC  | AAGGGAGTCA | TTTACAAGCC | AGCCACCAAG | ATGGAGACTG | AGGCCCAAGC  | 1140 |
| TTGAGGTCCC  | CGGAGCTCCC | GGGCACATCC | AGGAAGGACC | TTGCTTTGGA | CCCTACACAC  | 1200 |
| TTCCGGTCTC  | TGGACACTTG | CGACACCTCA | AGGTGTTCTC | TGTAGCTCAA | TCTGCAAAACA | 1260 |
| TGCCAGCCCT  | CAGGATCCCT | CTGCTGGGTG | CCTCCTTGCC | TTGGGACCAT | GGCCACCCCA  | 1320 |
| GAGCCATCCG  | ATCGATGGAT | GGGATGCACT | CTCAGACCAA | GCAGCAGGAA | TTCAAGCTG   | 1380 |
| CTTGCTGTAA  | CTGTGTGAGA | TTGTGAAAGT | GTCTGAATTC | TGGAATCACA | AACCAAGCCA  | 1440 |
| TGCTGGTGGC  | CCATTAAATG | TTGAAAAACA | CTTTCATCCG | GGGCTTTGCC | AGAGCGTGCT  | 1500 |
| TTCAAGTGTG  | CTGGAAGATC | TGCTGCTTCT | CCAAGCTTTC | AGACAAGAAT | GTGCACTCTC  | 1560 |
| TGCTTAGGTT  | TGCTTTGGGA | AACTCAACTT | CTTTCCTCTG | GAGACGGGGC | ATCTCCCTCT  | 1620 |
| GATTTCTTTC  | TGCTATGACA | AAACCTTTAA | TCTGCACCTT | ACAACTCGGG | GACAAATGGG  | 1680 |
| GACAGGAAGG  | ATCAAGTTGT | AAAAAAAAAA | AAAAAAAAAA |            |             | 1718 |

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Seq ID NO: 57 DNA Sequence  
Nucleic Acid Accession #: NM\_006632.1  
Coding sequence: 377..1582

|            |            |            |            |            |             |      |
|------------|------------|------------|------------|------------|-------------|------|
| 1          | 11         | 21         | 31         | 41         | 51          |      |
|            |            |            |            |            |             |      |
| ACCGCTCCGC | CCACGCGTCC | GCCCCACGGT | CCGGTCCGGG | CCAGAGCGCA | GGTGTACCTG  | 60   |
| GCGGCCGTGC | TGGAGCACTT | GACCGCCGAG | ATCCTGGAGC | TGGCTGGCAA | CCCGGCCCGC  | 120  |
| GACAAGAAGA | CCCGCATCAT | CCTGCGCCAC | CTGTAGCTGG | CCATTGCGAA | CCCGAGGAGG  | 180  |
| CTTAACAAGC | TGCTGGGCGA | AGTCACCATC | GCGCAGGGCG | GTGTCTCTCC | CAACATTTCAG | 240  |
| GGCGTGCTTC | TGCCCCAGAA | GACCAAGAGC | CACCACAAGG | CCAAGGGTGA | AAACCATTCA  | 300  |
| CTAGGAGAGG | AGAAACACAA | TGGCCACCAA | GACAGAGTTG | AGTCCACAG  | CAAGGGAGAG  | 360  |
| CAAGAAGCGA | CAAGATATGC | AAGTGGATGA | GACACTGATC | CCCAGGAAGG | GTCCAAGTTT  | 420  |
| ATGTTCTGCT | CGCTTGGA   | TAGCCCTCGT | CTTACATTTT | TGCAATTTCA | CAACGATAGC  | 480  |
| ACAAAATGTC | ATCATGAACA | TCACCATGGT | AGCCATGGTC | AACAGCACAA | GCCTCAATC   | 540  |
| CCAGCTCAAT | GATTCCTCTG | AGGTGCTGCC | TGTTGACTCA | TTTGGTGGCC | TAAGTAAAGC  | 600  |
| CCCAAAGAGT | CTTCCTGCAA | AGTCCTCAAT | ACTTGGGGGT | CAGTTTGCAA | TTTGGGAAAA  | 660  |
| GTGGGGCCCT | CCACAAAGAC | GAAGCAGACT | CTGCAGCATT | GCTTTATCAG | GAATGTTACT  | 720  |
| GGGATGCTTT | ACTGCCATCC | TCATAGGTGG | CTTCATTAGT | GAAACCCCTG | GGTGGCCCTT  | 780  |
| TGTTCTCTAT | ATCTTTGGAG | GTGTTGGCTG | TGTTCTGCTG | CTTCTCTGGT | TTGTTGTGAT  | 840  |
| TTATGATGAC | CCCTTTTCCT | ATCCATGGAT | AAGCACCTCA | GAAAAAGAA  | ACATCATATC  | 900  |
| CTCCTTGAAA | CAACAGGTGG | GGTCTTCTAA | GCAGCCTCTT | CCCATCAAGT | CTATGCTCAG  | 960  |
| ATCTCTACCC | ATTTGGTCCA | TATGTTTAGG | CTGTTTCAGC | CATCAATGGT | TAGTTAGCAC  | 1020 |
| AATGGTTGTA | TACATACCAA | CTTACATCAG | CTCTGTGTAC | CATGTTAACA | TCAGAGACAA  | 1080 |
| TGCACTTCTA | TCTGCCCTTC | CTTTTATGTG | TGCCCTGGGT | ATAGGCATGG | TGGGAGGCTA  | 1140 |
| TCTGGCAGAT | TTCTTCTTAA | CCAAAAAGTT | TAGACTCATC | ACTGTGAGGA | AAATTGCCAC  | 1200 |
| AATTTTAGGA | CTCTCTCCCT | CTTCAGCACT | CATTGTGTCT | CTGCCTTACC | TCAATTCCCG  | 1260 |
| CTATATCACA | GCAACTGCCT | TGCTGACGCT | CTCTTGCGGA | TAAAGCACAT | TGTTGCAATC  | 1320 |
| AGGGATTTAT | ATCAATGTCT | TAGATATTGC | TCCAAGGTAT | TCCAGTTTTC | TCATGGGAGC  | 1380 |
| ATCAAGAGGA | TTTTCAGAGA | TAGCACCTGT | CATTGTATCC | ACTGTGAGCG | GATTTCTTCT  | 1440 |
| TAGTCAGGAC | CTCTGAGTTG | GGTGGAGGAA | TGTCTTCTTC | TGCTGTTTTC | CCGTTAAACCT | 1500 |
| GTTAGGACTA | CTCTTCTACC | TCATATTGGG | AGAAGCAGAT | GTCCAAGAAT | GGGTAAAGAA  | 1560 |
| GAGAAACTC  | ACTCGTTTAT | GAAGTTATCC | CACCTTGGAT | GGAAAAGTCA | TTAGGCACCG  | 1620 |
| TATTGCATAA | AATAGAAGGC | TTCCGTGATG | AAAAATCAGG | TGAAAAGATT | TTTTTTTCTC  | 1680 |
| GTGGCTCTTT | TCAATTATGA | GATCAGTTCA | TTATTTTATT | CAGACTTTTT | TTTGAGAGAA  | 1740 |
| ATGTAAGATG | AATAAAAAAT | CAATAAAAA  | GATAACTAAG | AAAAAAAAAA | AAAAA       | 1795 |

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Seq ID NO: 58 DNA Sequence  
Nucleic Acid Accession #: NM\_003058.1  
Coding sequence: 145..1812

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|------------|------------|------------|------------|------------|------------|-----|
| 1          | 11         | 21         | 31         | 41         | 51         |     |
|            |            |            |            |            |            |     |
| GGCCCTGCCC | TGAAGGCTGG | TCACCTGCAG | AGGTAAACTC | CCCTCTTTGA | CTTCTGGCCA | 60  |
| GGGTTTGTGC | TGAGCTGGCT | GCAGCCGCTC | TCAGCCTCGC | TCCGGGCACG | TCGGGCAGCC | 120 |
| TGCGGCCCTC | CTGCCCTGAG | GATCATGCCC | ACCACCGTGG | ACGATGTCCT | GGAGCATGGA | 180 |
| GGGGAGTTTC | ACTTTTTCCT | GAAGCAAAAT | TTTTTCTCTC | TGGCTCTGCT | CTCGGCTACC | 240 |
| TTCCGCCCCA | TCTACGTTGG | CATCGTCTTC | CTGGGCTTCA | CCCTGACCA  | CCGCTGCCGG | 300 |
| AGCCGCCGAG | TGGCCGAGCT | GAGTCTGCGC | TGCGGCTGGA | GTCTCTGAGA | GGAAGTGAAC | 360 |
| TACACGGTGC | CGGGCCAGG  | ACCTGCGGGC | GAAGCCTCCC | CAAGCAGATG | TAGGCGCTAC | 420 |
| GAGCTGGAAT | GGAACCAAGG | CACCTTTGAC | TGCGTGGACC | CCCTGGCCAG | CCTGGACACC | 480 |
| AACAGGAGCC | GCCTGCCACT | GGGCCCTTGC | CGGGACGGCT | GGGTGTACGA | GACGCTGGC  | 540 |
| TGCTCCATCG | TCACCGAGTT | TAACCTGGTA | TGTGCCAACT | CCTGGATGTT | GGACCTATTC | 600 |
| CAGTCATCAG | TGAATGTAGG | ATTCTTTATT | GGCTCTATGA | GTATCGGCTA | CATAGCAGAC | 660 |
| AGGTTTGGCC | GTAAGCTCTG | CCTCCTAACT | ACAGTCTCTA | TAAATGCTGC | AGCTGGAGTT | 720 |
| CTCATGGCCA | TTTCCCAAC  | CTATACGTGG | ATGTTAAATT | TTGCTTTAAT | CCAAGGACTG | 780 |
| CTCAGCAAGG | CAGGCTGTGT | AATAGGCTAC | ATCCTGATTA | CAGAATTTGT | TGGGCGGAGA | 840 |
| TATCGGAGAA | CAGTGGGAGT | TTTTTACCAA | GTTCGCTATA | CAGTTGGGCT | CCTGGTGCTA | 900 |
| GCTGGGGTGG | CTTACGCACT | TCCTCACTGG | AGGTGGTTGC | AGTTCAGAGT | TGCTCTGCC  | 960 |

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AACTTCTTCT TCTTGCTCTA TTAAGTGGTGC ATACCTGAGT CTCCCAGGTG GCTGATCTCC 1020
CAGAATAAGA ATGCTGAAGC CATGAGAATC ATTAAGCACA TCGCAAAGAA AAATGGAAAA 1080
TCTCTACCCG CTTCCCTTCA GCGCCTGAGA CTTGAAGAGG AAATGGGCAA GAAATTTGAA 1140
CCTTCATTTC TTGACTTTGT GCGAACTCCT CAGATAAGGA AACATACTAT GATATTGATG 1200
TACAACCTGGT TCACGAGCTC TGTGCTCTAC CAGGGCCTCA TCATGCACAT GGGCCTTGCA 1260
GGTGACAATA TCTACCTGGA TTTCTTCTAC TCTGCCCTGG TTGAATTTCC AGCTGCCTTC 1320
ATGATCATCC TCACCATCGA CCGCATCGGA CGCCGTTACC CTTGGGCTGC ATCAAAATATG 1380
GTTGCAGGGG CAGCCTGTCT GGCCTCAGTT TTTATACCTG GTGATCTACA ATGGCTAAAA 1440
ATTATTATCT CATGCTTGGG AAGAATGGGG ATCACAATGG CCTATGAGAT AGTCTGCCTG 1500
GTCAATGCTG AGCTGTACCC CACATTTCAT AGGAATCTTG GCGTCCACAT CTGTTCTCTCA 1560
ATGTGTGACA TTGGTGGCAT CATCAGGCCA TTCCTGGTCT ACCGGCTCAC TAACATCTGG 1620
CTTGAGCTCC CGCTGATGGT TTTGCGCGTA CTTGGCTTGG TTGCTGGAGG TCTGGTGTCTG 1680
TTGCTTCCAG AAATTAAGG AAGAGCTTTG CCTGAGACCA TCGAGGAAGC CGAAAAATATG 1740
CAAGACCAA GAAAAATAA AGAAAAGATG ATTTACCTCC AAGTTTCAGAA ACTAGACATT 1800
CCATTGAACT AAGAAGAGAG ACCGTTGCTG CTGTCATGAC CTAGCTTTGA TGGCAGCAAG 1860
ACCAAAAGTA GAAATCCCTG CACTCATCAC AAAGCCCATC CAACTCAACC AAATTTACCC 1920
CTGAGCCCTA TCAACCTAGG TCTACAGCCA GTGGAGTCTA TTGTACACTG TGGAAAAATA 1980
CCCATGGGAC CAGATCCTGC CAAATCTTTC CAGCTCACTT TATTCTCAGC ATTCCTAGGA 2040
CATTGGACAT TGGTTTTCTG GAGGGTTTTT TTTCCGATCT TTGTATTTTT TTAATTTTGA 2100
TTCTTTTCTT TCCATGCTA GCAACAGAA TACATAGGGG AACTGTGGGC TAGGCAAAANA 2160
AAATAGAAAA AGTGTGAAAA ACAGTAAAGT TGGGAGAGGA GCATCTATTT TCTTAAAGAA 2220
ATAAACACC NAAACAAAAA AAAAAAATAA AAAAAA 2257

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Seq ID NO: 59 DNA Sequence
Nucleic Acid Accession #: Eos sequence
Coding sequence: 227..2311
1      11      21      31      41      51
|      |      |      |      |      |
GTCAGGGGGG TGTGGCCCC GCACAGATTG AGCCGAGTTG TCGCCCCGCT GGGAGAAGTG 60
ACCCTCCTGC GCCTGATCAG AACACTGAGG CTCAGAGAAG TTAAGTACTC CAAAGTCATA 120
TAGCCAGTAT TTTCTGGAGC TGTAATTCAA ATCAGATGTG TTCAATACCT TCTACTACCC 180
CATTGCTGTC TTTATGAAA GAAATTTTCAT TTCAATATAG GTGACTATGC AGCCTGCAAT 240
TCAAGTATGG TTTGAGAAAG ATCTGCCTCT AAGTCTCTCG AGTCTCTGTA CTCCCAGACA 300
CGGACCCAGG TTGGCTAATG TTTGTCAGTA CGATGAGTGG ATAGCTGTGA GGCATGAAGC 360
CACTTTGTGT CCCATGCAAG AAGATCTGTC AATCTGGTTA TCTGGTTTAT TAGGTATTAA 420
AGTTAAGGCA GAAAAATTA TGAAGAAGCT TGATAATGGA GTACTATTAT GTCAACTGAT 480
TGATGTTCTT CAAACATATG TGAACATATG CAACTCTGAA GAATCAGGGA ATTTTCCAAT 540
GAGAAAAAGT CCCTGTAAAG AAGATGCTGC ATCAGGTTCA TTCTTTGCTC GGGACAATAC 600
CGCAAACTTC CTTCACTGGT GTAGGGACAT TGGGGTTGAT GAAACTTACC TCTTTGAATC 660
TGAAAGTTTA GTTTTGACA AAGATCCAAG ACAGGTGTAT CTTTGTCTTC TTGAAATTGG 720
TCGAATTGTG TCAAGATACG GGGTTGAGCC ACCAGTGTTA GTAAACTTGG AGAAAGAAAT 780
TGAGTTAGAA GAGACTTTGC TTAATACTTC TGGGCCGTGA GATTCCATCA GCATTCCAA 840
ATCATGCTGT CGCTGTAAAG AGCTACATGA AGCTGTTAAA CATATTGCTG AGGACCTCC 900
TTGTAGTTGT TCTCATCGAT TTTCTATTGA GTATTTATCT GAAGGACGGT ACCGACTAGG 960
GGATAAAATA CTCTTTATAA GAATGCTTCA TGA AAAACAT GTCATGGTTC GCGTTGGTGG 1020
AGGCTGGGAT ACTCTTCAAG GATTTTGTCT TAAATATGAC CCCTGTGCAA TATTACAGTT 1080
TGCCACATTA GAACAAAAAA TTTTAGCATT TCAAAAAGGA GTTTCTAATG AAAGTGTACC 1140
TGATTGCGCT GCCAGAACAC CTCAGCCTCC TGAATGAAT CCTTTGTGAG CAGTTAACAT 1200
GTTTCAGAAA CAAATTTCAA AACCCAGCGT GCCAGTTAGT ATTCCAAAAA GCAAGAAAAA 1260
ACAGGGACGT CCACCAGGTG CATTGGTGCC AGCATCTTCA CTGAAAGGAG GTAATCTGGG 1320
CTCATGTGTA GTCCGTCTTA AATTGCCAAA TTCTCCAGCA GCATCTTCTC ATCCCAAGCT 1380
CAAGTCTTCA AAAGGCATAA CGAAGAAACC GCAGGCTCCT TCAAACAATG CATCATCTTC 1440
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GGTTATTCCA GCCCAGAAAT CAGCAGATCT GCCCGAGTCC ACACTTTTGC CAAATAAGTG 1620
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AGCTACCAAA AAGCAGCCTC AGAATAAAAG TGCAATTCAG AAGACAGGAC CCAGCTCCTT 2040
GAAGTCTCTT GGCCTGATCC CACTGTCCAT CGTGAGCCTA CCCCAGTCTT CTACCAAAAC 2100
ACAAACTGCA CCGAAGTCAG CACAGACTGT CGCTAAGAGC CAGCATTCAA CTAAGGGGCC 2160
TCCCAGAAAT GGCAAAAACC CAGCTTCAAT CAGGAAACCA CCCTCATCTG TTAAGGATGC 2220
AGATAGTTGA GATAAAAAAC CTACTGCAAA GAAAAAGGAA GATGATGACC ATTATTTTGT 2280
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TAGGTGCAGA CACTAAGGAT AGTGAGGATG GAGGCTGGGA TGAGGAAAGG GTTCATCAGA 2460
ATTCACATAT CTGAATTCAC TGGAAAGAGC CCTTCTGAAG CAAACAGTTG TAAATCACT 2520
GCAAGGTTTT TATTAATAAT AGACATGTAT ATGATTTTCA GTCTATAGCA TCTTTGTTAA 2580
CATCTGCCTT TTGCAGGAAA TGTAAAAGTT ATTTAACACT ACAAGAAATT TAACAATAGT 2640
TGCTCTATTT TTGAATATGT ATTAATATAT GAGTTTCATAT ACCTGTCAAT ATCAACGGTG 2700
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TATGTTTCAC ATGTTGTGCA ATGTGACAGG GGAAGCTGAT TTAGTAGCTT TTAGCATATT 3120
AAAAATAATT TTTTATAATG TAATTTCTCT TGAGTGCAGA CCTGACATTT TACATTAANA 3180
TAATGTGAAA CATCAGAAAT ATGTTTAAAC AACTTTAAAA TTAAGATGAT GTTAAATAAA 3240
TTTTAGAGTT ATGCTATGGA AAAATCTTAT CATGAAATTA TTTTCTCTCA GATAGCACAA 3300
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WO 03/025138

PCT/US02/29560

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ACCTGTAAAT AATTTATTTT TAAGGGATGG TGACTTTAAA AATTATTAAT GAACTTTGAG 3540  
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TTCTGTCTGC TCAGCCTCCT GAGTGGTTGG GATTACAGGC ATCCACCACC AGGCCAGCT 4860  
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CAAAATGCCCT TGGTAAATTG GATGACCTCT AACCTTACTG TCCATATGGA GTTTGTCAAT 5460  
CTTTATGGAT AAGAGAACTT AAGGAAAAGT TACTGTTTTT CTTCACTCTT TTTATATCTA 5520  
TCTGATTTAA AATCTGTTAC TTTATTAATA GGCTTCAACA ACAGGTTGTT AGGATGTAGT 5580  
CTTACATCCA GGTTACATA ATAACCCCAT TTGAATCCAA ATTTGTGTAT ATTTTCTTAT 5640  
GCCAGCAGTA TTTGTATCCA ATTTAACTT AGGTTTGTTT TCTTGAG 5687

Seq ID NO: 60 DNA Sequence

Nucleic Acid Accession #: Eos sequence

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55

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AGAAGTAAGA AAAAATAAAA CACTTTGTTG AAGTTATATA CCTATTGGA TTTTAAAA 180  
AGCATTACCC AATAGGCTAT AGAACGATGC CAACACATA TGCCAGGTTG CAAGGCATGG 240  
AGAATGGGAG AATGTGCAT GACTGTCTAA TGGGTATAAA GCTCCCTTTT GAAGTGAAAA 300  
AATTACTTTG GATCTAGATA GTAGTGGTAC TGGCAAATGT GCTAAACGCC AATGAATAAT 360  
GCACATTAAA GTGTTTAAAT GTATAATTT GTGGGTGAAA ATTCCTATAT CAATTATTCT 420  
TTAAATAAAC AAGTGGCTGA CCAGATTIGA CCAAGAGACC ATAGTTGTGC AGCCCTTGGT 480  
TTATGCTACA AATTTAATTC CCATATGCTT GAAATAGTAA ATGCTGTCTAT TTTAATCATT 540  
TACATTAGAA ACATGGGATG TTTTGAAACT ATAATATGTT ATGCAATTAT ATGAACACTA 600  
AAATTATTAC TGTGGAATTT TTTTATTGTT AGTAACGGGA GTATGCAATT TTTTGTGCT 660  
GTACACA 667

Seq ID NO: 61 DNA Sequence

Nucleic Acid Accession #: Eos sequence

60  
65  
70

1 11 21 31 41 51  
| | | | |  
GACCTAAGAA CTTATCAAG AACTCAGCAG TATGAGAATA GATCAATACA TAGAGGGTTT 60  
CCTTTAAGTC TTGTAGAAAC TCATTACTCT CCAGTCTCTT TTTCCACTTA TAGTAGAGAG 120  
AATCAGACTT GCGGATATCC AGTTAACTAT CAATACCTTT AAAAAATGTG AACAAGCAGT 180  
CCATCTGAAT AATTATACCA AATGTCAAGG CTTTAAAAAG TGCTTAACTT TAAAGGTCCT 240  
TTGCAAGTTG TCAGACCTAG ATTCTCAGTT CAGTTAGCAC AGAGAGAGAC AAGGAAAAAA 300  
TGAGGAACAC TTTTCTCAGC CATAAATATT CACTGGTTTT TGAATACTA TTGATTCTT 360  
GGATAAGAAA ATAGGTCAAC TTTATAGCTT TTTGTCTCGA AATTGATTTG CCGCCACAGA 420  
CAGTGGCTTG GTGCCATATA TCCCAGCCTA CATGGGAGGC TGAGGTGGGA GATCGCTTGA 480  
GCCCCAAAAG TCAGAGGTGC AGTGAGCTGT GATTGTGCCA CTGTATCCCA ACCTCAT 537

Seq ID NO: 62 DNA Sequence

Nucleic Acid Accession #: Eos sequence

75  
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1 11 21 31 41 51  
| | | | |  
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TACTATCAAT AATGTTTCCA TGTAAGACAG CCATCACCCTA AAGGAATACT TTTAAAAACAG 180  
GTTGTACAAAT AAAACAGGTT GGACCAATAT AAAAGAAATA TAAATAAAGG TGGTTTATTT 240  
AAATGTAAAT ACACAGATAC TTCCATTAAA TCTAAACAAA CTTTAAAAAG AGGAGCAAA 300  
AATGAGTAAT GCCATAGAAC ATTAGAAGAA CACAGTTAAC GAATGGAAAC TTGTAACACG 360  
ATACACACAC ACCGATGCAAT ATATATATGT ATCATATATA TCAACTAAAA GACATTTTCT 420  
TAGAGCATAT TGAATTGTTA ATAATTATTT GAAGTGACAT GTGGTGGGAC ATAAATCAAG 480  
ACTCAGTAAA TTTGAAAAA TTCAATATCA TAAAGAATAT ATGATCCAGC CTTAGTAGAA 540

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GTAAGGGAAA TTTAAAAAT GTAACATAAA TATCTTTAAT TTTGGAAATT AAGAAAATAC 600  
 ACTTCAAAAA AATTTAAAGT CCTGCCCTCAG CCTCCCCAGT AGCTGGGATT ACAAGCATGC 660  
 ACCACCATGT CCAGCCAATT TTGTAATTAT AGTAGAGACA GG 702

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Seq ID NO: 63 DNA Sequence

Nucleic Acid Accession #: AK025967

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| 1           | 11          | 21         | 31          | 41         | 51          |      |
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|             |             |            |             |            |             |      |
| ACAACAGGAA  | CACATATAGC  | TGGAATGCAG | ATGGGATCTG  | TGCTACTTAC | GCTAGCCATG  | 60   |
| GGATGATTAG  | AACAAGATAA  | GAGACATGAG | GAAGACTTCT  | TCAAGGAGGT | GCTCAAGCCA  | 120  |
| TGTTTTGGAA  | AAGAGAACTC  | AAGGTCTGGC | AGGGAGAAAG  | GAGCAAGGTC | CTCTTCTCCC  | 180  |
| TGAAGGCTGT  | CACAGTTCCCT | GTGCAGAGAG | AGAGGGCACT  | GCAGCACCCA | GGCGCTGACT  | 240  |
| GCCTTTTGTG  | AGTCTCAITT  | GCAGGCCCCC | AGCTGGAGAA  | CCCAGGAGGA | AGAGGAAAAA  | 300  |
| AGTTTTTTTCC | TCCTCTACAC  | TCCCATGCA  | TGACTAAAGA  | GTAGGAGGAG | TCAGCAAGGC  | 360  |
| AGACATATAG  | AGTACCCAGG  | AGGTGGACAA | ACAACTGCCCT | TGGTGGAAAC | TCTGTCTTTT  | 420  |
| CTGGACTTAT  | CCTGGTGCCA  | CTGAGACTGT | GCAGATTTAG  | ATCTACAATC | CACCTGGAAAT | 480  |
| TGATTTTGT   | ATATGGAGTG  | AGGTCCACCA | CTTACAGGGA  | AAGCATCACC | CGAAAGTGAG  | 540  |
| AATGCCTAGA  | GGCAGGAATC  | ATGGAGGCTT | CCTTAACCGT  | CTGCTGCAA  | CAGCAGGTGC  | 600  |
| TAGAGATGAC  | ACTGCAGAGT  | AGAGAACAAA | GGAACTCTTAG | TAATTGTTC  | ATCCAAATCTC | 660  |
| CACACTTTAA  | AGATGAAGAA  | ACTGGTATTG | AGAAAAATAC  | ACAGCTTATC | CAAGGTGTGCA | 720  |
| CTGCTGGTTG  | GTAGCTGAGA  | TGAATTTAGA | ACCCACATCT  | GATGACTTCA | CCATATTGCT  | 780  |
| CCCAGTTTTT  | CTGTCTGTTC  | CACATGTAAA | AGTCTGACTC  | TTCACTTCTC | CTTTAGTAGT  | 840  |
| ATAGACTTTT  | AACATTTTTG  | TATGTCAAGA | TGGACTTTTT  | CTCATACCCA | GCCCCTGCCT  | 900  |
| TTTCTCTCTC  | CTTCATACCT  | TGCAGGATCT | TAAACAGAA   | TTAAAAGGAG | TTTTTTGTTT  | 960  |
| TGTTTTGTAT  | TATCTAATAA  | AAGTCAAGGG | AGGGAGAGGG  | CCAGTATAAG | CAAGAGTACA  | 1020 |
| GTTCCTAGT   | TTGTAGATGC  | GGTAGTCTGA | GGAATCAGAA  | ACACACAAAG | GTTTGGAGAA  | 1080 |
| CTGGTACATG  | CTCCCAGGTG  | GGAAGCCAGG | ACTCTTGTTA  | GGATCTTGAG | GACAAGGCAG  | 1140 |
| AGGACAATAT  | GAGAGCGAGG  | GGATCCTAGA | GGTGGAAATCA | AGGAAGAGAA | ACTAGAGAGA  | 1200 |
| GAAAAAGGAA  | CTGGCTATCC  | ATCCATGATG | GATCCTGTGT  | GGACTGATGG | GTGGCTTGGC  | 1260 |
| ATCATCCTTT  | AGTAGACTTC  | ATGTGGTTGA | ATAATTGGCC  | AATGGAAGGA | ATTTCTTTTT  | 1320 |
| TGGTAACAGA  | CTCTGTGTGT  | ACAGTTATGG | GTCTTAATTT  | ATAATAAAAG | GTTACATTGA  | 1380 |
| AAATTGAAAA  | AAAAAAA     |            |             |            |             | 1398 |

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Seq ID NO: 64 DNA Sequence

Nucleic Acid Accession #: Eos sequence

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| 1           | 11          | 21         | 31          | 41          | 51          |      |
|-------------|-------------|------------|-------------|-------------|-------------|------|
|             |             |            |             |             |             |      |
| GGCACGAGGA  | GAGAACTCC   | ATCTCAAAAA | CAAAACAACA  | CAAAACAAAA  | AAAGAAGAGA  | 60   |
| AATCAAGGCT  | TGTTCCCTGT  | CTCTCTCTCT | CCACATGTGA  | GCACACAAAG  | AGGTCACTGT  | 120  |
| AACACACAAT  | GAGAAGGAGG  | CTGCCTGCAA | GTTAAGACAA  | GAGGCCTCAG  | CATGAAACCT  | 180  |
| GCCTTACTGT  | GCCTTTGGTC  | TTGAACTTCC | CAGCCTCTAA  | AACCTGTGAG  | AATAAGTTTC  | 240  |
| TGTTGTTC    | GGCACCAGT   | CTATGGTATT | CTGTATGGCA  | GCCAGAAATTA | AGACACCAGT  | 300  |
| GAAGCAAGAT  | AATCAGTAAC  | TGGATACTTA | ACTGTGTGGT  | ATAAAACATA  | GGGGCTTTAG  | 360  |
| TAGAGAAGAA  | AATTGGACTT  | TGTTGGGGAC | ATCCTTACTA  | CTTCTGCTCA  | TGTATCATGC  | 420  |
| TTTAGCTTGT  | TTCTGTCTTT  | GGAGGAGGCT | GCATATTTTT  | AAAATACCCC  | CAAAAGTACA  | 480  |
| AAGACTAAT   | TTATAGCCCC  | TGTGTTCTCA | TTATCCAGGC  | TTAATAAATG  | TTGGCCATTT  | 540  |
| TCCACTTTTG  | TTTCATATAT  | AAGTTTCTAC | AAAATGACAA  | CACCTTAGAT  | AAAGCTGAAG  | 600  |
| TTCATGTTTC  | ATTCGTCATC  | CCTTCCCCCA | AGGGCTTCTT  | TTGCTCAATA  | TGGGACTCAT  | 660  |
| GAGAGTCATC  | GGTGTGTGTT  | GAGGCAGCTG | TTTGTGATT   | TTCTGGACCA  | AATAATGTTT  | 720  |
| CACCGTGTGA  | CTGGACATAC  | CTTAGTCTAT | CCATTCTACC  | ACTGATGAGC  | ATGTAAGCTG  | 780  |
| TTACTATTTT  | TAACTATTAC  | AAATTATCTT | GCTAACACAT  | TTTTGTGCAAT | GTCTTTTGGT  | 840  |
| GACCAATATG  | ACTCATTCTT  | CTCAGGTATG | TATCTCAGAG  | TGAACTGTGT  | TTATCACAGT  | 900  |
| GTATGCTTTA  | TATTTAGTGC  | TTTCCAATTC | CTGATTAAAG  | AATCTTTGCC  | TGCTCCTAAG  | 960  |
| GATGTAAAAT  | TATTTCTCTTA | TGGCCTGGCT | CAGTGGCTCA  | TGCTGTAAAT  | CCCAGCATTT  | 1020 |
| TGGGAGGCCA  | AGGTGGGAGG  | ATTGCTTGAG | GCCAGGAGTT  | CAAGACCAGC  | CTGGGCAACA  | 1080 |
| TACTGAGACC  | CTCATCTCTA  | CAAAAAA    | AAATTTGTTT  | AATTAGCTGA  | GCTTGGTGGT  | 1140 |
| ATGCACCTAT  | ACTCCTAGCT  | ACTCAGGAGG | CTGAGGCAGG  | AGGATCGCTT  | GAGCCCAGGA  | 1200 |
| ATTCAGAGAT  | GCAGTAAGCT  | ATGATCATGC | CACCTGTATTA | CAGCCTGGGT  | GATAGSGTGA  | 1260 |
| GACCCCTGCT  | CTAAAAAGAT  | ACATCTATTA | AAAATAATAT  | TATTTTATTT  | TATTTTATTT  | 1320 |
| TATTTTATTA  | TTATACTTTA  | AGTTTAAAGG | TACATGTGCA  | CATTGTGCAG  | GTTAGTTACA  | 1380 |
| TATGTATACA  | TGTGCCATGC  | TGGTGCCTG  | CACCCACTAA  | CTCGTCATCT  | AGCATTAGGT  | 1440 |
| ATATCTCCCA  | GTGCTATCCC  | TCCCCCTCC  | CCCGACCCCA  | CAACAGTCCC  | CAGAGTGTGA  | 1500 |
| TGTTCCCTCT  | CCTGTGTCCA  | TGTGATCTCA | TTGTTCAATT  | CCCACCTATG  | AGTGAGAATA  | 1560 |
| TGCGGTGTTT  | GGTTTTTTGT  | TCTTGCAGTA | GTTTACTGAG  | AATGATGATT  | TCCAATTTCA  | 1620 |
| TCCATGTCCC  | TACAAAGGAC  | ATGAACCTAT | CATTTTTTAT  | GGCTGCATAG  | TAAAAATACA  | 1680 |
| TTTTAAAAAA  | TAATAAATTA  | TTCTCTTATG | TTATTGTCTA  | GAATCTTCAT  | TATTTTACCT  | 1740 |
| TTCAGATTTA  | GATCTACAAT  | CCACCTGGAA | TTGATTTTTG  | TATATGGAGT  | GAGGTCCCAC  | 1800 |
| ACTTACAGGG  | AAAGCATCAC  | CCGAAAGTGA | GAATGCCTAG  | AGGCAGGAAT  | CATGGAGGCT  | 1860 |
| TCCTTAACCG  | TCTGTCTGCA  | ACAGCAGGTG | CTAGAGATGA  | CACCTGCAGAG | TAGAGAACAA  | 1920 |
| AGGAATCTTA  | GTAATTGTTC  | AATCCAATCT | CCACACTTTA  | AAGATGAAGA  | AACTGGTATT  | 1980 |
| GAGAAAAATA  | CACAGCTTAT  | CCAAGGTTGC | ACTGCTGGTT  | GGTAGCTGAG  | ATGAATTTAG  | 2040 |
| AACCCACATC  | TGATGACTAC  | ACCATATTGC | TCCCAGTTTT  | CCTGTCTGTT  | CCACATGTAA  | 2100 |
| AAGTCTGACT  | CTTCACTTCT  | CCTTTGAGTA | TATAGACTTT  | TAACTTTTTT  | GTATGTCAAG  | 2160 |
| ATGGACTTTT  | CCTCATACCC  | AGCCCCTGCC | TTTTCTCCTC  | CCTTCATACC  | TTGCAGGATC  | 2220 |
| TTTAACAGAA  | TTTAAAGGGA  | GTTTTTTGTT | TTGTTTTGAT  | GTATCTAATA  | AAAGTCAAGG  | 2280 |
| GAGGAGAGGG  | GCCAGTATAA  | GCAAGAGTAC | AGTTTCTCTAG | TTTGTAGATG  | CGGTAGTCTG  | 2340 |
| AGGAATCAGA  | AACACACAAA  | GGTTTGGAGA | ACTGGTACAT  | GCTCCCAGGT  | GGGAAGCCAG  | 2400 |
| GACTCTTGGT  | AGGATCTTGA  | GGACAAGGCA | AAGGACAATA  | AGAGAGCCAG  | GGGATCCCTAG | 2460 |
| AGGTGGAATC  | AAGGAAGAGA  | AACTAGAGAG | AGAAAAAGGA  | ACTGGCTATC  | CATCCATGAT  | 2520 |
| GGATCCTGTG  | TGGACTGATG  | GGTGGCTTGG | CATCATCCTT  | TAGTAGACTT  | CATGTGGTTG  | 2580 |
| AAATAATTGGC | CAATGGAAGG  | AATTTCTTTT | TTGGTAACAG  | ACTCTGTGTG  | TACAGTTATG  | 2640 |
| GGTCTTAATT  | TATAATAAAA  | GGTTACATTG | AAAATTGAAA  | AAAAA       | AAAAA       | 2700 |
| GCATTATAAG  | TGTACTTCTA  | GCCTTACTTC | GTGCGGGTAA  | TTCATCTCG   | CTCTGTGCTG  | 2760 |
| CTG         |             |            |             |             |             | 2763 |

**PCT/US02/29560**

| Seq ID NO: 66 DNA Sequence            |   |            |            |            |            |            |             |      |  |
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| Nucleic Acid Accession #: NM_022073.1 |   |            |            |            |            |            |             |      |  |
| Coding sequence: 327..1046            |   |            |            |            |            |            |             |      |  |
|                                       | 1 | 11         | 21         | 31         | 41         | 51         |             |      |  |
| 45                                    |   | GAGTCTGGCC | GCAGTCTGGG | CAGTGGTGGC | TTCCATCCCC | CAAAAGGCGC | CCTCCGACTC  | 60   |  |
|                                       |   | CTTGGCCGCG | ACTGCTCGCC | GGGCGAGCTG | GGAAACGGGT | CGTGGAGCTC | CGCACCACTC  | 120  |  |
|                                       |   | CCGCTGGTTT | CCGAAGGCGA | ATCCCTTCTC | CCGAGAGATT | CGAGAAATTC | TCCCTTGTC   | 180  |  |
|                                       |   | CCGACGGCTG | AGCGGCTCG  | TGACCTGTGC | AGCCGAGGTG | TTCTGAACCC | CGGGCCACGC  | 240  |  |
| 50                                    |   | TCGCCCGGCC | TCGGCTTCGC | GCTCTGCTAG | ATCGTTTCCG | CTCTGGTTTG | ACGCTGGGGA  | 300  |  |
|                                       |   | TCGCCGAGCT | CGATTCTGCG | GCGGAGATAG | CCCTGGGCAC | CATCATGAGG | CTGACACTGG  | 360  |  |
|                                       |   | AGAAAAATGC | CCTGGAGTAC | ATCGTCCCTC | GTCGTGACGA | GGTGGGCTTC | TGCTACCTGG  | 420  |  |
|                                       |   | ACAACTTCTT | GGGCGAGGTG | GTGGCGCACT | CGCTCTCTGA | GCGCGTCAAG | CAGCTGCATG  | 480  |  |
|                                       |   | GCACCGGGGG | CTGCGGGGAG | GCGGACCTGG | CGCGGCGCGG | CGCGGCGCTG | TCCAAGGCGAC | 540  |  |
|                                       |   | ACCTGCGGGG | CGACAGATCT | ACGTGGATCG | GGGGCAACGA | GAGGGGCTCG | GAGGCGCATCA | 600  |  |
| 55                                    |   | GCTTCTCTCT | GTCCCTCATC | GACAGGCTGG | TCTCTACTGT | CGGGAGCCGG | CTGGGCAAT   | 660  |  |
|                                       |   | ACTACGTCAA | GGAGAGGTCT | AGGCGCAATG | TGGCTTGCTA | TCCGGGAAAT | GGAACAGGTT  | 720  |  |
|                                       |   | ATGTTCCGCA | CGTGGACAAC | CCCAACGGGT | ATGTCGCTGT | CATCACCTGC | ATCTACTACT  | 780  |  |
|                                       |   | TGAACAGGAA | TGGGATGCC  | AGCATACATG | GTGGGATCTT | CGGGATATTT | CCAGAGGGGA  | 840  |  |
| 60                                    |   | AATCATTCAT | AGCAGATGTG | GAGCCCATTT | TTGACAGACT | CCTGTTCTTC | TGGTCAGTCT  | 900  |  |
|                                       |   | GTAGGAAACC | ACACGAAGTG | CAGCCCTCTT | AGCCCAACAG | ATATGCTATG | ACTGTCTGGT  | 960  |  |
|                                       |   | ACTTTGATGC | TGAAGAAAGG | GACGAGCCA  | AAAAGAAATT | CAGGAATTTA | ACTAGGAAAA  | 1020 |  |
|                                       |   | CTGAATCTGC | CCTCATGAA  | GCTGACCTGT | GCTCTGAAAT | CTGCTGGGCT | TGTTTCTATT  | 1080 |  |
|                                       |   | AGTAAACGGT | CTGGAATTC  | CTTAAATTTT | TTGAGATCCA | AAGATGGGCT | CTTCAGTGAG  | 1140 |  |
| 65                                    |   | AACAATCTCC | CTGCTACTTC | TTGCATCTCT | CACATCCCTG | TCTTGTGTGT | GGTACTTCAT  | 1200 |  |
|                                       |   | GTTTTCTTGC | CAAGACTGTG | TGATCTTCTA | GATACCTCTT | TTGCCAGATG | AAGTTATTTG  | 1260 |  |
|                                       |   | CTACTCCAGC | AAATTCTCTG | AGACATCTTA | CTCGGCCAGC | GGTTTACCTG | ATGATATCGG  | 1320 |  |
|                                       |   | TAATACTACT | AAGAGAAAGG | CTATTAGGAG | CAGCGAGGGA | ATGAACCTTA | TTGCACTTTT  | 1380 |  |
|                                       |   | ATGTATACTT | CTGATTTTGA | AAGGAGGAGG | TTTGAAGAAG | AAAAAATGGA | GGTGTGATAG  | 1440 |  |
|                                       |   | GCCACAGAGA | GGCATCACGG | AAGCCTTAAC | AGCAGGAAAC | AGAGAAATTT | GTGTCATCTG  | 1500 |  |
| 70                                    |   | AACAATTTCC | AGATGTCTCT | AATCCAGGGC | TGTTTGGGTT | TCTGGGAAAT | TATCAACAAC  | 1560 |  |
|                                       |   | TAATGACATT | AATACCTCTA | GAAGGGCTCG | CTGTCTATAG | GAAACAATTA | TAAGTGTCCC  | 1620 |  |
|                                       |   | ATGGGGCAGA | CATCTCTTTT | TTCCAGATCC | TGCAACCTGG | ATTTTCTGCC | TCAGCTCCAT  | 1680 |  |
|                                       |   | TTTGCTGAAA | ATAATGACTT | TCTGAATAAA | GATGGCAACA | CAATTTTTC  | TCCATTTTCA  | 1740 |  |
|                                       |   | GTCTTACTCT | GGGAACCTAA | TTCCCGAGAA | GCTBAAAAC  | TAGACATTAT | TTGTTTTGGT  | 1800 |  |
| 75                                    |   | TGCTTTTATG | GAAATGGAAT | TAAATTTTAA | TGAAGGAAAA | AATATATCCC | TGGTAGTTTT  | 1860 |  |
|                                       |   | GTGTTGAACC | CTTAATAACT | TGGAAAGAGC | TAGGTTCTAT | TAGATACAA  | AAACATGTGT  | 1920 |  |
|                                       |   | GCATCTTGAA | CAATTTGAGA | GGGGAGGTGG | AGTTGGAAT  | GTGGGTGTTT | CTGTTTTTTT  | 1980 |  |
|                                       |   | TTTTTTTTTT | TTTTTTTTTT | ATTTTCTCTT | TTTAAATGAG | TCACCCTTTC | ACACAAAAAA  | 2040 |  |
|                                       |   | AGCAGGGTGA | TGTATTTTAA | AAATGGAAGA | GGAATATAAA | AAATCTCAAA | GCTATTGTAG  | 2100 |  |
| 80                                    |   | TTCTTCGTCT | TCCCTAGCAG | TCCTTCTTCA | GCTCACTTGG | CTCTCTAGAT | CCACTGTGGT  | 2160 |  |
|                                       |   | TGGCAGTATG | ACCAGAATCA | TGGAACTTGC | TAGCACTGTG | GAAGCTTCTA | CTCTCTGAGT  | 2220 |  |
|                                       |   | AAGCAGCATG | CGCACTGCCT | CAATAAATTG | GTATTGAGCA | CGTATTTTGC | AAAAGCTACT  | 2280 |  |
|                                       |   | TTTCTAGATT | TTCAATATTA | CTTTCAATGT | TTAAAAATCC | CTTTAATCTT | TTGCTTGAAA  | 2340 |  |
|                                       |   | ATCCCATGAA | CATTAAAGAG | CACAGAAATG | TTTCTTTTGT | TATGATACGA | TATATATATA  |      |  |

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5  
TATATAGTCT TCCAAGATAG AAGTTTACTT TTTCTCTTTC TGGTTTGTGA AAATTTCCAG 2460  
ATAAGACATG TCACCATTA TTTCTCAACGA CTGCTCTATT TTGTTGTACG GTAATAGTTA 2520  
TCACCTTCTA AATTACTATG TAATTTACTC ACTTATTATG TTTATTGTCT TGTATCCTTT 2580  
CTCTGGAGTG TAAGGACAAAT GAAGACAGGA ATTTTGTATA TTTTAAACCA ATGCAACATA 2640  
CTCTCAGCAC CTAAATAGT GCCGGGAACA TAGTAAGGGC TCAGTAATAA CTTGTTGAAT 2700  
AAACTCAGTC TCCTACATTA GCATTCTAAA AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA 2760  
AAAAAAAAAG 2770

10  
Seq ID NO: 67 DNA Sequence  
Nucleic Acid Accession #: NM\_139314.1  
Coding sequence: 196..1416

15  
1 11 21 31 41 51  
| | | | |  
ATAAAAACCG TCCTCGGGCG CGGCGGGGAG AAGCCGAGCT GAGCGGATCC TCACACGACT 60  
GTGATCCGAT TCTTTCCAGC GGCTTCTGCA ACCAAGCGGG TCTTACCCCC GGTCTCTCCG 120  
GTCTCCAGTC CTCGCACCTG GAACCCCAAC GTCCCGGAGA GTCCCGGAAT CCCCCTCC 180  
AGGCTACCTA AGAGGATGAG CGGTGCTCCG ACGGCGGGG CAGCCCTGAT GCTCTGCGCC 240  
GCCACCGCGG TGCTACTGAG CGCTCAGGGC GGACCCGTGC AGTCCAAGTC GCCCGCTTT 300  
GGGTCTGGG ACGAGATGAA TGTCTTGGCG CACGGACTCC TGCAGCTCGG CCAGGGGCTG 360  
CGCGAACACG CGGAGCGCAC CGCAGTCAG CTGAGCGCGC TGGAGCGGCG CCTGAGCGCG 420  
TGCGGGTCCG CCTGTCAGGG AACCGAGGGG TCACCGGACC TCCCGTTAGC CCCTGAGAGC 480  
CGGTGGGACC CTGAGGTCTT TCACAGCCTG CAGACACAAC TCAAGGCTCA GAACAGCAGG 540  
ATCCAGCAAC TCTTCCACAA GGTGGCCAG CAGCAGCGGC ACCTGGAGAA GCAGCACCTG 600  
CGAATTCAGC ATCTGCAAA GCGATTGGC CTCTCGGACC ACAAGCACCT AGACCATGAG 660  
GTGGCCAAAG GACGGTGACT CTTGGCTCTG CCGAGATGG CCCAGCCAGT TGACCCGGCT 720  
CACAATGTCA GCGGCTGCA CCGCTGCCC AGGATTTGCC AGGAGCTGTT CCAGGTTGGG 780  
GAGAGGCAGA GTGGACTATT TGAATCCAG CCTCAGGGT CTCCGCCATT TTTGGTGAAC 840  
TGCAAGATGA CCTCAGATGG AGGCTGGACA GTAATTCAGA GGCGCCACGA TGGCTCAGTG 900  
GACTTCAACC GGCCTGGGA AGCCTACAAG GCGGGGTTTG GGGATCCCCA CGGCGAGTTC 960  
TGGCTGGGTC TGGAGAAAGT GCATAGCATC ACGGGGAGCC GCAACAGCCG CCTGGCCGTG 1020  
CAGCTGCGGG ACTGGGATGG CAACGCGGAG TTGCTGCAGT TCTCCGTGCA CCTGGGTGGC 1080  
GAGGACACGG CCTATAGCCT GCAGCTCACT GCACCCGTGG CCGGCCAGCT GGGGCCACCC 1140  
ACCGTCCCAC CCAGCGGCTT CTCCGTACCC TTCTCCACTT GGGACCAGGA TCACGACCTC 1200  
CGCAGGGACA AGAAGTGGC CAAGAGCCTC TCTGGAGGCT GGTGGTTTGG CACCTGCAGC 1260  
CATTTCAACC TCAACGGCCA GTACTTCCG TCCATCCAC AGCAGCGGCA GAAGCTTAAG 1320  
AAGGGAATCT TCTGGAAGAC CTGGCGGGG CGCTACTACC CGCTGCAGGC CACCACCATG 1380  
TTGATCCAGC CCATGGCAGC AGAGGCAGCC TCCTAGCGTC CTGGCTGGGC CTGGTCCCAG 1440  
GCCACGAAA GACGGTGACT CTTGGCTCTG CCGAGGATG TGGCCGTTCCT CTGCCTGGGC 1500  
AGGGGCTCCA AGGAGGGGCC ATCTGGAAC TTGTGGACAG AGAAGAAGAC CACGACTGGA 1560  
GAAGGCTCCG TTTCTGAGTC AGGGGGGCTG CATGCGTTGC CTCTGAGAT CGAGGCTGCA 1620  
GGATATGCTC AGACTCTAGA GGCCTGGACC AAGGGGCATG GAGCTTCACT CTTTCTGGC 1680  
CAGGGAGTTG GGGACTCAGA GGGACCACTT GGGGCCAGCC AGACTGGCCT CAATGGCGGA 1740  
CTCAGTCACA TTGACTGACG GGGACCAAGG CTTGTGTGGG TCGAGAGCGC CCTCATGGTG 1800  
CTGGTGCTGT TGTGTGTAGG TCCCTGGGG ACACAAGCAG GCGCCAATGG TATCTGGGCG 1860  
45 GAGCTCAGAG AGTTCTTGA ATAAAGCAA CCTCAGAACA CTTAAAAAAA AAAAAAAAAA 1920  
AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA AAAAAA 1967

50  
Seq ID NO: 68 DNA Sequence  
Nucleic Acid Accession #: NM\_016109.2  
Coding sequence: 196..1416

55  
1 11 21 31 41 51  
| | | | |  
ATAAAAACCG TCCTCGGGCG CGGCGGGGAG AAGCCGAGCT GAGCGGATCC TCACACGACT 60  
GTGATCCGAT TCTTTCCAGC GGCTTCTGCA ACCAAGCGGG TCTTACCCCC GGTCTCTCCG 120  
GTCTCCAGTC CTCGCACCTG GAACCCCAAC GTCCCGGAGA GTCCCGGAAT CCCCCTCC 180  
AGGCTACCTA AGAGGATGAG CGGTGCTCCG ACGGCGGGG CAGCCCTGAT GCTCTGCGCC 240  
GCCACCGCGG TGCTACTGAG CGCTCAGGGC GGACCCGTGC AGTCCAAGTC GCCCGCTTT 300  
GCGTCTGGG ACGAGATGAA TGTCTTGGCG CACGGACTCC TGCAGCTCGG CCAGGGGCTG 360  
CGCGAACACG CGGAGCGCAC CGCAGTCAG CTGAGCGCGC TGGAGCGGCG CCTGAGCGCG 420  
TGCGGGTCCG CCTGTCAGGG AACCGAGGGG TCACCGGACC TCCCGTTAGC CCCTGAGAGC 480  
CGGTGGGACC CTGAGGTCTT TCACAGCCTG CAGACACAAC TCAAGGCTCA GAACAGCAGG 540  
ATCCAGCAAC TCTTCCACAA GGTGGCCAG CAGCAGCGGC ACCTGGAGAA GCAGCACCTG 600  
CGAATTCAGC ATCTGCAAA GCGATTGGC CTCTCGGACC ACAAGCACCT AGACCATGAG 660  
GTGGCCAAAG GACGGTGACT CTTGGCTCTG CCGAGATGG CCCAGCCAGT TGACCCGGCT 720  
CACAATGTCA GCGGCTGCA CCGCTGCCC AGGATTTGCC AGGAGCTGTT CCAGGTTGGG 780  
GAGAGGCAGA GTGGACTATT TGAATCCAG CCTCAGGGT CTCCGCCATT TTTGGTGAAC 840  
TGCAAGATGA CCTCAGATGG AGGCTGGACA GTAATTCAGA GGCGCCACGA TGGCTCAGTG 900  
GACTTCAACC GGCCTGGGA AGCCTACAAG GCGGGGTTTG GGGATCCCCA CGGCGAGTTC 960  
TGGCTGGGTC TGGAGAAAGT GCATAGCATC ACGGGGAGCC GCAACAGCCG CCTGGCCGTG 1020  
CAGCTGCGGG ACTGGGATGG CAACGCGGAG TTGCTGCAGT TCTCCGTGCA CCTGGGTGGC 1080  
GAGGACACGG CCTATAGCCT GCAGCTCACT GCACCCGTGG CCGGCCAGCT GGGGCCACCC 1140  
ACCGTCCCAC CCAGCGGCTT CTCCGTACCC TTCTCCACTT GGGACCAGGA TCACGACCTC 1200  
CGCAGGGACA AGAAGTGGC CAAGAGCCTC TCTGGAGGCT GGTGGTTTGG CACCTGCAGC 1260  
CATTTCAACC TCAACGGCCA GTACTTCCG TCCATCCAC AGCAGCGGCA GAAGCTTAAG 1320  
AAGGGAATCT TCTGGAAGAC CTGGCGGGG CGCTACTACC CGCTGCAGGC CACCACCATG 1380  
TTGATCCAGC CCATGGCAGC AGAGGCAGCC TCCTAGCGTC CTGGCTGGGC CTGGTCCCAG 1440  
GCCACGAAA GACGGTGACT CTTGGCTCTG CCGAGGATG TGGCCAAGAC CACGACTGGA 1500  
GAAGCCCCCT TTTCTGAGTC AGGGGGGCTG CATGCGTTGC CTCTGAGAT CGAGGCTGCA 1560  
GGATATGCTC AGACTCTAGA GGCCTGGACC AAGGGGCATG GAGCTTCACT CTTTCTGGC 1620  
CAGGGAGTTG GGGACTCAGA GGGACCACTT GGGGCCAGCC AGACTGGCCT CAATGGCGGA 1680  
CTCAGTCACA TTGACTGACG GGGACCAAGG CTTGTGTGGG TCGAGAGCGC CCTCATGGTG 1740  
CTGGTGCTGT TGTGTGTAGG TCCCTGGGG ACACAAGCAG GCGCCAATGG TATCTGGGCG 1800  
GAGCTCAGAG AGTTCTTGA ATAAAGCAA CCTCAGAACA CTT 1843

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PCT/US02/29560

Seq ID NO: 69 DNA Sequence  
Nucleic Acid Accession #: NM\_001216.1  
Coding sequence: 43..1422

|    |             |            |            |             |            |            |      |
|----|-------------|------------|------------|-------------|------------|------------|------|
|    | 1           | 11         | 21         | 31          | 41         | 51         |      |
| 5  |             |            |            |             |            |            |      |
|    | GCCCGTACAC  | ACCGTGTGCT | GGGACACCCC | ACAGTCAGCC  | GCATGGCTCC | CCTGTGCCCC | 60   |
|    | AGCCCCCTGGC | TCCCTCTGTT | GATCCCGGCC | CCTGCTCCAG  | GCCTCACTGT | GCAACTGCTG | 120  |
|    | CTGTCACTGC  | TGCTTCTGAT | GCCTGTCCAT | CCCCAGAGGT  | TGCCCCGGAT | GCAGGAGGAT | 180  |
| 10 | TCCCCCTTGG  | GAGGAGGCTC | TTCTGGGGAA | GATGACCCAC  | TGGGCGAGGA | GGATCTGCCC | 240  |
|    | AGTGAAGAGG  | ATTACCCAG  | AGAGGAGGAT | CCACCCGGAG  | AGGAGGATCT | ACCTGGAGAG | 300  |
|    | GAGGATCTAC  | CTGGAGAGGA | GGATCTACCT | GAAGTTAAGC  | CTAAATCAGA | AGAAGAGGGC | 360  |
|    | TCCCTGAAGT  | TAGAGGATCT | ACCTACTGTT | GAGGCTCCTG  | GAGATCCTCA | AGAACCCAG  | 420  |
|    | AATAATGCCC  | ACAGGGACAA | AGAAGGGGAT | GACCAGAGTC  | ATTGGCGCTA | TGGAGGCGAC | 480  |
|    | CGCCCTTGGC  | CCCGGGTGTC | CCCAGCCTGC | GCGGCGCGCT  | TCCAGTCCCC | GGTGGATATC | 540  |
| 15 | CGCCCCCAGC  | TGCGCGCCTT | CTGCGCGGCC | CTGCGCCCCC  | TGGAATCCTT | GGGCTTCCAG | 600  |
|    | CTCCCGCGCG  | TCCCAGAACT | GCGCCTGCGC | AACAAATGGCC | ACAGTGTGCA | ACTGACCCTG | 660  |
|    | CCTCCTGGCC  | TAGAGATGGC | TCTGGGTCCC | GGGCGGGAGT  | ACCGGGCTCT | GCAGCTGCAT | 720  |
|    | CTGCACTGGG  | GGGCTGCAGG | TCGTCCGGGC | TGCGAGCACA  | CTGTGGAAGG | CCACCGTTTC | 780  |
|    | CCTGCCGAGA  | TCCACGTGGT | TCACCTCAGC | ACCGCCTTTC  | CCAGAGTTGA | CGAGGCGCTG | 840  |
| 20 | GGGCGCCCGG  | GAGGCGCTGC | CGTGTGCGCC | GCCTTTCTCG  | AGGAGGCGCC | GGAAGAAAC  | 900  |
|    | AGTGCCTATG  | AGCAGTTGCT | GTCTCGCTTG | GAAGAAATCG  | CTGAGGAAGG | CTCAGAGACT | 960  |
|    | CAGGTCCCAG  | GACTGGACAT | ATCTGCACTC | CTGCCCTCTG  | ACTTCAACCG | CTACTTCCAA | 1020 |
|    | TATGAGGGGT  | CTCTGACTAC | ACCGCCCTGT | GCCCAGGGTG  | TCATCTGGAC | TGTGTTTAAC | 1080 |
|    | CAGACAGTGA  | TGCTGAGTGC | TAGCAGCTC  | CACACCTCT   | CTGACACCTC | GTGGGACCT  | 1140 |
| 25 | GGTGACTCTC  | GGCTACAGCT | GAACCTCCGA | GCGACGCGAG  | CTTTGAATGG | GCGAGTGATT | 1200 |
|    | GAGGCGCTCT  | TCCCTGTGCG | AGTGGACAGC | AGTCCTCGGG  | CTGCTGAGCC | AGTCCAGCTG | 1260 |
|    | AATTCTGCGC  | TGGCTGCTGG | TGACATCCTA | GCCCTGGTTT  | TGCGCTCTCT | TTTTGCTGTC | 1320 |
|    | ACCAGCGTCG  | CGTTCCTTGT | GCAGATGAGA | AGGCAGCACA  | GAAGGGGAAC | CAAAGGGGGT | 1380 |
| 30 | GTGAGCTACC  | GCCCAGCAGA | GGTAGCCGAG | ACTGAGCCCT  | AGAGGCTGGA | TCTTGGAGAA | 1440 |
|    | TGTGAGAAAG  | CAGCCAGAGG | CATCTGAGGG | GGAGCCGGTA  | ACTGTCCTGT | CCTGCTCATT | 1500 |
|    | ATGCCACTTC  | CTTTTAACCT | CCAAGAAATT | TTTAAATA    | AATATTATA  | AT         | 1552 |

Seq ID NO: 70 DNA Sequence  
Nucleic Acid Accession #: NM\_003039.1  
Coding sequence: 107..1612

|    |             |             |            |             |            |             |      |
|----|-------------|-------------|------------|-------------|------------|-------------|------|
|    | 1           | 11          | 21         | 31          | 41         | 51          |      |
|    |             |             |            |             |            |             |      |
| 35 | CTTCTCTCTC  | CATTCACTGC  | ACGCGTTACT | TGGCTAAAA   | GGAGGTGAGC | GGCACTCTGC  | 60   |
|    | CCTTCCAGAG  | CAAGCATGGA  | GCAACAGGAT | CAGAGCATGA  | AGGAAGGGAG | GCTGACGCTT  | 120  |
| 40 | GTGCTTGCCC  | TGGCAACCCCT | GATAGCTGCC | TTTGGGTGAT  | CCTTCCAGTA | TGGGTACAAAC | 180  |
|    | GTGGCTGTGT  | TCAACTCCCC  | AGCACTGCTC | ATGCAACAAT  | TTTACAATGA | GACTTACTAT  | 240  |
|    | GGTAGGACCG  | GTGAATTCAT  | GGAAGACTTC | CCCTTGACGT  | TGCTGTGCTC | TGTAACCGTG  | 300  |
|    | TCCATGTTTC  | CATTGGAGG   | GTTTATCGGA | TCCCTCCTGG  | TGCGCCCTT  | GCTGAATAAA  | 360  |
| 45 | TTTGGCAGAA  | AAGGGGCTT   | GCTGTTCAAC | AACATATTTT  | CTATCGTGCC | TGCGATCTTA  | 420  |
|    | ATGGGATGCA  | GCAAGTTCGC  | CACATCATTT | GAGCTTATCA  | TTATTTCCAG | ACTTTTGGTG  | 480  |
|    | GGAATATGTG  | CAGGTGTATC  | TTCCAACCTG | GTCCCCATGT  | ACTTAGGGGA | GCTGGCCCTT  | 540  |
|    | AAAAAACCCTG | GGGGGGCTCT  | CGGGGTGGTG | CCCCAGCTCT  | TCATCACTGT | TGGCATCCTT  | 600  |
|    | GTGGCCCCAGA | TCTTTGGTCT  | TGGAATCTC  | CTTGCAAAACG | TAGATGGCTG | GCCGATCCTG  | 660  |
|    | CTGGGGCTGA  | CCGGGGTCCC  | CGCGGCGCTG | CAGCTCCTTC  | TGCTGCCCTT | CTTCCCGGAG  | 720  |
| 50 | AGCCCCAGGT  | ACCTGTCTGT  | TCAGAAGAAA | GACGAAGCGG  | CCGCCAAGAA | AGCCCTACAG  | 780  |
|    | ACGCTGCGCG  | GCTGGGACTC  | TGTGGACAGG | GAGGTGGCCG  | AGATCCGGCA | GGAGGATGAG  | 840  |
|    | GCAGAGAAGG  | CCGGGGCTT   | CATCTCCGTG | CTGAAGCTGT  | TCCGGATGCG | CTCGCTGCGC  | 900  |
|    | TGGCAGCTGC  | TGTCATCAT   | CGTCTCATG  | GCGCGCCAGC  | AGCTGTCCGG | CGTCAACGCT  | 960  |
| 55 | ATCTACTACT  | ACGCGGACCA  | GATCTACCTG | AGCGCCGCGC  | TGCGGAGGA  | GCACGTGCAG  | 1020 |
|    | TACGTGACGG  | CCGGCACCAG  | GCGCGTGAAC | GTGGTCATGA  | CCTTCTGCGC | CGTGTCTGTC  | 1080 |
|    | GTGGAGCTCC  | TGGGTGAGAG  | GCTGCTGCTG | CTGCTGGGCT  | TCTCCATCTG | CCTCATAGCC  | 1140 |
|    | TGCTGCTGTC  | TGACTGCAGC  | TCTGGCACTG | CAGGACACAG  | TGTCTGGAT  | GCCATACATC  | 1200 |
|    | AGCATGCTCT  | GATGATCTC   | CTACGTCTCA | GGACATGCCC  | TGCGGCCAG  | TCCCATACCC  | 1260 |
| 60 | GCGCTGCTCA  | TCACTGAGAT  | CTTCTGCGAG | TCTCTCGGC   | CATCTGCTTC | CATGGTGGGG  | 1320 |
|    | GGCAGTGTGC  | ACTGGCTCTC  | CAACTTCACC | GTGGGCTTGA  | TCTTCCGCTT | CATCCAGGAG  | 1380 |
|    | GGCCTCGGCC  | CGTACAGCTC  | CATTGTCTTC | GCGGTGATCT  | GCCTCTCAC  | CACCATCTAC  | 1440 |
|    | ATCTTCTTGA  | TGTCCCGGA   | GACCAAGGCC | AAGACGTTCA  | TAGAGATCAA | CCAGATTTTC  | 1500 |
|    | ACCAAGTGA   | ATAAGGTGTC  | TGAAGGTGAC | CCGGAAGAGG  | AGGAACGTAA | AGAGCTTTCA  | 1560 |
| 65 | CCTGTCACTT  | CGGAACAGTG  | ACTCTGGAGA | GGAAGCCAGT  | GGAGCTGGTC | TGCCAGGGGC  | 1620 |
|    | TTCCCACTTT  | GGCTTATTTT  | TCTGACTTCT | AGCTGTCTGT  | GAATATCCAG | AAATAAAACA  | 1680 |
|    | ACTCTGATGT  | GGAATGCAGT  | CCTCATCTCC | AGCCTCCCCA  | CCCCAGTGGG | AACTGTGCAA  | 1740 |
|    | AGGGCTGCTT  | TGCTGTTCTT  | GAAGCTGGGC | TGTCTCTCTC  | CATGTTGGCC | TGTCAACAGA  | 1800 |
|    | CCCCAGTCAA  | TTAAACAGCT  | GGTCTCTCAC | TTTGCTGGTT  | CAGCCTTCGT | GTGGCTCCTG  | 1860 |
| 70 | GTAACGTGGC  | TCCACCTTGA  | TGGGTCAACC | TTTGTGTGGC  | TCTGTGTAAC | ATAACAACAA  | 1920 |
|    | CAGTTACTAT  | AGTGGTGAGA  | TGGAAGGAAT | CAAATTTTGC  | CAGAGAAACT | AACTCGGTGG  | 1980 |
|    | CCCCAACAGG  | TCTTCCGGGG  | CCATGGGCAT | TTGTTTAGAG  | CCAAATTCAT | CCTCTTACCA  | 2040 |
|    | GATCCTTTTC  | CAGAAATACC  | TGTCTAGGAA | GGTGTGATGT  | CAGAAACAT  | GACATCCAGA  | 2100 |
|    | AAGCTGAGGA  | ACAGGTTTCT  | GTGGAGACAC | TGAGTCAGAA  | TTCTTCATCC | AAATATTTT   | 2160 |
| 75 | GTTAGTGAA   | AATGGAATTG  | CTTCTGTGTA | GTCAATAAAA  | TGAACCTGAT | CATTTTTC    | 2218 |

Seq ID NO: 71 DNA Sequence  
Nucleic Acid Accession #: NM\_001252.1  
Coding sequence: 138..719

|    |            |            |            |            |            |            |     |
|----|------------|------------|------------|------------|------------|------------|-----|
|    | 1          | 11         | 21         | 31         | 41         | 51         |     |
|    |            |            |            |            |            |            |     |
| 80 | GGCTGCTCCC | CTGACAGGTT | GAAGCAAGTA | GACGCCAGG  | AGCCCCGGGA | GGGGGCTGCA | 60  |
|    | GTTTCCTTCC | TTCTTCTCTG | GCAGCGCTCC | GCGCCCCCAT | CGCCCTCTCT | GCGCTAGCGG | 120 |
|    | AGGTGATCGC | CCGGCGGATG | CCGAGGAGGG | GTTTGGGCTG | CTGGTGGCGG | GCGAGGCCCT | 180 |
|    | ATGGGTGCGT | CCTGCGGGCT | GCTTTGGTCC | CATTGGTTCG | GGGCTTGGTG | ATCTGCGCTG | 240 |

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5 TGGTGTGCAT CCAGCGCTTC GCACAGGCTC AGCAGCAGCT GCCGCTCGAG TCACTTGGGT 300  
 GGGACGTAGC TGAGCTGCAG CTGAATCACA CAGGACCTCA GCAGGACCCC AGGCTATACT 360  
 GGCAGGGGGG CCCAGCACTG GGCCTCTCCT TCCTGTCATG ACCAGAGCTG GACAAGGGGC 420  
 AGCTAGCTAT CCATCGTGAT GGCATCTACA TGGTACACAT CCAGGTGACG CTGGCCATCT 480  
 GCTCCTCCAC GAGCGCTCC AGGCACCACC CCACCACCCT GGCGGTGGGA ATCTGCTCTC 540  
 CCGCCTCCCG TAGCATCAGC CTGCTGCGTC TCAGCTTCCA CCAAGTGTGT ACCATTGCCT 600  
 CCCAGGCGCT GACGCCCCTG GCCGAGGGG ACACACTCTG CACCAACCTC ACTGGGACAC 660  
 TTTTGCCTTC CCGAAACACT GATGAGACCT TCTTTGGAGT GCAGTGGGTG CGCCCCTGAC 720  
 CACTGCTGCT GATTAGGTTT TTTTAAATTI TATTTTATTT TATTTAAGTT CAAGAGAAAA 780  
 10 AGTGATACACA CAGGGCCAC CCGGGGTGG GGTGGGAGT TGGTGGGGG TAGTGTGGC 840  
 AGGACAAGAG AAGGCATTGA GCTTTTCTT TCATTTTCTT ATTAATAA 888

Seq ID NO: 72 DNA Sequence  
 Nucleic Acid Accession #: NM\_018092.2  
 Coding sequence: 13..618  
 15 1 11 21 31 41 51  
 | | | | |  
 AGCAGGTTTC GAATGCTCTT TACTTCCTTT GTGGAGCAAA AGAAAAAAGC AGGAGTATTT 60  
 GAACAAATCA CTAAGACTCA TGAACAATT ATTGGCATTAT CTTCAGGGAT TGTCTTGGTC 120  
 20 CTTCCTATT TTTCTATTTT AGTACAAGTG AAACAGCCTC GAAAAAAGGT CATGGCTTGC 180  
 AAAACCGCTT TTAATAAAAC GGGTTTCCAA GAAGTGTTTG ATCCTCCTCA TTATGAACCTG 240  
 TTTTCACTAA GGGACAAAGA GATTTCTGCA GACCTGGCAG ACTTGTGCGA AGAATTGGAC 300  
 AACTACCAGA GGATGCGGCG CTCTCCACC GCCTCCCGCT GCATCCACGA CCACCACTGT 360  
 GGGTCGCAGG CCTCCAGCGT CAAACAAAGC AGGACCAACC TCAGTTCCAT GGAGCTTCTC 420  
 25 CTCGAAATG ACTTTGCACA ACCACAGCCA ATGAAAAACAT TTAATAGCAC CTTCAGAAAA 480  
 AGTAGTTACA TTTCTAAACA GGGACATGAG TGCCCTGAGC AGGCCCTGGA AGACCGAGTA 540  
 ATGGAGGAGA TTCCCTGTGA AATTATGTC AGGGGCGGAG AAGATTCTGC ACAAGCATCC 600  
 ATATCCATTG ACTTCTAATC TTCTGCTAAT GGTGATGTGA ATTCTTAGGG TGTGTACGTA 660  
 CGCAGCCTCC AGGGCACCAT ACTGTTTCCA GCAGCCAACC CTTTCTCCC ATCACAACCTA 720  
 30 CGAAGACCTT GATTTACCGT TAACCTATTG TATGGTGATG TTTTATTCT CTCAGGCAGT 780  
 CTATATATGT TAAACCAATC AAGGAACTTA CTCTATTGAG TGGAAACAA ATCATCTCTC 840  
 ATTGCTTGGT GTCATTATATA GGAAGCACTG CCAGTTAAAG AGCATTAGAA GAGGTGGTTG 900  
 GATGGAGCCA GGCTCAGGCT GCCTCTTCGT TTTAGCAACA AGAAGACTGC TCCTGACTGA 960  
 35 TAACAGCTCT GTCAATATTT TGATGCCACA ATAAACTTGA TTTTCTTTA CATTCCTTTT 1020  
 ATTTTCTCTT TCTCTAAATT TAATTTGTTT TATAAGCCTA TCGTTTACC ATTTCATTTT 1080  
 CTTACATAAG TACAGTGGI TAATGTACCA CATACTTCAG TATAGGCATT TGTCTTGAG 1140  
 TGTGTCAAAA TACAGCTAGT TACTGTGCCA ATTAAGACCC AGTTGTATTT CACCCATCTG 1200  
 TTTCTTCTTG GCTAATCTCT GTACTCTGCT CTTTAAATTA TGGGGCCTT ATTCTTATT 1260  
 40 TTCTGTGAGA AATAATAGAT GATATGATTT ATTACCTTTC AATTATATTT TTCTCAGTTA 1320  
 TACTAGAAAA TTTCTAATC CTGGGATATA TGTACCATTG TCAGCTATGA CTAAAAATTT 1380  
 GAAAAAGATA AAAATTTCTA GCAAGCCTTT GAAGTTTACC AAGTATAGTC ACATTCACTG 1440  
 ACAGCCCATC CATTCAGTA AAGAATCATT TCATTCACTT TGGGAGAGGC CTATAATTAC 1500  
 45 ATTTATTTCG AATGTTTCTC TTCGCTAGAT TGTACATAG CTCCTATTCT GTTGGTTTTG 1560  
 CTTACAGCAT ATGGTAACCA AGGTAGATG CCAGTTAAAA TTCCTTAGAA ATTGGATGAG 1620  
 CCTTGAGCTT GCTTCTTAAC TGGGACATGA CATTTTTCTA GCTCTTATCA AGAATAACAA 1680  
 CTTCCACTTT TTTTAAACT GCACTTTTGA CTTTTTTTAT GGTATAAAAA CAATAATTTA 1740  
 TAAACATAAA AGCTCATTTG GTTTTTTAGA CTTTGTATAT TATTTGATAC TGTACAAACT 1800  
 50 TTATTAATC AAGATGAAAG ACCTACAGGA CAGATTCTCT TCAGTGTTCAT CATCAGTGCC 1860  
 TTTGTATGCA AATATGCTGT GTTGGACCTG GACGCTATAA CTTATTGTAA AGACCTTGGA 1920  
 AATGTGGACA TAAGCTCTTT CTTTCTTTT GTTACTGTAT TTAGTTTGTG ATAAATTTT 1980  
 CACTGTGTGA TATTTATGCT CTAAATCACT ACACAAATCC CATATTAATA TATACATTTG 2040  
 ACCTGACCTT TTAATCATGT TATTTATGCC ACCAAGGTTG TGGATCTTAA GGTATGTATG 2100  
 GAAAGGAACT CATTTATCAA ATTGTAAGTA ATACAGACAT GCCATTAAAA AGAGGTAAT 2160  
 55 TCTTGTTCCT TATATTTGT TAGTAAATTC TCAATGAAAT AAGTTGAAAT TTCCTGGAT 2220  
 TTCATTAAC TTTAAATATT ACATATATGT GTTTTCTCAG ATTAGTGAAA ATTGTGACCT 2280  
 TAAATTTAAT ACACATATAC TGCTCAG 2308

Seq ID NO: 73 DNA Sequence  
 Nucleic Acid Accession #: Eos sequence  
 60 1 11 21 31 41 51  
 | | | | |  
 GCTGAATGTT TTTTTCATT TCCTGAGAGA TGCAAAATGTT CATTCATTCA TCTCATTATA 60  
 CAACACAGTA CATAAATGTA GCTTCAGAGC GTATTAAGTG CTTTATACA CAAGTGCTGG 120  
 65 CTGTGTGGAC CAGGTGGTAG CTCATTAGG CCCCAAATTC ATTAAGGGCA GGGCTGACT 180  
 CTTAGGCTTC TTAATATTTG GTTTGGTGCA TGGTCAAGAG CTGGACCCAC ATGTTGCATA 240  
 GCAGCAGGCG TGATATGTTT AAAGACGCTG GGCTTTTCT GCTCTGGGGC CTTTCCCGG 300  
 GGGTCCGGT GAGTCCCTCC CCAGGTGGGT CTGCCCCAC CCGTGTGGGC GGGATTAGCT 360  
 CCCAGAGGCT GGCCAGGCCC CACCTGGGGG AGGCTTGAGG GCAGGGCCCC AAGGCTGAGA 420  
 70 TTCAGGCTTG GGGGAACAGA GCAGGAAAGA GACCCGTATC CGAAAGTGAG CGGGCAGGC 480  
 ACCTAGTCAC ATGGGTAATG GGCAGGGGTC GGTCACTGGC TTTGGCTCCA GGGCCAGAGC 540  
 AGCTGACTT AGTGTGAGC TCCAAGCATG GAACACTGGA GTTGGTTTCA TTTGACCAGC 600  
 AAGCCTCTAA ATGGGTGCCT TGATTACCCA CCGCAAGGAG AGGGCAGTTG CCTTTTATG 660  
 ACATGTTAAT TCCAGCCAGG TGAGTCACCA GGTAGCTCTC ATCTCTCTGC CAGGCTCCCC 720  
 75 TGCTGTGCGG TTTGGCATTG TCAGATAATG TGATCATTC TGAAGTGAC ATTTGAGTTC 780  
 CAAACAGTTT TTCTCTTTA ACCATTTCAC CCTCAGGAGT GATTCTCCTT TGTITGGCAT 840  
 TGTACGGGAA TGTGATGATC CATTCAAATG ACTTTTGAGT TCCAAATAGT GTTTCTACTT 900  
 TAACTTCCTA AATGAAAAA AAAAAAATA AAA 933

Seq ID NO: 74 DNA Sequence  
 Nucleic Acid Accession #: Eos sequence  
 80 1 11 21 31 41 51  
 | | | | |  
 TTTTTTTTTT TCATTIAGGA AGTTAAAGTA GAAACACTAT TTGGAATCCA AAAGTCATTT 60  
 GAATGGATCA TCACATTCCT TGCAATGCC AAACAAGGA GAATCACTCC TGAGGTGAA 120

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|    |  |            |            |             |             |            |      |
|----|--|------------|------------|-------------|-------------|------------|------|
|    | ATGGTTAAAG                             | GAGAAAACTG | GTTTGGAACT | CAAATGTCAC  | TTCAATGAAT  | GATCACATTA | 180  |
|    | TCTGACAAATG                            | CCAAACCGAC | AGGCAGGGGA | GCCTGGCAGG  | AGGATGAGAG  | CTACCTGGTG | 240  |
|    | ACTCACCTGG                             | CTGGAATTAA | CATGTCATAA | AAAGGCAACT  | GCCCTCTCCT  | TGCGGTGGGT | 300  |
|    | AATCAAGGCA                             | CCCAATTAA  | GGCTTGCTGG | TCAAAATGAA  | CCAACTCCAG  | TGTTCCATGC | 360  |
| 5  | TTGGAGCTCA                             | ACACTAAGTC | AGACTGCTCT | GGCCCTGGAG  | CCAAAGCCAG  | TGACCGACCC | 420  |
|    | CTGCCCATTA                             | CCCATGTGAC | TAGGTGCTGT | CCCCGCTCAC  | TTTCGGTACC  | GGGTCTCTTT | 480  |
|    | CCTGCTCTGT                             | TCGCCCAAGC | CTGAATCTCA | GCCTTGGGGC  | CCTGCCCTCA  | AGCCTCCCCC | 540  |
|    | AGGTGGGGCC                             | TGGCCAGCCT | C          |             |             |            | 561  |
| 10 | Seq ID NO: 75 DNA Sequence             |            |            |             |             |            |      |
|    | Nucleic Acid Accession #: Eos sequence |            |            |             |             |            |      |
|    | Coding sequence: 1..459                |            |            |             |             |            |      |
|    | 1                                      | 11         | 21         | 31          | 41          | 51         |      |
| 15 | ATCATTGCAG                             | CCACGATTAA | TAATGCCAGC | ATGACTTCCC  | CAATTGACAA  | TGCTGGACTT | 60   |
|    | GCAGCAGATG                             | ACTTCAAAT  | GAATGCATCC | TTGCAGACAC  | AGATCTCCAC  | GGATGCTGAA | 120  |
|    | CGAGTTAGCT                             | CGGCCAAGAG | TGAGATAATG | GAGCTGAAAC  | AAGTCTCCCA  | GTCCCTCCAG | 180  |
|    | CATGAACTGC                             | AGTCTGTCTT | GGCCATGCAA | AGCTCCCCAG  | AAGGAACCCCT | GGCTGACACA | 240  |
|    | GAAGCTGGCT                             | ACGTGGCTCA | GCTGTGAGAA | ATTAAGATGT  | ATATCAGCAT  | CTGTGAGGAG | 300  |
| 20 | CAGATCTGCC                             | AGATCCGGGG | CGAGACTGAA | TACCAGAAAC  | CAGAGTATGC  | ACAACTGCAG | 360  |
|    | GACATCAAGA                             | CAGCCCTGGA | GCTGGAGATC | GAGACCTACC  | ACCGCCTGCT  | CGGTGGAGAG | 420  |
|    | GGAGGTTCTG                             | AGGCCAGAGA | AGCTGAATCT | AAAGGATGAT  | TCTCTGTGGA  | CTCCAAAGGA | 480  |
|    | ATAACCAACA                             | CAGCTCAATC | GAGGGGAAGA | GTCGCTTTTT  | AAAATTCACA  | TAAAAGCAGA | 540  |
|    | GGAAACGAGC                             | TGGTGAACGA | TAATGACCAA | CTAATTTTCAT | CTCAACACTG  | TTTCTGTATG | 600  |
| 25 | AAAAATTCAG                             | AGTAAGATGC | AGGCAGCTGA | GTCCTGTCCC  | CAGGATGTAA  | ATGATGACAC | 660  |
|    | CTAACAAAGG                             | CGTGCTGAAG | CACTGCAACA | AACCTGCGGC  | CACAGACCTG  | CAGCTACTCC | 720  |
|    | TGTAATCCIT                             | TCTCAGATTC | TTTGTCTTA  | TTGCTTCGGT  | TTTGTCTTTA  | AATTCGAAAA | 780  |
|    | TGTGTTTTCC                             | TTCTTAATCA | TTCTGTGTGC | ATAAATTTTT  | TGCTGTGTGC  | AAATCAA    | 837  |
| 30 | Seq ID NO: 76 DNA Sequence             |            |            |             |             |            |      |
|    | Nucleic Acid Accession #: NM_003265.2  |            |            |             |             |            |      |
|    | Coding sequence: 102..2816             |            |            |             |             |            |      |
|    | 1                                      | 11         | 21         | 31          | 41          | 51         |      |
| 35 | CACTTTTCAG                             | AGTGGCGTCT | ATTTGCCACA | CACITCCCTG  | ATGAAATGTC  | TGGATTTGGA | 60   |
|    | CTAAAGAAAA                             | AAGGAAAGGC | TAGCAGTCAT | CCAACAGAA   | CATGAGACAG  | ACTTTGCTTT | 120  |
|    | GTATCTACTT                             | TTGGGGGGGC | CTTTTGCCCT | TTGGGATGCT  | GTGTGCATCC  | TCCACCACCA | 180  |
|    | AGTGCACTGT                             | TAGCCATGAA | GTTGCTGACT | GCAGCCACCT  | GAAAGTTGACT | CAGGTACCCG | 240  |
| 40 | ATGATCTACC                             | CACAAACATA | ACAGTGTGTA | ACCTTACCCA  | TAATCAACTC  | AGAAGATTAC | 300  |
|    | CAGCCGCCAA                             | TGTCACAAAG | TATAGCCAGC | TAAGTAGCTT  | GGATGTAGGA  | TTTAACACCA | 360  |
|    | TCTCAAAACT                             | GGAGCCAGAA | TTGTGCCAGA | AACITCCCAT  | GTTAAAGTTT  | TTGAACCTCC | 420  |
|    | AGCACAATGA                             | GCTATCTCAA | CTTTCTGATA | AAACCTTTGC  | CTTCTGCACG  | AATTTGACTG | 480  |
|    | AACITCCATC                             | CATGTCCAAT | TCAATCCAGA | AAATTAAGAA  | TAATCCCTTT  | GTCAAGCAGA | 540  |
| 45 | AGAATTTAAT                             | CACATTAGAT | CTGTCTCATA | ATGGCTTGTC  | ATCTACAAAA  | TTAGGAATCT | 600  |
|    | AGGTTTCAGT                             | GGAATATCTC | CAAGAGCTTC | TATTATCAAA  | CAATAAAATT  | CAAGCGCTAA | 660  |
|    | AAAGTGAAGA                             | ACTGGATATC | TTTGCCAAIT | CATCTTTTAA  | AAAATTAGAG  | TTGTATCGA  | 720  |
|    | ATCAAAATTA                             | AGAGTTTTCT | CCAGGGTGT  | TTACGCAAT   | TGGAAGATTA  | TTTGGCCTCT | 780  |
| 50 | TTCTGACAAA                             | TGTCACAGTG | GGTCCAGCC  | TTACAGAGAA  | GCTATGTTTG  | GAATTAGCAA | 840  |
|    | ACACAAGCAT                             | TCGGAATCTG | TCTCTGAGTA | ACAGCCAGCT  | GTCCACCAAC  | AGCAATACAA | 900  |
|    | CTTTCTTGGG                             | ACTAAAGTGG | ACAAATCTCA | CTATGCTCGA  | TCTTTCCTAC  | AACAACCTAA | 960  |
|    | ATGTGGTTTG                             | TAACGATTTG | TTTGCTTGGC | TTCCACAAC   | AGAATATTTC  | TTCTAGATG  | 1020 |
|    | ATAATTAAT                              | ACAGCATTTG | TTTTCTCACT | CTTTGCACGG  | GCTTTTCAAT  | GTGAGGTACC | 1080 |
| 55 | TGAAATTTGA                             | ACGCTCTTTT | ACTAAACAAA | GTATTTCCCT  | TGCTCTCACT  | CCCAAGATTG | 1140 |
|    | ATGATTTTTT                             | TTTTCACTGG | CTAAATGTTT | TGGAGCACCT  | TAACATGGAA  | GATAATGATA | 1200 |
|    | TTCCAGGCAT                             | AAAAAGCAAT | ATGTTACAG  | GATTGATAAA  | CCTGAAATAC  | TTAAGTCTAT | 1260 |
|    | CCAACTCCTT                             | TAAAGCTTTG | CGAACTTTGA | CAAAATGAAAC | ATTTGTATCA  | CTTGCTCATT | 1320 |
|    | CTCCCTTACA                             | CATCTCAAC  | CTAACCAAGA | ATAAAATCTC  | AAAAATAGAG  | AGTGATGCTT | 1380 |
|    | TCTCTTGGTT                             | GGGCCACCTA | GAAGTACTTG | ACCTGGGCTT  | TAATGAAATT  | GGCCAGAAAC | 1440 |
| 60 | TCACAGGCCA                             | GGAATGGAGA | GGTCTAGAAA | ATATTTTCTG  | AATCTATCTT  | TCCTACAACA | 1500 |
|    | AGTACCTGCA                             | GCTGACTAGG | AACTCCTTTG | CCTTGGTCCC  | AAGCCTTCAA  | CGACTGATGC | 1560 |
|    | TCCGAAGGGT                             | GGCCCTTAAA | AATGTGGATA | GCTCTCCTTC  | ACCAATCCAG  | CCTCTTCGTA | 1620 |
|    | ACTTGACCAT                             | TCTGGATCTA | AGCAACAACA | ACATAGCCAA  | CATAAATGAT  | GACATGTTGG | 1680 |
|    | AGGGTCTTGA                             | GAAACTAGAA | ATTCTCGATT | TGCAGCATAA  | CAACTTAGCA  | CGGCTCTGGA | 1740 |
| 65 | AACACGCAAA                             | CCCTGGTGGT | CCCATTTATT | TCCTAAAGGG  | TCGTCTCTAC  | CTCCACATCC | 1800 |
|    | TTAACTTGGG                             | GTCCACAGGC | TTTGACGAGA | TCCCAGTTGA  | GGTCTTCAAG  | GATTTATTTG | 1860 |
|    | AACTAAAGAT                             | CATCGATTTA | GGATTGAATA | ATTTAAACAC  | ACTTCCAGCA  | TCTGTCTTTA | 1920 |
|    | ATAATCAGGT                             | GTCTCTAAAG | TCATTGAACC | TTCAGAAGAA  | TCTCATAACA  | TCCGTTGAGA | 1980 |
|    | AGAAAGGTTT                             | CGGGCCAGCT | TTCAGGAACC | TGACTGAGTT  | AGATATGCGC  | TTTAATCCCT | 2040 |
| 70 | TTGATTGCAC                             | GTGTGAAAGT | ATTGCCTGGT | TTGTTAATTG  | GATTAACGAG  | ACCCATACCA | 2100 |
|    | ACATCCCCTG                             | GCTGTCAAGC | CACTACCTTT | GCAACACTCC  | ACCTCACTAT  | CATGGGTTC  | 2160 |
|    | CAGTGAGACT                             | TTTTGATACA | TCATCTTGCA | AAGACAGTGC  | CCCCTTTGAA  | CTCTTTTTC  | 2220 |
|    | TGATCAATAC                             | CAGTATCCTG | TTGATTTTTA | TCTTTATTGT  | ACTTCTCATC  | CACTTTGAGG | 2280 |
|    | GCTGGAGGAT                             | ATCTTTTAT  | TGGAATGTTT | CAGTACATCG  | AGTTCCTGGT  | TTCAAAGAAA | 2340 |
| 75 | TAGACAGACA                             | GACACAGACG | TTTGAATATG | CAGCATATAT  | AATTCATGCC  | TATAAGATA  | 2400 |
|    | AGGATTGGGT                             | CTGGGAACAT | TTCTCTTCAA | TGGAAAAGGA  | AGACCAATCT  | CTCAAATTTT | 2460 |
|    | GTCTGGAAGA                             | AAGGGACTTT | GAGGCGGGTG | TTTTTGAAT   | AGAAGCAATT  | GTTAACAGCA | 2520 |
|    | TCAAAAGAGG                             | CAGAAAAAAT | ATTTTGTGTA | TAACACACCA  | TCTATTAATA  | GACCCATTAT | 2580 |
|    | GCAAAAGATT                             | CAAGGTATAC | CATGCAAGTC | AACAAGCTAT  | TGAACAAAAT  | CTGATTTC   | 2640 |
| 80 | TTATATTGGT                             | TTTCTTGAG  | GAGATTCCAG | ATTATAAAT   | GAACCATGCA  | CTCTGTTTGC | 2700 |
|    | GAAGAGGAAT                             | GTTTAAATCT | CACGTGATCT | TGAAGTGGCC  | AGTTCAGAAA  | GAACGGATAG | 2760 |
|    | GTGCTTTTCG                             | TCATAAATTG | CAAGTAGCAC | TTGGATCCAA  | AAACTCTGTA  | CATTAAATTT | 2820 |
|    | ATTTAAATAT                             | TCAAATAGCA | AAGGAGAAAC | TTTCTCAAT   | TAAAAAGTTC  | TATGGCAAT  | 2880 |
|    | TTAAGTTTTC                             | CATAAAGGTG | TTATAATTG  | TTTATTCATA  | TTTGTAATG   | ATTATATTCT | 2940 |
|    | ATCACAATTA                             | CATCTCTCT  | AGGAAATGT  | GTCTCCTTAT  | TTCAGGCCTA  | TTTTTGACAA | 3000 |

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TTGACTTAAT TTTACCCAAA ATAAACATA TAAGCACGTA AAAAAAAAAA AAAAAA 3057

Seq ID NO: 77 DNA Sequence  
Nucleic Acid Accession #: Eos sequence

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| 1          | 11         | 21         | 31         | 41         | 51         |     |
|            |            |            |            |            |            |     |
| ATCAAGGAGG | ACAGATTTTA | TATGCTTAAG | ACTGGAGGGA | GAGAGACCAG | TTAGAAAGAC | 60  |
| TCTGGCTATA | ATCCAAGCAA | GCCATACTAT | GGGCTGGTTT | GGTGGAGGTA | GAGGAATGTC | 120 |
| CAGATTGGAG | AAACAGGAAG | TTAAAAATGG | GCAGGGCTTG | CTGACTGTTT | GAAACTAGGG | 180 |
| GGTGTGAAGG | GAGGCAGCAC | TCTAGGATAA | ACACCAGACT | TGCCGATTGT | TTGGGAATAT | 240 |
| CCAATTCTCG | TGTAGAAGAC | AGGAAAACAA | TAAACTCAAA | AGAAGTGTTA | CACATAGATA | 300 |
| ACTAAATTAG | TCATCTGTAG | ATAGTACAAC | ATATTGCGTG | GTACAGAGAT | CAAAAGGGAC | 360 |
| AGAAAGACCA | AGGAGGCAC  | AAATATTCAC | GGTACCCTAA | ATACGTGAGA | CATGAGGCAC | 420 |
| TCAGGATGCA | GGAGGTTTCA | ATTTGACAGG | ATGGATGCAC | ACTGCATGAC | CCACAGTTCA | 480 |
| GCTGGTGTGA | TCATTCCACC | CAACTTGCCC | CCTCTCCCGT | GTGTTGACCC | ACCCAGCAC  | 540 |
| CTGCCTCTGT | CTTCTCAGAA | TGTGTTTAC  | ATTATTTTAA | TAAACGATGT | TATTTGAGCA | 600 |
| TTTA       |            |            |            |            |            | 604 |

Seq ID NO: 78 DNA Sequence  
Nucleic Acid Accession #: Eos sequence

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| 1          | 11         | 21         | 31         | 41         | 51         |     |
|            |            |            |            |            |            |     |
| TTTTTTTTTT | TTTTTTTTTA | AATGCTCAAA | TAACATCGTT | TATTAAATAA | ATGTAAAAA  | 60  |
| CATTCTGAGA | AGCAGGAGGC | AGGTGCTGGG | GTGGGTCAAC | ACACGGGAGA | GGGGGCAAGT | 120 |
| TGGGTGGAAT | GATCGATCAC | ACCAGCTGAA | CTGTGGGTCA | TGCAGTGTGC | ATCCATCCTG | 180 |
| TCAAATTGAA | ACCTCCTGCA | TCCTGAGTGC | CTCATGTCTC | ACGTATTTAG | GGTACCGTGA | 240 |
| ATATTTAGTG | CCTCTCTGGT | CTTCTGTGCC | CTTTGTATCT | CTGTACACAC | GAATACGTTG | 300 |
| TACTATCTAC | AGATGACTAA | TTTAGTTATC | TGIGTGTAAC | ACTTCTTTTG | AGTTTATTGT | 360 |
| TTTCTGTCT  | TCTACAGCAG | AATTGGATAT | TCCCAAAACA | TCTGCAAGTC | TGGTGTTTAT | 420 |
| CCTAGAGTGC | TGCCTCCCTT | CACACCCCT  | AGTTTCAAAC | AGTCAGCAAG | CCCTGCCCAT | 480 |
| TTTAACTTC  | CTGTTTCTC  | AATCTGACA  | TTCTCTACC  | TCCACCAAAC | CAGCCCATAG | 540 |
| TATGGCTTGC | TTGGATTATA | GCCAGAGTCT | TTCTAACTGG | TCTCTCTCCC | TCCAGTCTTA | 600 |
| AGCTTAAAA  | CGTCTCCTTG | ATT        |            |            |            | 623 |

Seq ID NO: 79 DNA Sequence  
Nucleic Acid Accession #: Eos sequence  
Coding sequence: 315..1416

|             |            |            |             |             |            |      |
|-------------|------------|------------|-------------|-------------|------------|------|
| 1           | 11         | 21         | 31          | 41          | 51         |      |
|             |            |            |             |             |            |      |
| CTTCAGATAG  | ATTATATCTG | GAGTGAAGAA | TCCTGCCACC  | TATGTATCTG  | GCATAGTATT | 60   |
| CTGTGTAGTG  | GGATGAGCAG | AGAACAACAA | CAAAATAATC  | CAGTGAGAAA  | AGCCCGTAAA | 120  |
| TAAACTTTCA  | GACCAGAGAT | CTATTCTCTA | GCTTATTTTA  | AGCTCAACTT  | AAAAGGAAGA | 180  |
| ACTGTTCTCT  | GATTCTTTTC | GCCTTCAATA | CACTTAAATGA | TTTAACTCCA  | CCCTCCTTCA | 240  |
| AAAGRAACAG  | CATTCTCTAC | TTTTATACTG | TCTATATGAT  | TGATTTCAC   | AGCTCATCTG | 300  |
| GCCAGAAGAG  | CTGAGACATC | CGTTCCCTTA | CAAGAAACTC  | TCCCGGGTGG  | GAACAAGATG | 360  |
| GATTATCAAG  | TGTCAAGTCC | AATCTATGAC | ATCAATTATT  | ATACATCGGA  | GCCCTGCCAA | 420  |
| AAAATCAATG  | TGAAGCAAT  | CGCAGCCCGC | CTCTGCGCTC  | CGCTCTACTC  | ACTGGTGTTC | 480  |
| ATCTTTGGTT  | TTGTGGGCAA | CATGCTGGTC | ATCCTCATCC  | TGATAAACTG  | CAAAAGGCTG | 540  |
| AAGAGCATGA  | CTGACATCTA | CCTGCTCAAC | CTGGCCATCT  | CTGACCTGTT  | TTTCTTCTT  | 600  |
| ACTGTCCCCT  | TCTGGGCTCA | CTATGCTGCC | GCCAGTGGG   | ACTTTGAAA   | TACAATGTGT | 660  |
| CAACTCTTGA  | CAGGGCTCTA | TTTTATAGGC | TTCTTCTCTG  | GAATCTTCTT  | CATCATCCTC | 720  |
| CTGACAATGC  | ATAGGTACCT | GGCTGTCTGT | CATGCTGTGT  | TTGCTTTAAA  | AGCCAGGACG | 780  |
| GTCACTTTTG  | GGTGTGTGAC | AAGTGTGATC | ACTTGGGTGG  | TGGCTGTGTT  | TGCGTCTCTC | 840  |
| CCAGGAATCA  | TCTTTACCAG | ATCTCAAAAA | GAAGGTCTTC  | ATTACACCTG  | CAGCTCTCAT | 900  |
| TTTCCATACA  | GTCAGTATCA | ATTCTGGAAG | AATTTCAGAA  | CATTAAAGAT  | AGTCATCTTG | 960  |
| GGGCTGGTCC  | TGCGCTGCT  | TGTCATGGTC | ATCTGCTACT  | CGGGAATCCT  | AAAAACTCTG | 1020 |
| CTTCGGTGTG  | GAAATGAGAA | GAAGAGGCAC | AGGGCTGTGA  | GGCTTATCTT  | CACCATCATG | 1080 |
| ATTGTTTATT  | TTCTCTTCTG | GGCTCCCTAC | AACATTGTCC  | TTCTCTCTCT  | CACCTTCCAG | 1140 |
| GAATTCTTTG  | GCCTGAATAA | TTGCAAGTGC | TCTAACAGGT  | TGGACCAAGC  | TATGCAGGTG | 1200 |
| ACAGAGACTC  | TTGGGATGAC | GCAGTGTGTC | ATCAACCCCA  | TCATCTATGC  | CTTTGTCCGG | 1260 |
| GAGAAGTTCA  | GAAACTACCT | CTTAGTCTTC | TTCCAAAGGC  | ACATTGCCAA  | ACGCTTCTGC | 1320 |
| AAATGCTGTT  | CTATTTTCCA | GCAAGAGGCT | CCCGAGCGAG  | CAAGCTCAGT  | TTACACCCGA | 1380 |
| TCCACTGGGG  | AGCAGGAAAT | ATCTGTGGGC | TTGTGACACG  | GACTCAAGTG  | GGCTGGTGAC | 1440 |
| CCAGTCAGAG  | TTGTGCACAT | GGCTTAGTTT | TCATACACAG  | CCTGGGCTGG  | GGGTGGGGTG | 1500 |
| GGAGAGGTCT  | TTTTTAAAG  | GAAGTTACTG | TTATAGAGGG  | TCTAAGATTCT | ATCCATTTAT | 1560 |
| TTGGCATCTG  | TTTAAAGTAG | ATTAGATCTT | TTAAGCCCAT  | CAATTATAGA  | AAGCCAAATC | 1620 |
| AAAATATGTT  | GATGAAAAAT | AGCAACCTTT | TTATCTCCCC  | TTACATGCA   | TCAAGTTATT | 1680 |
| GACAAACTCT  | CCCTTCACTC | CGAAAGTTCC | TTATGTATAT  | TTAAAAGAAA  | GCCTCAGAGA | 1740 |
| ATTGCTGATT  | CTTGAGTTTA | GTGATCTGAA | CAGAAATACC  | AAAAATTATT  | CAGAAATGTA | 1800 |
| CAACTTTTTA  | CCTAGTACAA | GGCAACATAT | AGGTTGTAAA  | TGTTGTTAAA  | ACAGGTCTTT | 1860 |
| GTCTTGCTAT  | GGGGAGAAAA | GACATGAATA | TGATTAGTAA  | AGAAATGACA  | CTTTCTATGT | 1920 |
| GTGATTTCCC  | CTCCAAGGTA | TGGTTAATAA | GTTTCACTGA  | CTTAGAACCA  | GGCGAGAGAC | 1980 |
| TTGTGGCCTG  | GGAGAGCTGG | GGAAGCTTCT | TAAATGAGAA  | GGAATTTGAG  | TTGGATCATC | 2040 |
| TATTGCTGGC  | AAAGACAGAA | GCCTCACTGC | AAGCACTGCA  | TGGGCAAGCT  | TGGCTGTAGA | 2100 |
| AGGAGACAGA  | GCTGTGTTGG | AAGACATGGG | GAGGAAGGAC  | AAGGCTAGAT  | CATGAAGAAC | 2160 |
| CTTGACGGCA  | TGTCTCCGTC | TAAGTCATGA | GCTGAGCAGG  | GAGATCCTGG  | TTGGTGTGTC | 2220 |
| AGAAAGTTTA  | CTCTGTGGCC | AAAGGAGGGT | CAGGAAGGAT  | GAGCATTTAG  | GGCAAGGAGA | 2280 |
| CCACCAACAG  | CCCTCAGGTC | AGGGTGAGGA | TGGCCTCTGC  | TAAAGCTCAAG | CGGTGAGGAT | 2340 |
| GGGAAGGAGG  | GAGGTATTCT | TAAAGATGGG | AAGGAGGGAG  | GTATTCTGTG  | AGCATATGAG | 2400 |
| GATGCAGAGT  | CAGCAGAACT | GGGTGCGATT | TGGTTTGGAA  | GTGAGGGTCA  | GAGAGGAGTC | 2460 |
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Seq ID NO: 87 DNA Sequence  
Nucleic Acid Accession #: Eos sequence

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Seq ID NO: 88 DNA Sequence  
Nucleic Acid Accession #: Eos sequence

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Seq ID NO: 90 DNA Sequence  
Nucleic Acid Accession #: AB058765.2  
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WO 03/025138

PCT/US02/29560

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| 5  | GTCCAGGGAA | GTCTCTCCC   | CATCAAACT  | GCCGACAAAC | CGTGCCCTAC | AAGGAAGGAA  | 900  |
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|    | AGCCACAGAG | GACAGGAGAG  | AGGGACCTCA | GAGGCCGGAA | TTTCTCCTGG | GAACAGCCCC  | 1020 |
|    | TTGCAAGGCC | TCATCAACTG  | TCTGAAGGAA | ATCCTTGTC  | CTGGGCCCCG | GCACCCCGAG  | 1080 |
|    | ACATCCCAAA | GCTTCTTGCC  | ACCTCTCCCT | AGCCTGGGCA | CGTCCAGGCT | AACCAGAGCA  | 1140 |
|    | GACCTGGGCG | CTGGGAGCCC  | GCCCTGGGCA | GTGAAGACCG | AGGCGGTTC  | AGGGGATTGT  | 1200 |
| 10 | CCCTCCAGG  | GTCTGTACA   | CTGTCTGAAG | GAGCTCCCCG | AGGCCAGGA  | CAGGCATCCC  | 1260 |
|    | AGTCCCTCAG | GAGTGGGGAA  | CCGACGGCTA | CAGGAGAATC | CAGGAGCCTG | GAAAAGGGGT  | 1320 |
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|    | CTGCTCTCTG | TGAAGATGGA  | GAACAGCTGG | GTCCAGAGCC | CCCCAGGACC | TGCATCCTGT  | 1440 |
| 15 | CAGCCTGGCA | GGCAGCCCTC  | CAGTCCCTCA | GCCACTGGAG | ACACCAGAGG | GGTCCCCCAA  | 1500 |
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|    | CACAGATCAC | ACAGTGAAGA  | AGCGACCAGA | GAGCCTGTC  | TGCTCTGGG  | TCTGCAGAGC  | 1740 |
| 20 | TGTGTGAGAG | ATGGCCCCAG  | CAGGCCCTG  | GCCCCCGAG  | GAACCCCCAC | CAGCTTCTCC  | 1800 |
|    | TCATCCAGCA | GCACCGACTG  | GGACCTGGAT | TTTGGGAGTC | CTGTGGGGAA | CCAGGGGCGAG | 1860 |
|    | CATCCTGGAA | TGAAGAGCCC  | ACCAGGAAGC | TCCCCACTGC | AGGGTCTGGA | GAATTGTCTC  | 1920 |
|    | AAGGAGATAC | CTGTGCTGT   | CTGCGGCTC  | GCTGCGCCT  | GCTCCTCAGC | AGCAGACAGG  | 1980 |
|    | GGACCGAGGA | GAGCAGAGCC  | CAGGAACCTG | ACAGCAGACA | AGGAAGGACT | GAGGGCTGAG  | 2040 |
| 25 | GCCTGGAGT  | CAGCCCGTCT  | CGGGCAGGGT | AGGGGAGAA  | CGCCACCCCG | GAGCCTCCAT  | 2100 |
|    | CTGGTCAGCC | CACAGGTGTT  | CACCTCCAGC | TGCGTCCCG  | CCTGCCACCA | CGGGGGGTTT  | 2160 |
|    | AAGAGCCTTG | GGGCCACCA   | GCCAGGAGTG | TGGAGGTGGC | TCCACAGAGG | GTCTGCCCCC  | 2220 |
|    | AAAGCCCTCC | CGCTGCACCTG | CCTGGAGAGC | GCCCTGAGGG | GACTCTTGCC | TGTAAGCCCC  | 2280 |
|    | TTGCGCTTCG | CCTGCGTGGG  | AGGCCCCAGC | CCCAGCCCCA | GCCCCGCTC  | CAGCTCGAGC  | 2340 |
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|    | CAGGAGAGGG | ACCGCTTCC   | CAGCTGTAAG | CCTCTGTCC  | CTCTGTCC   | ATGCTCTGGT  | 2460 |
|    | GGGACCCCTG | CTGCGAGCAG  | TGGCGGCAGC | CCTGGTGAAG | ACCCAGGAG  | AACAGAGCCC  | 2520 |
|    | AGGTAATGCA | GCGCCCTCGG  | TGCAGGTACA | GCTCAGGATC | CCTGCCCGGT | TTCTCAGCTG  | 2580 |
|    | GAGAAAAGGC | CCAGGGTTAG  | TGAAGCATCC | AGAGGCCTGG | AGCTTGGACA | TGGAAGACCC  | 2640 |
| 35 | AGAGTTGCA  | CCAAGACCCA  | TGAGAGGCTG | CTCCCCCAGG | GCCCCGCTGA | GCTGCCAGT   | 2700 |
|    | GAGTCTCCCC | CTCCGAGCT   | GCCCCCTCCG | GAAAGCTGCG | CTCCTGTGTT | GCCAGCCTCC  | 2760 |
|    | TCCTCGCAGC | CGCATGCCCA  | CTGTGGGAAG | CCCTGCAGC  | AGGAGCTGCA | CAGCCTCGGT  | 2820 |
|    | GCTGCCCTTG | CGGAGAAGCT  | GGATCGGCTC | GCCACAGCGC | TGGCAGGCCT | GGCTCAGGAA  | 2880 |
|    | GTGGCCACCA | TGAGGACCCA  | GGTGAATCGG | CTGGGAGGCG | GCCCCCAAGG | CCCTGGGCCA  | 2940 |
| 40 | ATGGGCAAG  | CTTCTGGAT   | GTGGACCTC  | CCACGGGGAC | CTCGTGGGC  | TCATGGCCCT  | 3000 |
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|    | GCTGCGCGGG | CAGTCCGCT   | GCCTCCAGAC | GCTCCCCGG  | CAGAACCTCC | TGGGCTCCAC  | 3180 |
|    | TGCAGCTCTT | CCAGCAGCT   | GCTGTCTCT  | ACACCCAGCT | GCCATGCTGC | GCGCCTGCA   | 3240 |
| 45 | CACCCCTCC  | TCGCACATAC  | CGGGGGCCAC | CAGAGCCCCC | TTCCCCCTTT | AGTGCTGTCT  | 3300 |
|    | GCCTTACCCC | TGACGGGAGC  | CTCTCTCTCT | CGAGCCAGTG | CAGATGCAGA | CGTGCCGACC  | 3360 |
|    | TCAGGAGTGG | CACCCAGACG  | GATCCCAAG  | CGGCCCAAGG | AGCCGAGCAG | CCTGCTGGGA  | 3420 |
|    | GGAGTCGAGA | GGGCCCTCCA  | GGAGAAGCTG | TGGGTGGGG  | AGCACAGGGA | CCCGAGATGG  | 3480 |
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|    | TGCTCAGGAG | GCTCTGTGG   | GGGTGCTTTC | CTCAGCCTCT | GGCCCTCTTG | GCTCAGATTC  | 3720 |
|    | AATCAATGAT | TGCTTCCCTC  | TCCTGTCTTT | CCCACTGGAG | CGGCCCAAGC | TTGTAGGTGG  | 3780 |
| 55 | GTGGTGTGCA | TAGGCCACGT  | GTGCCCCACA | TATGCAGGGG | GTGCCCCACA | CAGCTAGAGC  | 3840 |
|    | GGCCAGGAGA | GCGCCTCTTA  | ACCACAGGCC | GTTCCTGATC | TCAGGAGCCT | TGAAGGGCTG  | 3900 |
|    | GGCTCTTGCC | TTCTTGAGT   | AAATATTGGC | ACAGATTTC  | TTTGAGAGAA | CTCAGCCCCC  | 3960 |
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| 70 | CAAGGAAGGA  | AGGCCCAAGG | GCCCTGGGCG | GGGAGCCCCG | CCCTCCCAAC | CATAGCCCA   | 420  |
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|    | TAAACAGAGC  | AGACCTGGGG | CCTGGGAGCC | CGCCCTGGGC | AGTGAAGACC | GAGGCGGTTT  | 660  |
| 75 | CAGGGGATTG  | TACCCCTCAG | GGTCTGCTAC | ACTGTCTGAA | GGAGCTCCCC | GAGGCCCAGG  | 720  |
|    | ACAGGCATCC  | CAGTCCCTCA | GGAGTGGGGA | ACCGAGCGCT | ACAGGAGAA  | CCAGGAGCCT  | 780  |
|    | GGAAAAGGGG  | TTCTGGAGGG | CCTGGATACC | TCCTGACCCC | TCCTCCCAT  | CCTGATCTTG  | 840  |
|    | GAGCTGGCGG  | TCTGCTCTCT | GTGAAGATGG | AGAACAGCTG | GGTCCAGAGC | CCCCCAGGAC  | 900  |
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| 80 | GGGTCCCCCA  | ACCCAGCTGG | GGCCCTGAGG | CTCAAGCTGC | CAGTGCCTCA | AGCTCACCCG  | 1020 |
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5  
 GGCTGTCTCC CCCCTTCAGA CTGGGGCCTC CCCCAAAGGA CAGGGACTGT GTCTCCCCTG 2580  
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Seq ID NO: 93 DNA Sequence  
 Nucleic Acid Accession #: NM\_002104.1  
 Coding sequence: 41..835

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Seq ID NO: 94 DNA Sequence  
 Nucleic Acid Accession #: NM\_052947.1  
 Coding sequence: 199..4794

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10  
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45

Seq ID NO: 95 DNA Sequence  
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Coding sequence: 527..1108

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80

Seq ID NO: 96 DNA Sequence  
Nucleic Acid Accession #: NM\_002149.2  
Coding sequence: 375..956

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|    | CGGGCGCAGC | GAGGCCGCGG | CTGCTAGTCA | CTCCTCCCGG | CCTCGGCGCG | CTTGTCCCGG 180   |
| 5  | GCAGCGGCC  | GGGCCCGCTG | CAGCCGCGCG | CGGCGCCGAA | CTTGGGCTCG | GGAAGCCGGC 240   |
|    | GGACCGCGTC | CTGCGCGGGA | GCAGGGGCA  | GGTCTAGTGG | CCCAGTCAGG | ACGCGGAAAC 300   |
|    | ACTCCCTGGA | GGTTCTGACC | CACTCCCTCT | CAGCCTCCGC | CTGGTCTCTG | GTGTAGTCGC 360   |
|    | CGCCCGCAGC | CGCCATGGGC | AAACAGAAAC | GCAAGCTGCG | GCCCGAGGTG | CTGCAGGACC 420   |
|    | TGCGGGAGAA | CACGGAGTTC | ACCGACCACG | AGCTGCAGGA | GTGGTACAAG | GGCTTCCTCA 480   |
| 10 | AGGACTGCCC | CACCGGCCAC | CTGACCGTGG | ACGAGTTCAA | GAAGATCTAC | GCCAACTTCT 540   |
|    | TCCCTTACGG | CGACGCTTCC | AAGTTTCGCG | AGCACGTCTT | CCGCACCTTC | GACACCAACG 600   |
|    | GCAGCGGCAC | CATCGACTTC | CGGGAGTTCA | TCATTGCGCT | GAGCGTGACC | TCGCGGGGCA 660   |
|    | AGCTGGAGCA | GAAGCTCAAG | TGGGCTTCA  | GCATGTACGA | CCTGGAACGC | AACGGCTACA 720   |
|    | TCAGCCGCGC | CGAGATGCTG | GAGATCGTGC | AGGCCATCTA | CAAGATGGTG | TCGTCTGTGA 780   |
| 15 | TGAAGATGCC | GGAGCATGAG | TCCACCCCGG | AGAAGCGCAC | AGACAAGATC | TTCAGGCAGA 840   |
|    | TGGACACCAA | CAATGACCGC | AAACTGTCCT | TGGAAGAATT | CATCAGAGGT | GCCAGAGAGC 900   |
|    | ACCCCTCCAT | CGTCCGCTTC | CTGCAGTGGC | ACCCAGCAGC | TGCCAGTCAG | TTCTGAGCGA 960   |
|    | GCGGCCCTCG | GACAGTTGCA | GAGAAACACA | GGCTTGTGCT | GCCGTTTAAG | CTTGTCTTGC 1020  |
|    | AAGAGTGGAT | GCCCCGCAAT | CGTTCTGTCT | CTCCCGGGCC | CGGGGCTTGG | GGCATGCGTT 1080  |
| 20 | GCACCTGGCC | GGCCCGGTGG | CTGCGCTTCC | CTCCTCCACC | TGACCAACGC | GACATTCCTC 1140  |
|    | CCCTCAGCGC | TGGCCGCGTC | CGTCCAGGG  | CAACTCCAGC | GGATGTGGTG | ACATGCGAGG 1200  |
|    | TTCAAGTGTT | CTTGGTTCCA | GCCACCTCCC | GGCTCAGGG  | GAGCTCAGAG | GTCCATGCCG 1260  |
|    | AGGAGACCCG | GCAGGACCTC | CCGAGGCTGC | GCCCCGGCCG | GCCCATGCGT | TTTGTGATCC 1320  |
|    | CAAGTGACTC | TGTGGGAAGG | GTGGGAGCGA | GGGCTCGGGA | GGGTATACAG | GGAGCCCCCTC 1380 |
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|    | TGTGCTCCCT | TTTCTTTTAA | TATATAAATT | ATGTATGGTG | AACTGGAGTG | TATTGTGTAG 1500  |
|    | GTCCCGTATT | TAATGCCCTT | GATGCTCTT  | GAAGCGCAGC | CCCTGTGGCG | CCGCAGCCCC 1560  |
|    | CTGAGCCTGG | CTGTTGTGTG | GTATTTATGC | TCTCTTTGTC | TGCCGTGTTT | TAAGGAAATG 1620  |
|    | CATGTGTGCC | CTGAGCCGTG | ATGATCTCTC | CATCCGTGTT | GTGAGCACAG | GCATTTGTGT 1680  |
| 30 | CTGGTCTGTC | CTCCTGTGTC | ATTGGTCTGG | CATTTCGGGT | ATTAAATGA  | TAAATATAAT 1740  |
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Seq ID NO: 97 DNA Sequence  
Nucleic Acid Accession #: Eos sequence

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|    | AACCTGCTCT | TTAACAATAA  | TTATGAAAGG | TTAAAAAGAG  | TCTATAAAAA | CTTACCTTAT | 120  |
|    | GGTCAAACAT | GAAAAATTGG  | ATAAATATGT | CTACAAGGTT  | TTATTAATAA | TAAGTTTAA  | 180  |
| 40 | ATTAATAACA | CACATAATAA  | AAGGTAAAAA | TTAGCTTATC  | TGGTATAAAA | GTACATACAG | 240  |
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|    | CCATCTGCAG | GTTAAACAAA  | AGCAATTAGC | ATGCTTGTGC  | ACATGGCAGG | CCAGAGACCC | 480  |
| 45 | TGATTGTCCT | CCITCCACTA  | AGGTGGTCCT | CCAGTCGACC  | AGGCATGGGC | TGCATGGTAG | 540  |
|    | CTCTTTTCCA | GGATTCTACA  | GCTGGAGTA  | ATAAGTCAAT  | CCAAGCTCTC | TCTGCTATAT | 600  |
|    | CCTGAAGTCC | CTGCGGGTCA  | GCCCCCGAGG | GCCATCCAGC  | TTCCGCTCTC | CAACACTAAG | 660  |
|    | TTCACTTCTT | GTCTCTCATG  | GCAAGGAGGA | GACTTAGCAT  | TCCTTGAGGA | CCTGAAGGGA | 720  |
|    | TGCAGTGAGC | TTAAGAATTT  | TCAAGAGCTT | ATCAATCAGT  | CAGCCCTTGT | TCATCCCGGA | 780  |
| 50 | GCGGATGTGT | GGTGGTATTG  | TGGTGGACCT | TTATTGGGCA  | CTCTGCGGAA | TAATAGAGT  | 840  |
|    | GGCACTTGTG | CTTTAGCCTA  | TTTGGCTATC | CCTTTCACCC  | TGGCATTTCA | TCAACACAGC | 900  |
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|    | TCCGAAATCA | AATAGCTACA  | GGATTTAAGT | CAATATTTTG  | GTAGATGACA | GTCAATAAAA | 1080 |
| 55 | ATGTAGATTA | GATAAACTGC  | ATCTATTACA | CCCAACAGCA  | ATGAGCTTTT | CATGAGTTGA | 1140 |
|    | AAAAAGAAAA | AACCTCATGC  | GGCCCCAGCC | CTGAGGCTAC  | CTGACCTGAC | AAAACTCTTT | 1200 |
|    | ACACTCTATG | TGTCAGAAAG  | AGAAAAAATG | GCAATTGGAG  | TTTAAACCCA | GACTGTAGGG | 1260 |
|    | CCCTGGCCAA | GGCCAGTGGC  | CTATCTCTCA | AAACAACCTAG | ACGGGGTTTC | CAAAGGCTGG | 1320 |
|    | CCCCCATGTC | CAAGGGCCCT  | GGCAGCAATA | GCCCTGTTAG  | CACAAGAAGC | AGATAAGCTA | 1380 |
| 60 | ACTCTTAGGC | AAAACTTAAA  | CATAAAGTCC | CCCCATGCTG  | TGGTAACTTT | AATAAATACC | 1440 |
|    | AAAGGACATC | ATTAGCTAAT  | GAATGCTAGA | CTGACTGACT  | AGATACCAAA | GCTTGCTCTG | 1500 |
|    | TGAAATCCCT | TGCATAACCG  | TGAAAGTTTG | CAACACCTTA  | AACCCAGCCA | CCTTACTCCT | 1560 |
|    | GGTATCAGAG | AGCCCAAGTT  | AACATAACTG | TGTAGAGTGA  | TTGGACTCAG | TTTATTCTAG | 1620 |
| 65 | TGGGTCCAAC | TCCAAGACCA  | TCCTTAAACA | TCAGTAGACT  | GGGAGCTGTA | CGTGGATGGG | 1680 |
|    | AGCAGCTTCC | CCAAACCCCTG | CAAAAGTATT | CTGAAGAAGA  | CGACAAGCGC | TGCTCCAGTC | 1740 |
|    | ACACCCGGAA | GCTGACTGGT  | CCAATCATGG | CCGAGCATGA  | GGAAACTCAT | CGCGGGACTC | 1800 |
|    | ATTTTCTCTA | AAATTGGAGC  | TGACACAGTA | AGGACTTCAA  | CTGACCTTCC | TCAGACTGAG | 1860 |
|    | GACTGTTCCC | AGGATATACA  | TCAAGTCACT | GAGGTAGGGA  | AAAAAGGTTG | CTACAGTCCT | 1920 |
|    | ATTATTTTAT | AGTTATTATG  | AATGCCTAGG | AACTCCAAAA  | GGAACTTGTT | TGTACAATAA | 1980 |
| 70 | CACTCAGTAC | AAAGTATGTA  | ATCCAGGAAG | TGACCAAGCT  | GAAGCGTGTT | ATGACTCACT | 2040 |
|    | GTAAAGCTCC | CATGATTAA   | GACTGATCCT | TTTCTAAGTG  | ACAGAAGTAG | AGTAATAGCT | 2100 |
|    | AAAAAATAA  | AAAAAAGT    | CGAGC      |             |            | 2125       |      |

Seq ID NO: 98 DNA Sequence  
Nucleic Acid Accession #: NM\_003946.2  
Coding sequence: 98..724

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|    | GGCAGAGGGG | AGAGGACGGA | GGACACCGAG | TTCCCCGTGT | TGGCCTCCAG | GTCTGTGCT  | 60  |
|    | TGCGGAGCCG | TCCGCGCGCT | GGGATCGAGC | CCCCACAATG | GGCAACGCGC | AGGAGCGGCC | 120 |
|    | GTCAAGAGAT | ATCGACCGCG | AGCGGAAACG | CCTGGTCGAG | ACGCTGCGAG | CGGACTCGGG | 180 |
|    | ACTGCTGTTG | GACGCGCTTG | TGGCGCGGGG | CGTGCTCACC | GGGCCAGAGT | ACGAGGCATT | 240 |
|    | GGATGCACTG | CCTGATGCCG | AGCGCAGCGT | GCGCCGCCTA | CTGCTGCTCG | TGCAGGGCAA | 300 |
| 80 | GGGCGAGGCC | GCTGCCAGG  | AGCTGCTACG | CTGTGCCGAG | CGTACCGCGG | GCGCGCGCGA | 360 |

WO 03/025138

PCT/US02/29560

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CAGAGCTTCA GACCCTGACG AGGCCGGGGG CCCTGAGGGC TCCGAGGCGG TGCAATCCGG 540
GACCCCGGAG GAGCCAGAGC CAGAGCTGGA AGCTGAGGCC TCTAAGAGG CTGAACCCGA 600
GCGGAGGCCA GAGCCAGAGC TGGAAACCGA GGCTGAAGCA GAACCAAGC CGGAAGTGG 660
GCCAGAACCG GACCAGAGC CCGAGCCCGA CTTCGAGGAA AGGGAACGAGT CCGAAGATT 720
CTGAAGGCCA GAGCTCTGAC AGGCGGTGCC CCGCCCATGC TGGATAGGAC CTGGGATGCT 780
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AAACTCCGGA GGGTCGGACG GGACCTGGGC TCTCTCCAGC ATTCTGGCTG TTTGCCACG 900
AACTTAGGGT GGTACCTCTT GAGTCCAGG GACCTGGGCA GGCCCAAGCC CACCACGAGC 960
ATCATCCAGT CCTACGCCCT AATCTGCCCT TAGGAGTCCA GGCTGCACCC TGGAGATCCC 1020
AAACCTAGCC CCTAGTGGG ACAAGGACCT GACCCTCCTG CCGCATACA CAACCCATTT 1080
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CAGCCTTGGG AAGTGAGACT AGAAGAGGGG AGCAGAAAGG GACCTTGAGT AGACAAAGGC 1260
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Seq ID NO: 99 DNA Sequence  
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 Coding sequence: 63..1460

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GGGGCTGGGC CGTGCTCTTC GGCTGTTTCC TCACTACTGG CTCTCTCTAC GCCTTCCCCA 180
AGGCCGTGCA GTGCTTCTTC AAGGAGCTCA TACAGGAGTT TGGGATCGGC TACACGACA 240
CAGCCTTGAT CTCTCCATC TGCTGGGACA TGCTCTACGG GACAGGTCCG CTCTGCAGTG 300
TGTGCTGCTT GCGCTTTGGC TGCCGGCCCG TCACTGTTGT GGGGGTCTC TTTGCTGCTC 360
TGGGATGGT GGCTGCTGCC TTTTGGCCGA GCATCATCCA GGTCTACCTC ACCACTGGGG 420
TCATCACGGG GTTGGGTTTG GCACTCAACT TCCAGCCCTC GCTCATCATG CTGAACCGCT 480
ACTTCAGCAA GCGCGGCCCC ATGGCCAAAG GGCTGGCGGC AGCAGGTAGC CCTGTCTTCC 540
TGTGTGCCCT GAGCCCGCTG GGGCAGCTGC TGCAGGACCG CTACGGCTGG CCGGGCGGCT 600
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TGGTGGTCA C GGGCCAGCGG GGCTCGGGGC CGCGCGGACC CTCCCGGCGC CTGCTAGACC 720
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TGGGGTCTTT CGTCCGCCCC GTGTTCTGTG TGAGCTACGC CAAGGACCTG GCGCTGCCCG 840
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GCCTCGTGGT CTCTTCGATC TTCTTTGGCA TCTCTACGG CATGGTGGGG GCCTTGCACT 1080
TCGAGGTGCT CATGGCCATC GTGGGCACCC ACAAGTTCTC CAGTGCCATT GGCCTGGTGC 1140
TGCTGATGGA GGCCTGGGCC GTGCTCGTCG GGGCCCTTTC GGGAGGCAAA CTCTGGATG 1200
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CCCCGGAAC AAGTGTCTGA GTGGCTGGC GGGGCCGCA GGCACAGGGA GGAGGTACAG 1500
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CGGGTGGGA ACCGTGTCAT TCCAGAGTGG ATCTGCGGTG AAGCCAAGCC GCAAGGTTAC 1680
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CTCAAGGACC TGGAAACCCA TGCTTCGAGA CAACGTGACT TTAATGGAG GGTGGGTGG 1800
CGCAGACAG GCTGGCAGGG CAGGTGCTGC GTGGGGCCCT CTCCAGCCCG TCCTACCCCT 1860
GGCTCACATG GGGCCTGTGC CCACCCCTCT TGAGTGTCTT GGGACAGCT CTCTCCACCC 1920
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Seq ID NO: 100 DNA Sequence  
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 Coding sequence: 163..1590

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CTGTTTAAGT ACATAGATGA AAATCAGGAT CGCTACATTA AGAACTCGC AAAATGGGTG 240
GCTATCCAGA GTGTGTCTGC GTGGCCGGAG AAGAGAGGCG AAATCAGGAG GATGATGGAA 300
GTTGCTGCTG CAGATGTAA GCAGTTGGGG GGCTCTGTGG AACTGGTGA TATCGGAAA 360
CAAAAGCTCC CTGATGGCTC GGAGATCCCG CTCCCTCCTA TTCTGCTCGG CAGGCTGGGC 420
TCCGACCCAC AGAAGAAGAC CGTGTGCATT TACGGGCAAC TGGATGTGTA GCGCTGCAGC 480
CTGGAGGAGG GCTGGGACAG CGAGCCCTTC ACCCTGGTGG AGCGAGACGG CAAGCTGTAT 540
GGGAGAGGTT CGACTGATGA TAAGGGCCCG GTGGCCGGCT GGATAAACGC CTTGGAAGCG 600
TATCAGAAAA CAGGCCAGGA GATTCTGTC AACGTCCGAT TCTGCTCGA AGGCATGGAG 660
GAGTCAGGCT CTGAGGGCCT AGACGAGCTG ATTTTGGCCC GGAAGACAC ATTCTTTAAG 720
GATGTGCACT ATGTCTGCAT TTCTGACAAT TACTGGCTGG GAAAGAAGAA GCCCTGCATC 780
ACCTACCGGC TCAGGGCAT TTGCTACTTT TTCTGAGG TGGAGTGCAG CAACAAAGAC 840
CTCCATCTTC GGGTGTACGG GGGCTCGGTG CATGAGGCCA TGACTGATCT CATTTTGCTG 900
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GCCGCGGTCA CGGAAGAGGA GCACAAGCTG TACGACGACA TCGACTTTGA CATAGAGGAG 1020
TTTGCCAAAG ATGTGGGGGC GCAGATCCTC CTGCACAGCC ACAAGAAAGA CATCCTCATG 1080
CACCAGTGGC GGTACCCGTC TCTGTCCCTC CATGGCATCG AAGCGCCTT CTCTGGGTCT 1140
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WO 03/025138

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ACCCCTGGTA AGTTCTCAGA GTGGTCAGGA TGGCTTGACC TGCAGAAGAT ACCCAAGGTC 1860
CAAAAGCACA AGGTCGCGG AAAGTTCTGG TTGTGCGCTG GGCACCAAGG CTCACACCTA 1920
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CCAAGAGTTT GAGCTCGCGG TGAGCTGTGA ATGCACCAAG GCACTCAAGC CTGGGCAATG 2160
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CCTGTAGTTC CAGCTACTCA GGACACTGAC GTAGGAGGGT TGCTTGAGAC TGAGAGTTGG 2280
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Seq ID NO: 101 DNA Sequence  
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Coding sequence: 93..1268

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CAGATGTTAA GCAGTTGGGG GGCTCTGTGG AACTGGTGGG TATCGGAAAA CAAAAGGAGA 300
TTCTCTGTAA CGTCCGATTG TGCCCTCGAAG GCATGGAGGA GTGAGGCTCT GAGGGCCTAG 360
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TGTCCTCCCA TGGCATGGAA GGCGCCTTCT CTGGGTCTGG GGCCAAGACC GTGATCCCA 840
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Seq ID NO: 102 DNA Sequence  
Nucleic Acid Accession #: Eos sequence

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CATCCAGATC TCCTAAACTC TCCTGAGAAC TTAGAAATTA ACTCCTTTCC TCTTCCCTAT 240
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PCT/US02/29560

TAAGTAGCTT GCAATTCAGT TAGGTGTCCA CCAATG

516

Seq ID NO: 103 DNA Sequence  
Nucleic Acid Accession #: NM\_018401.1  
Coding sequence: 65..1309

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| GAATATGGC  | GGGAACCACT | CCCACAAGCC  | CCCCTGTGTT | GACGAGAATG | AGGAAGTCAA  | 120  |
| CTTTGACCAT | TTTCAGATTG | TGCGGGCCAT  | TGGTAAAGGG | AGTTTTGGAA | AGGTATGCAT  | 180  |
| CGTGCAAGG  | CGAGACACTA | AGAAAAATGA  | TGCAATGAAG | TACATGAACA | AGCAGAAGTG  | 240  |
| CATCGAGAGG | GATGAGGTTG | GGAATGTTTT  | CCGGGAGCTG | CAGATCATGC | AAGGGCTGGA  | 300  |
| GCACCCCTTC | CTGGTCAATC | TGTGGTACTC  | CTTCCAGGAT | GAGGAGGACA | TGTT CATGGT | 360  |
| GGTGGACCTG | CTCTGGGGAG | GCGACCTGCG  | CTACCATCTG | CAGCAGAATG | TGCATTTTAC  | 420  |
| AGAGGGGACT | GTGAAACTCT | ACATCTGTGA  | GCTGGCAGTG | GCCCTGGAGT | ATCTTCAGAG  | 480  |
| GTACCAATC  | ATCCACAGAG | ACATCAAGCC  | AGACAATATC | CTGCTGGATG | AACACGGACA  | 540  |
| TGTTCACTT  | ACAGACTTCA | ACATAGCGAC  | GGTAGTGAAA | GGAGCAGAAA | GGGCTTCTCT  | 600  |
| CATGGCTGGC | ACCAAGCCCT | ACATGGCTCC  | AGAAGTATTC | CAGGTGTACA | TGGACAGAGG  | 660  |
| CCCCGGATAC | TGCTACCTCG | TCGACTGGTG  | GTCCCTGGGC | ATCACAGCCT | ATGAGCTGCT  | 720  |
| GCGGGGCTGG | AGGCCGTACG | AAATCCACTC  | GGTCAGGCC  | ATCGATGAAA | TCCTCAACAT  | 780  |
| GTTCAAGGTG | GAGCGTGTCC | ACTACTCTCT  | CACGTGGTGC | AAGGGGATGG | TGGCCCTGCT  | 840  |
| GAGGAAGCTC | CTGACCAAGG | ATCCTGAGAG  | CCGCGTGTCC | AGCCTTTCAT | ACATACAGAG  | 900  |
| CGTGCCCTAC | TTGGCCGACA | TGAACCTGGG  | CCGCGTGTTC | AAGAAGGCAC | TGATGCCCGG  | 960  |
| CTTTGTGCC  | AATAAAGGGA | GGTTGAACTG  | CGATCCACAC | TTTGAGCTTG | AAGAGATGAT  | 1020 |
| TCTAGAACTC | AAGCCACTTC | ACAAAAAGAA  | GAAGCGATTG | GCAAAAGAAC | GATCCAGGGA  | 1080 |
| TGGACAAGAG | GACAGCTGCC | CGCTGAATGG  | ACACCTGCAG | CAGCTGTTGG | AGACTGTCCG  | 1140 |
| GGAGGAATTG | ATCATATTCA | ACAGAGAGAA  | GCTCAGGAGG | CAGCAGGGAC | AGGGCAGCCA  | 1200 |
| GCTCTTGGAC | ACCGACAGCC | GAGGGGGAGG  | CCAGGCCCAA | AGCAAGCTCC | AGGACGGGTG  | 1260 |
| CAACAACAAC | CTCCTCACCC | ACACCTGCAC  | CCGTGGCTGC | AGCAGCTGAG | CCCACACTTG  | 1320 |
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| GTACGCCCC  | CTCTGTGCTT | CCGTTTTCTG  | CATCTGCCAA | AGGGGTAAAA | CACCTCTGCC  | 1560 |
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| CTATGGAAGC | AACGCTGCCA | AATCCTGGAG  | CAAAACCTGA | AGTGTCTTCA | TGTGCATTCT  | 1860 |
| CTGGCAGGCC | ACAGTCTCTG | GCTTGTGAAG  | TGGTGCAGCA | TGCAGACCAG | ACTTGTCCCC  | 1920 |
| AAGGTCTCAG | CGCTGCGGTC | TCACTCCTCC  | CCTCATTTAA | GAAGACTATC | CTTACCTTTT  | 1980 |
| AGTTTCAGCA | GTCTCACCAC | CCACCATATC  | CCCAGTGTCT | GGATGGCACA | CAGGTGTCCA  | 2040 |
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| AGGGTTTTCT | CTCCTGGGAA | GGGIGTAAAA  | TCAGCTTGTC | AGATTCTTCT | TACAGAGAGT  | 2220 |
| ATCCAATCGG | TATTGCTGGA | GCGGCTCCCT  | ATTTATACAA | TAGGAAGCAT | GGGTGCTTAG  | 2280 |
| AAAGTTTATT | TCAGGAGGAA | AATGGGTTCA  | CACAAAAAGC | AAACTACATT | CTGATCTGCT  | 2340 |
| CAGGGAGGAG | CTTGCCCTTG | AACCTGGAAG  | TGTTGGGATG | AGCAGGGAAA | GCTTAGACTT  | 2400 |
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| GCTGTCATG  | TCATCTCTTA | GATTTCTTAA  | AAGACATTTT | AATGATGGT  | TAGGTTTTAT  | 2880 |
| ATTTTTTATT | TTTTAAAAAG | AAATAGTCAG  | TGTTTTCTCT | CTTTCAACCG | AGACTATTTT  | 2940 |
| TGGATTGTGT | GCTCCTGCIC | AGTTGACTTG  | TTTTGCACAC | TTTTCTTTAC | TTCATGTCCC  | 3000 |
| CATCAACAAC | CGTCTGTCTC | CCCACCTCCC  | CCAGGAAATA | AGGGGCTGCT | TCCTCTCCCT  | 3060 |
| ACTGTGACCC | TGGAGGCTCT | TAAGATGATG  | ATGGTTTTTT | TTATTGGGCT | GACTTCACGA  | 3120 |
| ATTAGGGGCA | GGAGCTGGAA | GTCGCCCTAG  | GAACACCAGA | TTTCCTGGTT | CTGTCAAGT   | 3180 |
| TGGCATTTC  | TGTTTGGAA  | AAACTATTTT  | TGGACATTTC | CTTC       |             | 3224 |

Seq ID NO: 104 DNA Sequence  
Nucleic Acid Accession #: NM\_004207.1  
Coding sequence: 63..1460

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| GGGGCTGGGC | CGTGCTCTTC | GGCTGTTTCG | TCATCACTGG | CTTCTCCTAC | GCCTTCCCCA | 180  |
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| TGTGCGTGAA | CCGCTTTGGC | TGCCGGCCCG | TCATGCTTGT | GGGGGTCTC  | TTTGCGTCGC | 360  |
| TGGGATGTGT | GGCTGCGTCC | TTTTGCCGGA | GCATCATCCA | GGTCTACCTC | ACCAGTGGGC | 420  |
| TCATCAGCGG | GTTGGGTTTG | GCACTCAACT | TCCAGCCCTC | GCTCATCATG | CTGAACCGCT | 480  |
| ACTTCAGCAA | GCGGCGCCCC | ATGGCCAAAG | GGCTGGCGGC | AGCAGGTAGC | CCTGTCTTCC | 540  |
| TGTGTGCCCT | GAGCCCGCTG | GGGCAGCTGC | TGCAGGACCG | CTACGGCTGG | CGGGCGGGCT | 600  |
| TCCTCATCTT | GGGCGGCGTG | CTGCTCAACT | GCTGCGTGTG | TGCCGCACTC | ATGAGGCCCC | 660  |
| TGGTGTGTAC | GGCTGCGTCC | GGCTCGGGGC | CGCCGCGACC | CTCCGCGCGC | CTGCTAGACC | 720  |
| TGAGCGTCTT | CCGGGACCGC | GGCTTTGTGC | TTTACGCGGT | GGCGCGCTCG | GTCTATGGTG | 780  |
| TGGGGCTCTT | CGTCCCGCCC | GTGTTCTGTG | TGAGCTACGC | CAAGGACCTG | GGCGTCCCCG | 840  |
| ACACCAAGGC | CGCTTCTCTG | CTACCATCTC | TGGGCTTCAT | TGACATCTTC | GCGCGGCCCG | 900  |
| CCGCGGGCTT | CGTGGCGGGG | CTTGGGAAGG | TGCGGCCCTA | CTCCGCTTAC | CTCTTCAGCT | 960  |
| TCTCATGTGT | CTTCAAGCGC | CTCGCGGACC | TGGCGGGCTC | TACGGCGGGC | GACTACGGCG | 1020 |

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Seq ID NO: 105 DNA Sequence  
 Nucleic Acid Accession #: NM\_006598.1  
 Coding sequence: 5..3256

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Seq ID NO: 106 DNA Sequence  
Nucleic Acid Accession #: NM\_004585  
Coding sequence: 62..556

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Seq ID NO: 107 DNA Sequence  
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Coding sequence: 183..1646

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WO 03/025138

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PCT/US02/29560

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Coding sequence: 137..853

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Seq ID NO: 120 DNA Sequence

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Coding sequence: 639..2546

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Seq ID NO: 121 DNA Sequence

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Coding sequence: 206..397

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Seq ID NO: 123 DNA Sequence  
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Seq ID NO: 124 DNA Sequence  
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CCTTCTCTAG TTTTCTATG GAAGGAAATG ACACCAATA TGTCCGAGA ATGGACTTGA 4740  
TAGCAACAC TGGGGGCACC TTAAGATTTT GCACCTGTAA AGTGCTTAC AGGGTAACTG 4800  
TGCTGAATGC TTTAGATGAG GAAATGATCC CCAAGTGGTG AATGACACGC CTAAGGTGAC 4860  
AGCTAGTTTG AGCCAGTTAG ACTAGTCCCC CGGTCTCCCG ATTCCCACT GAGTGTATT 4920  
TGCACACTGC ACTGTTTICA AATAACGATT TTAGAAATG ACCTCTGTCT TCCCTCTGAT 4980  
TTTTATATGT TTTCTAAAGT TTTCTTTCTG TTTTAAATA AAAAGCTTTT TCCTCTGGA 5040  
ACAGAAGACA GCTGCTGGGT CAGGOCACCC CTAGGAACTC AGTCTGTAC TCTGGGGTGC 5100  
TGCTGAATC CATTAATAAT GGGAGTACTG ATGAATAAAA ACTACATGGT CAACAGTAAA 5160  
AAAAAATAA AAAAAA 5176

Seq ID NO: 127 DNA Sequence  
Nucleic Acid Accession #: NM\_002701.1  
Coding sequence: 102..899

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1 11 21 31 41 51  
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TAGGTTATTT CTAGAAGTTA GGTGGGCAGC TCGGAAGGCA GATGCACTTC TACAGACTAT 120  
TCCTTGGGGC CACACGTAGG TTCTTGAATC CCGAATGGAA AGGGGAGATT GATAACTGGT 180  
GTGTTTATGT TCTTACAGT CTTCTGCCCT TTAATAATCA GTCCAGGAC ATCAAGGCTC 240  
TGCAGAAAGA ACTGAGCAA TTTGCCAAGC TCCTGAAACA GAAGAGGATC ACCCTGGGAT 300  
ATACACAGGC CGATGTGGGG CTCACCCCTG GGGTCTTATT TGGGAAGGTA TTCAGCCAAA 360  
CGACCATCTG CCGCTTTGAG GCTCTGCAGC TTAGCTTCAA GAACATGTGT AAGCTGCGGC 420  
CCTTGCTGCA GAAGTGGGTG GAGGAAGCTG ACAACAATGA AAATCTTCAG GAGATATGCA 480

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AAGCAGAAAC CCTCGTGCAG GCCCGAAAAGA GAAAGCGAAC CAGTATCGAG AACCGAGTGA 540  
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ACATCGCCCA GCAGCTTGGG CTCGAGAAGG ATGTGTCGG AGTGTGGTTC TGTAACCGG 660  
GCCAGGAAGG CAAGCGATCA ACCAGCGACT ATGCACAACG AGAGGATTTT GAGGCTGCTG 720  
GGTCTCCTTT CTGAGGGGGA CCAGTGTCTT TTCTCTGGC CCCAGGGCCC CATTITGGTG 780  
CCCCAGGCTA TGGGAGCCCT CACTTCACTG CACTGTACTC CTCGGTCCCT TTCCCTGAGG 840  
GGGAAGCCTT TCCCTCTGTC TCTGTACCA CTCTGGGCTC TCCCTTGCAT TCAAACTGAG 900  
GTGCTGCTCT GCCCTTCTAG GAATGGGGGA CAGGGGGAGG GGAGGAGCTA GGGAAAGAAA 960  
ACCTGGAGTT TGTGGCAGGG TTTTGGATT AAGTCTTCA TTCACTAAGG AAGGAATTGG 1020  
GAACACAAAG GGTGGGGGCA GGGGAGTTT GGGCAACTGG TTGGAGGGAA GGTGAAGTTC 1080  
AATGATGCTC TTGATTTTAA TCCACATCA TGTATCACIT TTTTCTTAAA TAAAGAAGCT 1140  
TGGGACACAG TAGATAGA 1158

Seq ID NO: 128 DNA Sequence

Nucleic Acid Accession #: Eos sequence

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| | | | |  
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CAGCCCTCC TGCAATGAGT GGAGCTGCAA CCTTTTAGAA CTGATAATCA CAAACCCCTC 180  
AGAACCAAG TGAAATGAAG GAAAATATGT AACATTAGGC ATTGATGGAA GAGGACTAGA 240  
TCCTAGTGTA AGCATCTAA TAAAAGGAGG GGTTCAAAGA TGCTCTCCAG AACCAGTATT 300  
TCAGACTTCC TATGATAAAC TAAATGTGCC AGTACCAGAG ACTCCAGGAA AAACAGAAAA 360  
TTTGTTTTTG CAATTAGCCG AGCATGTAGT CCAGTCTTTA AATGTCAATT CATGTTATGT 420  
TTGTGGAAAA ACTGTAGTAA GAGTTTCCAT AAGAAGAACT TCCATAAGAA GCCCAAGAAAT 480  
TAGTTCCTAC AGACCTGAT CCTGATGAAT TCCCAGCCCA AAAGAACCAC CCTGACAAAT 540  
TTTAGGTCTT AAAAGCTGTA ATTATTAGAC AGTATTGCAT AGCTAGAGAA GGAAAGGAT 600  
TCACTCATCC TATAAGGCGG CTTAGTTGTC TTAGGCAAAA GCTGTATAAT GGTACCACAA 660  
ATACAGTTAC ATGGTGGAGT TCCAATTACA CAGAAAGAGA TCCATTCACT CAATTTCCAA 720  
GGTTGCAGAC TGCTTGGGCC CACCCAGAAT TCCACCGGGA CTGGACGGCC CCCACCAAGT 780  
TATACTGGAT ATGTGGGCAC AGAGCTTATG CTAAGCTGCC TGATCAGTGG ACAGGTAGCT 840  
GTGTAATTGA CACCATTAAA CCATCTTTCT TCTTACTGCC CATAAAAGCA GGGGAACITC 900  
TGGGCTTCCC AGTCTATGCT TCCCGCAAAA AACAAAGCAT AGCCATAGGT GATTGGAAAG 960  
ATGATAAATG GCCCCCTGAA AGAATCATAC AATACTATGG ACCCACCCT TGGGCACAAG 1020  
ATGACTCTTG GGGATATCGG ACCCCATCT ACATGCTCAA CGGAATCATA CGGTGTACAG 1080  
CTGTTTTCGA AATTATTACT AATACAACCG GTCAAGCCTT GACTGTTCTT GCCCAGCAGG 1140  
AGACTCTGAT GAGAAATGCT ATCTATCAAA ATAGACTAGC TCTTGACTAC TTGCTAGCAG 1200  
CTGAAAGAGA AGTTTGTGAA AAATTTAACT TTACTAATTG TTTTCTACAC ACAGGTGATC 1260  
AAGGGCAAGT AGTTAAAAAT ATAGTTAAAG ATATAACAAA ACTGGCAGAT GTACCCATAC 1320  
AAGTGTGGCA CCGACTCAAT CCAGGATCCA TGTTTAAAAA TTAGTTCCCA GCAATTAGGAA 1380  
GATTTAAAAA TCTTATAATA GGAGTTATAA TAGTAATAAA AACCTGCTTA CTGCTCCCTT 1440  
GTTTACTACT TTTACTTCTA CAAATGATAA AAAGCTTCAT TGCTACCTTA GTTCACCAAA 1500  
ATGCTTCAGC ACAAGGTGAC TATATGAATC ACTATCAATC TATTGCACAA AAAGACATAA 1560  
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ATGAGGAAAG AGAGCGACCC TCTCATATTG TTCTATATTG TTTTATACTC AGTACCTGTT 1680  
TTAAGGAAAA AACACAAGG AAGTAAATC AAAGACAGGC AGCCAGCGC CAGGCCAAAA 1740  
ACCAGCCCTG GGCCTGCGCT GCCTAAACCC AGTAGTTAAA AATCAACTCA TAACCTAGAA 1800  
ACTGATGTTA TTCATGATT CCAGACATTG TATAGAAGAA CATTGTGTAA CTCCCTGCC 1860  
TGTTCTGTTT CTCTCTGACT GCCGGTGCAT GCAGCCCTG TCACGTACCG CCTGCTTGCT 1920  
CAATCAATC ACGACCTTT CATGTGAAAT GTTTAGTGTG GTGAGCCCTT AAAAGGGACA 1980  
GAAATCGTC ACTCGGGGAG CTCAGATTTT AAGCGAGTAG TTTGCTGATG CTCCAGCTG 2040  
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Seq ID NO: 129 DNA Sequence

Nucleic Acid Accession #: Eos sequence

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GCCTAAAGT CACAACITTT TTGGAAGTTT TCCTAACCAC GTCAACCCAG ATTAGGCACA 120  
TGCTCTAGG TTAGAGTCTT GTCAACAGAG ATTGATCACA CTTGATTGTG ATTGTTAGAC 180  
AACTGCTCA TTCAATAGAC TGTGAGTTT TGGAGGGCAG AGATCTTGTC TCTGTTGTT 240  
CTCTTTTAAT CCCCAGTGTC TAGCATCTCA GAGACACTTG TTGAATGAAT TCATTACGA 300  
CTGGCTGAAT AATGAGCAAT TCATGAAAAA ACACCTTTATA TTCACAGGTT TTGGGTAAGA 360  
CAGTAGCTCC CTTAAAAAC ACACACACTC TTCTGTTAT GTCAACAGAA TACAGTCTAC 420  
ACTCAGTGCA AAGGGTTTCA AAATCCAGTA GGAAGGACAA ATATTGTCCC TCTTCTGTC 480  
TTGGAGAAGA TATTGTGCAA GTGTGGAGTT CTCCTGGAGA AATATTCTTT TTTTCTCTT 540  
GAGATGGAGT TTTACTCTTG TTGCCAGGC TGGAGTGCAA TGGCAGGATC TTAGCTCACT 600  
GCAACCTCTG CCTCATGGT TGAAGCAATT CAAGACCTGC CTTAGCTCC TGGGTAGCTG 660  
GAATTACAAG CACCCACAC CACATCCAGC TAATTTTTTG TAATTTCACT AGAGATGGG 720  
TTTCACTATA TTGGCCAGGC TGGTCTCGAA CTCTGACTT CAGACATCC ACCCGCTCA 780  
ATCTCCAAA GTGCT 795

Seq ID NO: 130 DNA Sequence

Nucleic Acid Accession #: NM\_005458.1

Coding sequence: 461..3286

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| | | | |  
GCGGCCCCCTG AGCAGCCTCG CCTTCGCTTC CCGGCTTCC TGCGGTCCG CCTCCCCCG 60  
CCGAGCTCCA GGGGCTGCGG CCTAGCAGCT CCGGGCGGGA GAGCGTTCA GAGCGCGAC 120  
GGGGCGGGG GAGGCGGGG CCGTGGGGG CCGCGCGCT GAGAGAGGC GCGCGCGAG 180  
ACGCGGCGCC CCTCTCCGC GTTGTCTCG TTGCTCCCG CCTCCCGCAC TCCGCTCGT 240  
CCCAACCTCT CCGGCGTGA TTGATCGTC ACGGGCGCG CCGCTGCGCG CGCGCGCGC 300  
GCGGCGGTC TGAGCGAGC CGGAACCTTA GCCGAGAGC GAGCGGGGG CCGGCGCGC 360  
GCCATTGCGC GGGCGCGCG GGAAGACCTT GCGCGGGGC GCGGGCGCG CCGAGGCCAT 420

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|    |             |             |            |            |             |             |      |
|----|-------------|-------------|------------|------------|-------------|-------------|------|
|    | GCGGGCCGAG  | TGAGCCGGCG  | CCCGCAGCCC | GCGGCGCGGC | ATGGCTTCCC  | CGCGGAGCTC  | 480  |
|    | CGGGCAGCCC  | GGGCGCGCGC  | CGCGCGCGCC | ACCGCGCGCC | GCGCGCCTGC  | TACTGCTACT  | 540  |
|    | GCTGCTGCCG  | CTGCTGCTGC  | CTCTGGCGCC | CGGGGCTGCG | GGCTGGGCGC  | GGGGCGCCCC  | 600  |
|    | CGGGCGCGCG  | CCCGCAGCCG  | CGCGGCTCTC | CATCATGGGC | CTCATGCGCG  | TCACCAAGGA  | 660  |
| 5  | GGTGCCCAAG  | GGCAGCATCG  | GGCGCGGTGT | GCTCCCGCGC | GTGGAACTGG  | CCATCGAGCA  | 720  |
|    | GATCCGCAAC  | GAGTCACTCC  | TGCGCCCTTA | CTTCCTCGAC | CTGCGGCTCT  | ATGACACGGA  | 780  |
|    | GTGCGACAAC  | GCAAAAGGGT  | TGAAAGCCTT | CTACGATGCA | ATAAAAATACG | GGCCTAARCA  | 840  |
|    | CTTGATGGTG  | TTTGGAGGGG  | TCTGTCCATC | CGTCACATCC | ATCATTGCGAG | AGTCCCTCCA  | 900  |
|    | AGGCTGGAAAT | CTGGTGCAAG  | TTTCTTTTGC | TGCAACCAAG | CCTGTTCTAG  | CCGATAAGAA  | 960  |
| 10 | AAAATACCCCT | TATTTCTTTC  | GGACCGTCCC | ATCAGACAAT | GCGGTGAATC  | CAGCCATTCT  | 1020 |
|    | GAAGTTGCTC  | AAGCACTACC  | AGTGGAAAGC | CGTGGGCAAG | CTGACGCAAG  | ACGTTCCAGG  | 1080 |
|    | GTCTCTGAG   | GTGCGGAATG  | ACCTGACTGG | AGTTCGTGAT | GGCGAGGACA  | TTGAGATTTC  | 1140 |
|    | AGACACCGAG  | AGCTTCTCCA  | ACGATCCCTG | TACCAGTGTC | AAAAAGCTGA  | AGGGGAATGA  | 1200 |
|    | TGTGCGGATC  | ATCCTTGCCG  | AGTTTGACCA | GAATATGGCA | GCAAAAGTGT  | TCTGTTGTGC  | 1260 |
| 15 | ATACGAGGAG  | AACATGTATG  | GTAGTAAATA | TCAGTGGATC | ATTCGGGGCT  | GGTACGAGCC  | 1320 |
|    | TTCTTGGTGG  | GAGCAGGTGC  | ACACGGAAGC | CAACTCATCC | CGCTGCCTCC  | GGAAAGATCT  | 1380 |
|    | GCTGTCTGCC  | ATGGAGGGCT  | ACATTGGCGT | GGATTTCGAG | CCCTGAGCTG  | CCAAGCAGAT  | 1440 |
|    | CAAGACCATC  | TCAGGAAAGA  | CTCCACAGCA | GTATGAGAGA | GAGTACAAAC  | ACAAGCGGTC  | 1500 |
|    | AGGCGTGGGG  | CCCAGCAAGT  | TCCACGGGTA | CGCCTACGAT | GGCATCTGGG  | TCATCGCCAA  | 1560 |
| 20 | GACACTGGAG  | AGGGCCATGG  | AGACACTGCA | TGCCAGCAGC | CGGCACCAGC  | GGATCCAGGA  | 1620 |
|    | CTTCACCATC  | ACGGACCACA  | CGCTGGGCAG | GATCATCTCT | AATGCCATGA  | ACGAGACCAA  | 1680 |
|    | CTTCTCTCGG  | GTACACGGGT  | CAAGTGTATT | CCGGAATGGG | GAGAGAAATG  | GGACGATTAA  | 1740 |
|    | ATTTACTCAA  | TTTCAAGACA  | GCAGGGAGGT | GAAGGTGGGA | GAGTACAAAG  | CTGTGGCCGA  | 1800 |
|    | CACACTGGAG  | ATCATCAATG  | ACACCATCAG | GTTCGAAGGA | TCCGAACCAC  | CAAAAGACAA  | 1860 |
| 25 | GACCATCATC  | CTGAGCAGC   | TGCGGAAGAT | CTCCCTACCT | CTCTACAGCA  | TCCTCTCTGC  | 1920 |
|    | CCTCACATCG  | CTCGGAGTGA  | TGCTGGCCAG | TGCTTTTCTC | TTCTTCAACA  | TCAAGAACCG  | 1980 |
|    | GAATCAGAAG  | CTCATAAAGA  | TGTCGAGTCC | ATACATGAAC | AACCTTATCA  | TCCTTGGAGT  | 2040 |
|    | GATGCTCTCC  | TATGCTTCCA  | TATTTCTCTT | TGGCCTTGAT | GGATCCTTTG  | TCTCTGAAAA  | 2100 |
|    | GACCTTTGAA  | ACACTTTGCA  | CCGTGAGGAC | CTGGATTCTC | ACCGTGGGCT  | ACACGACCGC  | 2160 |
| 30 | TTTTGGGGCC  | ATGTTTGGAA  | AGACCTGGAG | AGTCCAACGG | ATCTTCAAAA  | ATGTGAAAAAT | 2220 |
|    | GAAGAAGAAG  | ATCATCAAGG  | ACCAGAAACT | GCTTGTGATC | GTGGGGGGCA  | TGCTGCTGAT  | 2280 |
|    | CGACCTGTGT  | ATCCTGATCT  | GCTGGCAGGC | TGTGGACCCC | CTGCGAAGGA  | CAGTGGAGAA  | 2340 |
|    | GTACAGCATG  | GAGCCGAGCC  | CAGCAGGAGC | GGATATCTCC | ATCCGCCCTC  | TCCTGGAGCA  | 2400 |
|    | CTGTGAGAA   | ACCCATATGA  | CCATCTGGCT | TGGCATCGTC | TATGCCTACA  | AGGGACTTCT  | 2460 |
| 35 | CATGTTGTTG  | GGTGTCTTCT  | TAGCTTGGGA | GACCCGCAAC | GTACAGCATC  | CCGCACTCAA  | 2520 |
|    | CGACAGCAAG  | TACATCGGGA  | TGAGTGTCTA | CAACGTGGGG | ATCATGTGCA  | TCATCGGGGC  | 2580 |
|    | CGCTGTCTCC  | TTCTTGACCC  | GGGACCAGCC | CAATGTGCGG | TTCTGCATCG  | TGGCTCTGGT  | 2640 |
|    | CATCATCTTC  | TGCAGCACCA  | TCAACCTCTG | CCTGGTATTC | GTGCGGAAGC  | TCATCACCTC  | 2700 |
|    | GAGAACCAAC  | CCGATGTGCA  | CAACGCAGAA | CAGGCGATTG | CAGTTCATCT  | AGAATCAGAA  | 2760 |
| 40 | GAAAGAAGAT  | TCTAAAACGT  | CCACCTCGGT | CACCACTGTG | AACCAAGCCA  | GCACATCCCG  | 2820 |
|    | CCTGGAGGGC  | CTACAGTCAG  | AAAACCATCG | CCTGCGAATG | AAGATCACAG  | AGCTGGATAA  | 2880 |
|    | AGACTTGGAA  | GAGGTCAACCA | TGCAGCTGCA | GGACACACCA | GAAAAGACCA  | CCTACATTAA  | 2940 |
|    | ACAGAACCAAC | TACCAAGAGC  | TCAATGACAT | CCTCAACCTG | GGAAACTTCA  | CTGAGAGCAC  | 3000 |
|    | AGATGGAGGA  | AAGGCCATTT  | TAAAAAATCA | CCTCGATCAA | AATCCCCAGC  | TACAGTGGAA  | 3060 |
| 45 | CACAACAGAG  | CCCTCTCGAA  | CATGCAAAAG | TCCTATAGAA | GATATAAACT  | CTCCAGAAAC  | 3120 |
|    | CATCCAGGGT  | CGGCTGTCCC  | TCCAGCTCCC | CATCCTCCAC | CACGCCCTACC | TCCCATCCAT  | 3180 |
|    | CGGAGCGGTG  | GAGCCGAGCT  | GTGTGAGCCC | CTGCGTCAGC | CCACCCGCCA  | GGCCCGGCCA  | 3240 |
|    | CAGACATGTG  | CACCCCTCCT  | TCCGAGTCAT | GGTCTCGGGC | CTGTAAGGGT  | GGGAGGCCCTG | 3300 |
| 50 | GGCCCGGGGC  | CTCCCCCGTG  | ACAGAACCAC | ACTGGGCAGA | GGGTCTGCTG  | GCAGAAACAC  | 3360 |
|    | TGTCGGCTCT  | GGCTGCGGAG  | AAGCTGGGCA | CCATGGCTGG | CCTCTCAGGA  | CCACTCGGAT  | 3420 |
|    | GGCACTCAGG  | TGGACAGGAC  | GGGGCAGGGG | GAGACTTGGC | ACCTGACCTC  | GAGCCTTATT  | 3480 |
|    | TGTTGAAGTCC | TTATTTCTCT  | ACAAAAGAGA | GGAAACGGAA | TGGGACGTCT  | TCCTTAACAT  | 3540 |
|    | CTGCAAAACA  | GAGGGCGCTG  | GGATATCAAA | CTTGCAAAAA | AAAAAATAAA  | AAAAAATAAA  | 3600 |
| 55 | CAAAAAAACT  | AGACAAGGAG  | AGAGGCACTA | GAACTCCAGC | TGGAAGTCAC  | GGAGTGGCTC  | 3660 |
|    | GAGCAGCCTT  | GGGAAGAGGC  | AAGGAGCTTC | TGAAGAAACT | GCCTCTGCAC  | ACACATCACT  | 3720 |
|    | GGCTGTGACC  | CTCTGAGCTA  | GCCCTTCTCC | ACTCTGGGGG | AGGAGGTGGG  | AAGGGCCACC  | 3780 |
|    | AGGCCCCAG   | CTGCCAGGCC  | AGCTGACCCC | AGCCTTCTGT | GAACAGGGAG  | TCTGCAGGAG  | 3840 |
|    | CGCAGACAGG  | CACAGCCCTG  | GAGCAGGCGG | GCCGAGGCTG | GCGGCACTGG  | AGCAGGCTGA  | 3900 |
| 60 | CTTACATGCT  | CCACATGGGA  | CCTGTGTGAC | CCAATGAGAT | GTTTGTACT   | CTGGTAAATG  | 3960 |
|    | CCACACGTTA  | ACACAATAAC  | ACCCATTCTT | GGGACCGTGG | GGATTTAGGG  | CACGTCAGTG  | 4020 |
|    | CAGACACGCT  | CTGCAGCATT  | CACCGACAGT | CTGTCAATGA | CCCACCAAGT  | TGGCCATGTC  | 4080 |
|    | CTTGTGTTCC  | TATCGGATGC  | TCCAGTAAC  | CAGGGGGACC | ACCCGAGCTA  | ATCATGGAAT  | 4140 |
|    | GTCTGTTCCC  | AGCAAAACAG  | ATAAGAAAG  | ATTGTGCACT | TTAACCTCTC  | TCATCAGGGC  | 4200 |
| 65 | CCAAGGGCTG  | GCTGGGATTT  | TTTTTTTTTT | TTTCCCACTA | ACTTTGTTTC  | TGACCAAAAT  | 4260 |
|    | GAATTGGAGG  | CACCTGCTGA  | AAAGACATCC | CCGTAGACAT | AGGGGAGAGA  | GTTGCTGGCT  | 4320 |
|    | GAGGGCTTCC  | CTTGGCTTCC  | AGAAGGCAGC | CTTCCATCCA | GACAAAGCCG  | TGAGCTCTCC  | 4380 |
|    | CCTTGGGATC  | ACTGGGGTGA  | TCAGTCAGCA | GATTGATTCT | CATTCTAAG   | ATCATTCTCT  | 4440 |
|    | CCTTTAAATT  | GAGCCCTTAA  | GAGCACTGGC | CTGGGAGTCA | GACAGACCTG  | GGTTCAAGTC  | 4500 |
| 70 | CTCAGTCCCC  | TGCCCATCTC  | CTACGTGACT | TTGATCAGGT | CACATAGTGC  | TCTCTGAGCC  | 4560 |
|    | TCAGTTTCCC  | CTCTGTAATC  | TGGGGTTGAA | CTAAACACCC | TGTCCTGCCCT | ACCTCACAA   | 4620 |
|    | GTCACCTGTA  | GGATTGAAAC  | TTGATCTGCT | CCAGGAAAGC | TTTGTACCAA  | ACAGTGAAGC  | 4680 |
|    | CGCCCTGATC  | CGTGGAGTAT  | GAGTATGACT | CTGACCTTCA | GCCCTCCCTA  | CAGCCGGGGG  | 4740 |
|    | TGTGGCCGAG  | AGAAAGCTCC  | AGCACAGCCC | TCTACCCAGA | ACATCCGGGC  | TGGAGGGGAG  | 4800 |
| 75 | CTCCCACTAG  | CTTTTCTGAC  | ATTCTAGAC  | AGGTTCAATC | TTTGCTCAAG  | AAAGGCGCTG  | 4860 |
|    | ATGACAATGT  | CCAGGATGTC  | TGCACAACCT | AGCAGCTGCG | TCACTCCCTA  | AAGAAACCTA  | 4920 |
|    | TTGGCAGCTT  | CAACAGGCAG  | GCAATAATCT | CTTCCAGAA  | CCACTGCAGT  | CAGGAATAAA  | 4980 |
|    | CTGTTTCTTC  | CACCAGGCTT  | TGACAAAAGG | GCCACAGGA  | ATCTTACCAA  | TGCCAACATT  | 5040 |
|    | TCAAAGACCC  | CTATTTTCA   | TAGCATAGCT | TTCTGCTCCC | CTTCCCAAAA  | GAGAGGTTAT  | 5100 |
| 80 | GGAGGTACTG  | TAGCTTTTAG  | GGAAAAAATA | ATGTTAACAC | ATCACAGGTC  | AAGTTGAAGT  | 5160 |
|    | CATTCTCTGT  | TTAGGCACTA  | AAAATCGGTG | TTGTCACTCA | CTGTGTATTA  | CCAGTATTTA  | 5220 |
|    | CTTGTCTTCT  | TGATTTTCA   | AAAACCAAA  | TTAATTTAAA | GGACCAACAT  | AATTTTTCAT  | 5280 |
|    | AGGGAAAGAG  | ACAAATTAAT  | GTACATAATG | TATACACACA | CACAAAAAAA  | AATACCTGTA  | 5340 |
|    | GAAATATTAT  | TCCAGCATAG  | CAGGAAAAAC | AACAAAAGTA | TTGGACTGTC  | GGAGGTGAGC  | 5400 |
|    | CTGTGCGTCT  | GTAACCCCTT  | GTACTCCTG  | AGCGTGGGCT | GTCTTCTAGG  | TTAATCTCAG  | 5460 |

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5 AAGTACATTC TCTGTCTTAC TGATACTGTA GGTTCACCCA TTTTITTTTAA ATTTCTCTCGC 5520  
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 GTGCACAAAA CGCTTTAAAT TAGACTGGAA CTGCCAGAAT CAAATGTAAA TGAGGAATTT 5700  
 CTCTGATCCC TACTGCAATG TATCGATTTT TAATAAATTG TTGCAAATTT GTTTTATGA 5760  
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Seq ID NO: 131 DNA Sequence  
 Nucleic Acid Accession #: NM\_014817  
 Coding sequence: 247..2682

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 15 GGACGGCGCT GCGAAGTCCG AAAGAGGCCA TTTAGCGACT CTGGCCAGGC TAAGGGGAAT 180  
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 GAGGCGATGG AGGCTGCGCG CGCCTTGCGC CTCTGCTCG TGGTGTGCGG CTGCTCGCG 300  
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 CTCTGTGCA CCAACAGGGG GCTCGCGTA GTGCCAAGA CCAGCTCGCT GCGGAGCCCC 420  
 20 CACGACGTGC TCACCTACAG CTTCCGCGGC AACTTCATAA CCAACATCAC GGCCTTCGAC 480  
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 CACCCCAAGA CCTTCGAGAA GCTCTGCGG CTGGAAGAGC TGTACTGGG GAACAACTC 600  
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 25 AACGGGAACG AGATCAGCCG CCTAAGCCGC GGCTCCTTCG AGGGCTTGA GAGTCTAGTC 720  
 AAGCTGCGGC TGGACGGGAA CGCCTGCGG GCGCTGCGCG ACGCGTCTT CGCTCCCTTG 780  
 GGCAACCTGC TCTACCTACA TCTGAGTCC AACCGGATCC GCTTCTGCG CAAGAACCGC 840  
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 CTGCGCCACG CGGCACCTT CGCACCGCTG CGCTCCCTCT CCTCCCTCAT CCTCTCGGCC 960  
 30 AACAGCCTGC AGCACTCGG GCGCGCATC TTCCAGCACC TGCCACGCTCT CGGCTCTGCT 1020  
 TCGCTCAGGT GCGAACGAGT CACGCACTC GCGCTGAGG CTTTCTGGG TTTGGAGGCC 1080  
 CTGCGGAGC TGGCCTGGA GGTAAATCGG CTGAGCCAGC TGCCAATGC GCTGCTGGAG 1140  
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 GGCACCTTCG GCCACCTGGG CCGCTGCGC GAGCTCAGCC TGCGCAACAA CGCGCTCAGC 1260  
 GCCTTATCCG GGGACATCTT CGCGCGCAGC CCAGCCCTTT ATCGGCTGGA TCTAGACGGC 1320  
 35 AACGGCTGGA CTTGCACTG CCGCTGCGA GCGCTGAAGC GCTGGATGG CGACTGGCAC 1380  
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 45 CACGAGGAGC GTGCCGCCA GTCCGACGGT GGGGCCGGGC TGCCCGCGCT GGTGTCCGAC 1980  
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GATCGTTGTT TATGTTCAAA TGAGTAAATG TCCAGACCAC TTAATACTAC AGCTGCTTTT 4500  
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GAACATCACT GAAAATGCCT AATGCCTGGA TCTGTGTTCT ACTTTAGTTT CACTGGGAAG 4860  
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Seq ID NO: 132 DNA Sequence  
Nucleic Acid Accession #: NM\_001792.2  
Coding sequence: 206..2926

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CTTCGCTCGG CCCCTCTCCG CCTCCATGTG CCGGATAGCG GGAGCGCTGC GGACCCCTGCT 240  
GCCGCTGCTG GCGGCCCTGC TTCAGGCGTG TGTAGAGGCT TCTGGTGAAA TCGCATTATG 300  
CAAGACTGGA TTTCTGAAG ATGTTTACAG TGCAGTCTTA TCGAAGGATG TGCATGAAGG 360  
ACAGCCTCTT CTCATGTGA AGTTTAGCAA CTGCAATGGA AAAAGAAAAG TACAATATGA 420  
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GTTTCATTG AGGCGCATG CAGTAGATAT TAATGGAAAT CAAGTGGAGA ACCCCATTGA 960  
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GAATGGGACA GTTCTGTAGG GATCAAGGCC TGGAACATAT GTGATGACCG TAACAGCAAT 1080  
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TACACCAGCC TGGAACGCAG TGTACAGAAT CAGTGGCGGA GATCCTACTG GACGGTTCG 1500  
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TGAAAACCCCT TATTTGCCCC CCAATCCTAA GATCATTGCG CAAGAAGAA GGGTTCATGC 1740  
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GCCTGACACT GTGGAGCCTG ATGCCATCAA GCCTGTGGGA ATCCGACGAA TGGAGTAAAG 2640  
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CAAAAAAGAAA AAAAAAGAAA GGAAGGAAAG GGGTGGCCTG ACCTGGTGG CACTACTAAG 3960  
TGTGTGTTTT TTAAAAAAA AAATGGAAAA AAAAAAGCTT TTAACCTGCA GAGACTTCTG 4020



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ACAAACAGCTT TGCCTCTGTA TTGTGTACCA GAATATAAAT GATACACCTC TGACCCCAGC 4080  
GTTCTGAATA AAATGCTAAT TTTGGAAAAA AAAAAAAAAA AA 4122

Seq ID NO: 133 DNA Sequence  
Nucleic Acid Accession #: NM\_016941.1  
Coding sequence: 8..1864

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10 CATTTTCTCT CCCCAGACAC GGCCCGCTGG GCTCTTCGAG CTGCAGATCC ACTCTTTCGG 120  
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CTTCTTCAGA GTCTGCCTGA AGCCTGGGCT CTCAGAGGAG GCCGCCGAGT CCCCGTGGGC 240  
CCTGGCGCGG GCGCTGAGTG CGCGCGGACC GGTCTACACC GAGCAGCCCG GAGCGCCCGC 300  
15 GCCTGATCTC CCACTGCCCG ACGGGCTCTT GCAGGTGCCC TTCCGGGACG CCTGGCCTGG 360  
CACCTTCTCT TCCATCATCG AACCTGGAG AGAGAGGTTA GGAGACCAGA TTGAGGGGCC 420  
CGCCTGGAGC CTGCTGGCGC GCGTGGCTGG CAGGCGGCGC TTGGCAGCCG GAGGCCCGTG 480  
GGCCCGGGAC ATTTCAGCGG CAGGCGCCTG GGAGCTGCGC TTCTCGTACC GCGCGCGCTG 540  
CGAGCGCACT GCGGTGGGGA CCGGTGCAC GCGCTCTGCG CTGCGCGCA AGGCCCCCTC 600  
CGGTGCGGT CCGGACTGCG GCCCTGCGC ACCGCTCGAG GACGAATGTG AGGCGCGCT 660  
20 GGTGTGCCGA GCAGGCTGCA GCCCTGAGCA TGGCTTCTGT GAACAGCCCG GTGAATGCCG 720  
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25 CACTCGCCCG CTGGGTTCTG ACGGGCTGCG GTGTGAGGTG AGCGGGGTGA CATGTGAGA 960  
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CTGCCACTGC CCACCTGGTT TCCAAGGCTC CAACTGTGAG AAGAGGGTGG ACCGGTGCAG 1080  
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30 GCTGGGCTTC GGGCGGCGCG ACTGCCGCGA GCGCGCGGAC CCGTGGCGCG GCGGCCCTG 1320  
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35 ACTGCTCGTG GCCCGGCGCG TGGCCGCGCG TGCGCTCTTG CTGGTCCAGC TGGCGCGCGG 1560  
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CGCACTCCCG GATGCATCA ACAACCTAAG GACGAGGAG GGTTCGCGGG ATGGTCCGAG 1680  
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CGCGCTGGG CAGAGGAGC ACCTGCTTTT TCCTACCTT TCCTCGATTG TGTCCGTGAA 1860  
40 ATGAATTGGG TAGAGTCTCT GGAAGGTTT AAGCCATT TCAAGTTCTAA CTTACTTTCA 1920

Seq ID NO: 134 DNA Sequence  
Nucleic Acid Accession #: FGENESH prediction  
Coding sequence: 1..411

1 11 21 31 41 51  
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CAGGCCCACT TACCACTGG ATGGGTGAAG TGGCCCTTGC ACTTGAGGAG CTCACTGTCC 180  
50 AAAAGGTTGG AAGGGAAGTA CCCAGCCCTA TTGAATGGGG AAATTGAAGC ACAGATATGT 240  
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Seq ID NO: 135 DNA Sequence  
Nucleic Acid Accession #: NM\_024812.1  
Coding sequence: 184..621

1 11 21 31 41 51  
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65 ACCCGGGAGA CAGAATCCAC CTGGCTCACC TACACCGACT CGGACGCGCC GCCCAGCGCC 300  
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70 AAAGAAGTCA CCATTAATGT AACAGATAGC ATCCAACAGA TGGACAGAAG TCGAAGAATC 600  
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75 ATGTTAATAA ACTGCAAAATG TGCAGTTTCA TTTGCTCTT TGCAACTCCT GTAATAAGGT 900  
CTGGTGTAAA AGTAGTGAGT TAAAGCTACA GGTGAGTTTA TGAACAAGAA AAGTAGGAAT 960  
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80 TCAAGGTACA GGAATAACTCC TTGTTATCTT TGTTTCTCTA GCTTGGTATG AGACAGATCG 1200  
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|    |                                       |             |            |            |             |             |      |
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|    | GTACACTGCC                            | CCAGGACTGT  | CATTTTGGCA | TCTGCAAAGG | AATCACTTTA  | GAAAGCCAGC  | 1620 |
|    | ACCTGGTTGA                            | TGTGTATTCA  | TACTGACATT | AGATTGATGT | GCACCTGCATT | AGAAATGAGG  | 1680 |
|    | TAGCTGACAC                            | AGAAAAGGA   | TGTTTTGATA | GGAATAATTT | TCTAGTATGT  | CTTGAACAT   | 1740 |
| 5  | GTTCATCTGG                            | AAGTATTTTC  | CTCCAAAGTA | ATGTAGCATG | ATTTTTCAG   | GATTGTTAAC  | 1800 |
|    | ATGCCTGGGA                            | TTGGGAAAGA  | TAGGACTAAA | GTGTGCCAA  | ACTATATCAA  | TAAATTCAT   | 1860 |
|    | GTTTAGCAGA                            | AATAGGCAGC  | CTATTGGTGT | TATGTTTATG | TAAACATAGT  | CAGAGAACTG  | 1920 |
|    | ACATGCAGGT                            | CAAAAGTCAG  | ATACGCAACC | TCCCTATCTG | CTAACTCTGT  | TATTCTTCAA  | 1980 |
|    | ACACAAGTGG                            | GTAGTGTCAT  | TTTTCTCTCC | TTCCTTCCAT | TGGCAGATTG  | TATATTTATT  | 2040 |
| 10 | CACAAAACAT                            | TAAATGTCCA  | TCCGTGTCCA | GGTACTATGC | AGATGTTGAG  | GGATTTGGGG  | 2100 |
|    | TCTGGTTAGT                            | CGTGACTATC  | TATCCTGAAT | CTAACAGTGA | CTTCATAACT  | AGGAGACTGA  | 2160 |
|    | ATTAGACCTT                            | TAAGGTATAG  | TGTTGTGTGC | AAATCACTCT | GCAAATGGAAA | CTTTTATATT  | 2220 |
|    | CAGGGTAGGT                            | TTGTGTCITA  | AACTAGGTGT | TCTAATCAAT | GTACAAGACT  | TTACCATACA  | 2280 |
|    | CGCAACTATA                            | GTTTTCTTAA  | ACCTTCATCA | TTTTGTGATT | CTTTGAGAAA  | GGGCTTTTAG  | 2340 |
| 15 | GAACTTTATG                            | TTCTAAAAAA  | TGTTTTTAAC | AATAATAAGA | TAAAAGAAAA  | ACCTGTGATT  | 2400 |
|    | CATATGTCCC                            | CACCTGCCATT | ACTCAGCAGG | AGCCCCCAGC | TGCCAAAGGT  | TGGCAGTGAT  | 2460 |
|    | CCTGCAAGTT                            | CAAGGCTCTT  | TCTCCCTGG  | GGATGTGCTT | TGTGGCTTCT  | CTTTACAGCT  | 2520 |
|    | TTGTTTCTGC                            | ATCAGTTCAC  | TGCTGCATGT | TGTTTGAAT  | TTATCACCTT  | AAGAAAGTGT  | 2580 |
|    | CTCTGTTTFA                            | TATAGAAACA  | CTTTCTCACT | TACAGGGGAG | AAGGAAATGC  | AGGGCACATG  | 2640 |
| 20 | ATCTGGCCCT                            | CCCCAGAAC   | ATCTGGATT  | CACGGAGACA | GCAACAGAAA  | GTAAACCAT   | 2700 |
|    | GTGACTAAAA                            | ATGCATCTGG  | CTACTTTTC  | ATGTATGTAT | GAGACAGAAA  | CTAATCCTTA  | 2760 |
|    | CTATCTTATT                            | AGGATACAC   | TTTTCAATTG | AAAGTTTGTG | TCAATAAAGT  | CATTAATTTT  | 2820 |
|    | AAACAT                                |             |            |            |             |             | 2826 |
| 25 | Seq ID NO: 136 DNA Sequence           |             |            |            |             |             |      |
|    | Nucleic Acid Accession #: XM_040550.1 |             |            |            |             |             |      |
|    | Coding sequence: 82..4158             |             |            |            |             |             |      |
|    | 1                                     | 11          | 21         | 31         | 41          | 51          |      |
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|    | CCCAGATCTC                            | TGGCTGAGAG  | GATGGGGGCA | GATGGGGAAA | CAGTGGTTCT  | GAAGAACATG  | 120  |
|    | CTCATTGGCA                            | TCAACCTGAT  | CCTTCTGGGC | TCCATGATCA | AGCCTTCAGA  | GTGTGAGCTG  | 180  |
|    | GAGGTACACA                            | CAGAAAGGTT  | CCAGAGACAG | TCAGTGGAGG | AGGAGGGAGG  | CATTGCCAAC  | 240  |
|    | TACAACACAT                            | CCAGCAAAGA  | GCAGCCTGTG | GTCITCAACC | ACGTGTACAA  | CATTAAACGTG | 300  |
| 35 | CCCTTGGACA                            | ACCTCTGCTC  | CTCAGGGCTA | GAGGCCTCTG | CTGAGCAGGA  | GGTGAGTGCA  | 360  |
|    | GAAGACGAGA                            | CTCTGGCAGA  | GTACATGGGC | CAGACCTCAG | ACCACGAGAG  | CCAGGTCACC  | 420  |
|    | TTTACACACA                            | GGATCAACTT  | CCCCAAAAG  | GCCTGTCCAT | GTGCCAGTTC  | AGCCCAGGTG  | 480  |
|    | CTGCAGGAGC                            | TGCTGAGCCG  | GATCGAGATG | CTGGAGAGGG | AGGTGTCCGT  | GCTGCGAGAG  | 540  |
|    | CAGTGCACAG                            | CAAACCTGCT  | CCAAGAAAGT | GCTGCCACAG | GACAACTGGA  | CTATATCCCT  | 600  |
| 40 | CACTGCAGTG                            | GCCACGGCAA  | CTTTAGCTTT | GAGTCTCTGT | GCTGCATCTG  | CAACGAAGGC  | 660  |
|    | TGGTTTGGCA                            | AGAATTGCTC  | GGAGCCCTAC | TGCCCGCTGG | GTTGCTCCAG  | CCGGGGGGTG  | 720  |
|    | TGTGTGGATG                            | GCCAGTGAT   | CTGTGACAGC | GAGTACAGCG | GGGATGACTG  | TTCGGAACCT  | 780  |
|    | CGGTGCCCAA                            | CAGACTGCAG  | CTCCCGGGGG | CTCTGCGTGG | ACGGGGAGTG  | TGTCTGTGAA  | 840  |
|    | GAGCCCTACA                            | CTGCGCAGGA  | CTGCAGGGAA | CTGAGGTGCC | CTGGGGAGTG  | TTGGGGGAAG  | 900  |
| 45 | GGGAGATGTG                            | CCAACGGTAC  | CTGTTTATGC | GAGGAGGGCT | ACGTTGGTGA  | GGACTGCGGC  | 960  |
|    | CAGCGGCAGT                            | GTCTGAATGC  | CTGCAGTGGG | CGAGGACAAT | GTGAGGAGGG  | GCTCTGCGTC  | 1020 |
|    | TGTGAAGAGG                            | GCTACCAAGG  | CCCTGACTGC | TCAGCAGTTG | CCCCTCCAGA  | GGACTTGCGA  | 1080 |
|    | GTGGCTGGTA                            | TCAGCGACAG  | GTCCATTGAG | CTGGAATGGG | ACGGGCCGAT  | GGCAGTGACG  | 1140 |
|    | GAATATGTGA                            | TCTCTTACCA  | GCCGACGGCC | CTGGGGGGCC | TCCAGCTCCA  | GCAGCGGGTG  | 1200 |
| 50 | CCTGGAGATT                            | GGAGTGGTGT  | CACCATCAGC | GAGCTGGAGC | CAGGTCTCAC  | CTACAACATC  | 1260 |
|    | AGCGTCTACG                            | CTGTCAATAG  | CAACATCCTC | AGCCTTCCCA | TCACTGCCAA  | GGTGGCCACC  | 1320 |
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|    | CAGTGGGAGC                            | CCTTCTCATT  | TTCCTTCGAT | GGGTGGGAAA | TCAGCTTCAT  | TCCAAGAAGC  | 1440 |
|    | AATGAAGGGG                            | GAGTGATTGC  | TCAGGTCCCC | AGCGATGTTA | CGTCTTTTAA  | CCAGACAGGA  | 1500 |
| 55 | CTAAGCCTG                             | GGGAGGAATA  | CATTGTCAAT | GTGGTGGCTC | TGAAAGAAAC  | GGCCCGCAGC  | 1560 |
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| 60 | GTCAGTGCCG                            | TCCGAGGGAC  | CAACGAGAGC | GATTCTGCCA | CCACTCAGTT  | CACAACAGAG  | 1860 |
|    | ATCGATGCC                             | CCAAGAACTT  | GCGAGTTGGT | TCTCGCACAG | CAACCAGCCT  | TGACCTCGAG  | 1920 |
|    | TGGGATAACA                            | GTGAAGCCGA  | AGTTCAGGAG | TACAAGGTTG | TGTACGCCAC  | CCTGGCGGGT  | 1980 |
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|    | ACAGATATCT                            | TACCTGGCAC  | TGAGTATGGA | GTTGGAATAT | CTGCCGTCAT  | GAACTCACAG  | 2100 |
| 65 | CAAAGCGTGC                            | CAGCCACCAT  | GAATGCCAGG | ACTGAACCTG | ACAGTCCCGG  | AGACCTCATG  | 2160 |
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|    | GGAGAGACCA                            | TCCTTGTGTA  | CGGAGTCAGT | GAGGAATTTT | GGCTTGTGTA  | CCTGCTTCTT  | 3120 |
|    | AGCACCCACT                            | ATACTGCCAC  | CATGTATGCC | ACCAATGGAC | CTCTCACCAG  | TGGCACCATC  | 3180 |
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|    | AGACAAAGTG                            | CCCTGATCTC  | CTGGCAGCCT | CCCAGGGCAG | AGATTGAAAA  | TTATGTCTTG  | 3300 |

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Seq ID NO: 137 DNA Sequence  
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|    | CTGAAGAGCG | TGCTGAGCGC  | CCTGTGGAAAT | CTGTCTGCAC | ACAGCACAGA  | GAACAAGGCG  | 3420 |
| 5  | GCATCTGCGC | AGGTGGATGG  | CGCCCTGGGC  | TTCTTGGTGA | GCACCCCTGAC | CTACAAGTGT  | 3480 |
|    | CAGAGCAACT | CGCTGGCCAT  | CATCGAGAGC  | GGCGGCGGCA | TCCTCCGCAA  | TGTGTCCAGC  | 3540 |
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| 10 | GGCATGCTGC | GTAATCTGGT  | GCACTCCAAG  | CACAAGATGA | TCGCCATGGG  | CAGCGCCGCC  | 3780 |
|    | GGCCTGGCGA | ACCTGTCTGC  | CCATCGGCCG  | GCCAAGCACC | AGGCGGCCGC  | CACCGCCGTG  | 3840 |
|    | TCCCCAGGCA | GCTGCGTGCC  | CAGCCTGTAC  | GTGCGCAAGC | AGCGGGCGCT  | GGAGGCCGAG  | 3900 |
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|    | GCAGAGGCGC | CCACTAAGAA  | GCCGCTGCCG  | CCCCTGCGAC | ACCTGGACGG  | CCTGGCCCAA  | 4020 |
| 15 | GACTATGCTT | CGGATTCCGG  | CTGCTTTGAC  | GACGACGATG | CACCGTCATC  | CCTGGCTGCG  | 4080 |
|    | GCGCGGGCCA | CCGGGGAGCC  | AGCCAGCCCT  | GCCGCGCTGT | CCCTCTTCTT  | GGGCAGCCCC  | 4140 |
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|    | CAGTCTCTGT | CGCCATGCGC  | CGGCCCGGAG  | GGCGGGCGGG | GAGAGGCAAG  | AAGCCGGGCG  | 4440 |
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|    | CTACAGCCCC | CCAAGCACAG  | GAAGGGACGA  | CAGGCGGAGG | GAGAAATGGG  | CAGTGCCCGG  | 6960 |
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|    | GCCAAAGTCC | CGAGCCCGCG  | GCAGCAGCGG  | TGCGGAGGCC | TACACCGGCC  | TGCCAAGACC  | 7260 |
| 70 | TGGGAGCTGG | CGAGCGTGAG  | CCAGCCCCCG  | AGAAGCGCCA | CACCGCCCGC  | CCGCTCGGCC  | 7320 |
|    | AAGACCCCCG | CCTCCAGCTC  | CTCCAGACCC  | TGCGCCGCTT | CCAGGCCCTT  | GCCAGAAAG   | 7380 |
|    | CGCCCCCGCG | TCAACCAAGC  | TGCTGGGGCC  | CTGCCCGGCC | CCGAGCCCTC  | CCCGGTGCCG  | 7440 |
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|    | GAGCCGGGCC | CCAGGGGCGG  | GGCGGGGACC  | GAGGCGGGCC | CGGGGGCGCG  | CGGGGGCGCG  | 7620 |
| 75 | CTGGGCTCGG | TGCGTGTGGC  | CTCAGCCCTC  | TCCAGCGGCA | CGAGATCCTC  | CGACCGCTCG  | 7680 |
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| 80 | GAGCGCCCTG | CCCGGCGCAC  | CACCTCCGAG  | AGCCCGTCCC | GCTGCTGTGT  | GCGCGCGCCC  | 7980 |
|    | GCCGCCCCCG | CGGAGACTGT  | CAAGCGCTAC  | GCGTCCGCTG | GCACATCAG   | CGTGGCCCGC  | 8040 |
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|    | CGGGGCTCCA | CGCCGAGGGA  | CGCCCGGCGC  | GGGCCCCCGC | CGCGCAAGAC  | CAGCGACGCG  | 8280 |

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 15 AATCACTGCA GCCCGCGGTA ATTCGCTAAT GAGGGCTTTG CAGGGATTGT TTTTATTCTC 9180  
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Seq ID NO: 138 DNA Sequence  
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| GGAGCCATCT | GGGATAAGAC | TTTGACCCAT | GACTCCCATA | TCCACAGCCT | GTCCATCTCA | 780 |
| GCCCATCCCA | GTTTATCCTG | TATCATTTGA | GCTGGGATTC | CCACATCCCT | TGAGTTGGAA | 840 |
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80 Seq ID NO: 139 DNA Sequence  
 Nucleic Acid Accession #: BC032726.1  
 Coding sequence: 48..2135

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| 1 | 11 | 21 | 31 | 41 | 51 |
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Nucleic Acid Accession #: NM\_015163.2  
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| 5  | TGCACTGGCG | CGATCTCGCG  | TCACTGCAAC | CTCCGCTCC  | CAGGTTCAAG | CGATTCTCCT | 1320 |
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| 10 | TATGTATGTA | TGTATGTATT  | TATTTATGTA | TTTATTTTGT | AGACGGAGTT | TCGCTCTTGT | 1620 |
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| 15 | ATCATCTCTG | CCTGCTCTCA  | CAATTTGTGT | CAGCGTGGG  | CCCGCAACAT | CCTGGTGCAG | 1920 |
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|    | TGCGTGCAAT | GCAAGATGCC  | CGTGTGCTAC | CAGTGCTTGG | AGGAGGGCAA | CACTCCAGC  | 2580 |
|    | CACGAAGTCA | AGGCTCTGGG  | GGCATGTGG  | AAACTACATA | AGAGCCAGCT | CTCCAGGCG  | 2640 |
|    | CTGAACGGAC | TGTACAGCAG  | GGCCAAAGAA | GCCAAAGAGT | TTCTGGTACA | GCTGCGCAAC | 2700 |
| 30 | ATGGTCCAGC | AGATCCAGGA  | GAACAGTGTG | GAGTTTGAAG | CCTGTCTGGT | GGCCCAATGT | 2760 |
|    | GATGCCCTCA | TCGATGGCCT  | CAACAGAAGA | AAAGCCGAGC | TGCTGGCCCC | CGTCAACAAG | 2820 |
|    | GAGCATGAGC | ACAAGCTGAA  | GGTGGTTCGA | GATCAGATCT | CTCACTGCAC | AGTGAATTTG | 2880 |
|    | CGCCAGACCA | CAGGCTCAT   | GGAGTACTGC | TTGGAGGTGA | TTAAGGAAAA | TGATCCTAGT | 2940 |
|    | GGTTTTTTCG | AGATTTCTGA  | CGCCCTCATA | AGAAGAGTGC | ACCTGACTGA | GGATCAGTGG | 3000 |
| 35 | GGTAAAGGCA | CACCTCACTC  | AAGGATGACC | ACGGACTTTG | ACTTGAGTCT | GGACAACAGC | 3060 |
|    | CCTCTGCTGC | AATCCATCCA  | CCAGCTGGAT | TTCTGTCAAG | TGAAAGCTTC | CTCTCCAGTC | 3120 |
|    | CCAGCAACCC | CTATCCTACA  | GCTGGAGGAA | TGTTGTACCC | ACAACAACAG | CGCTACGTTG | 3180 |
|    | TCTCTGGAAC | AGCCACCTCT  | GTCACCGGTG | CCCCCGGATG | GATACATTCT | GGAGCTGGAT | 3240 |
| 40 | GATGGCAACG | GTGGTCAATT  | CCGGGAGGTG | TATGTGGGGA | AGGAGACAA  | GTGCACTGTG | 3300 |
|    | GATGGTCTTC | ACTTCAACAG  | CACATACAAC | GCTCGGGTCA | AGGCCCTCAA | CAAAACAGGA | 3360 |
|    | GTCAAGCCGT | ACAGCAAGAC  | CCTGGTCTCT | CAAACTGCTG | AGGTGGCCTG | GTTTGTCTTC | 3420 |
|    | GACCCCTGGT | CGGCGCACTC  | GGACATCATC | CTCTCCAATG | ACAACCTGAC | AGTGACCTGT | 3480 |
|    | AGTAGCTATG | ATGACCGGGT  | GGTGCTAGGG | AAGACTGGCT | TCTCCAAGGG | CATCCACTAC | 3540 |
| 45 | TGGGAGCTCA | CGGTAGATCG  | CTATGACAAC | CACCTGATC  | CTGCGCTTGG | TGTGGCTCGC | 3600 |
|    | ATGGAGCTGA | TGAAGATGT   | GATGTTAGGA | AAAGACGACA | AAGCTTGGGC | AATGTATGTG | 3660 |
|    | GACAATAACC | GGAGCTGGTT  | CATGCACAAC | AACCTGCACA | CCAACAGAAC | TGAGGGAGGG | 3720 |
|    | ATCACAAAAG | GGGCCAACAT  | TGGGGTCTCT | CTCGACTTAA | ATAGAAAAAA | CTTGACATTT | 3780 |
| 50 | TTTATCAACG | ATGAACAACA  | AGGTCCCAT  | GCATTGATA  | ACGTGGAGGG | CCTCTTCTTC | 3840 |
|    | CCTGCGGTCA | GCTTGAACAG  | GAACTGTCAG | GTCAAGCTGC | ACACCGGGCT | CCCACTCCCC | 3900 |
|    | GACTTCTACT | CCAGCAGAGC  | ATCAATAGCC | TAAGGATGTG | CCGTGGAGGC | GCCAGCTGCC | 3960 |
|    | TGTTCTTACC | TCCGCTCGG   | AGAGCCACAG | CAAGGAGCTC | AGCCAGCCGT | GCTGGGGTGC | 4020 |
|    | AGAGTTGGCA | AGAGTGGGAG  | AAGGAGGAGA | GAAAAGCTGG | TCCTCTGCAG | TCTTTACACC | 4080 |
|    | CACAGCTCTG | CCCTTTTCCC  | TTTCAACCTC | TCCTCCGCTG | TCATGCCTGC | TTCCGCTTCC | 4140 |
| 55 | ATGTCCAAAC | ATTCTAACCA  | ACAAAGGACC | TAGACAGCCC | ACCAAGTCAC | TTGGTTCCCA | 4200 |
|    | CTCCCAGATT | TGCTTTTTAT  | TTAACTTAAT | TTTTTATGTA | GGTGAGTTAT | ATTTTCTTTC | 4260 |
|    | TTTTCTGATC | AGGTTATTTG  | TGACTTACTG | GACTGGCACC | GCCAGGAGAA | AATTCTCTCT | 4320 |
|    | CTAACTTTTT | TTCTTAAGCT  | TTCTGTCAAA | CAATGAGGTT | GTAGGGGGAG | GTAGGGGAAG | 4380 |
|    | ATGAGCTGAA | TTGTAGCAT   | ACAGCTTACC | TGCTAGAATG | TTCTTACCCT | CTTACCTCTC | 4440 |
|    | CTGTAGCGTT | AGCTTCTCAG  | AGCTAAGCTT | TGGGAGAATG | AATCTATCAC | TGAGAAGTTT | 4500 |
| 60 | TACTACTCAT | TGAAGCACAA  | AAATATCCGC | TACACAGGTT | CACATCAGGG | TAGGATCGTT | 4560 |
|    | AGGATGGCTC | TATAATTAGG  | ATAGGCCAGA | ACCCTGGCCA | CTGTATAAAA | TTGAAAAGTC | 4620 |
|    | TCTAAGACAC | AGGCAAAACCA | GGGGACTTAA | TGATTTGGTT | CGTTTATTTA | ATAAAAGCTT | 4680 |
|    | TTAATTGAGA | ACCTACTATT  | GACCAGGCAC | TGTTCAAGAC | ACTAGAACAT | TATGTTCTAG | 4740 |
|    | ACACTGTGGG | GACACAGTGG  | TGAACAGACA | GGCATGCTCT | CTGCCCTTCG | GAGCTTATAT | 4800 |
| 65 | TCCAGTAGGA | GAAAAAGCAA  | AAATAAAATA | ATTATAAATG | GTCAATATGA | CTAGAAAGGA | 4860 |
|    | AATGGGCAAG | GGTCAAAGAG  | ACTCATGGGC | AAGATCTTTC | AGGCTTCCTA | GAATGATGCT | 4920 |
|    | AAAAATCCAC | ACATTCTGGC  | CATAGCACCA | GAAATGTACC | AACTCAATGC | CTTTTCAGCT | 4980 |
|    | GCATTATTTA | ATTATGGTAC  | CTGCTGCCAC | TCATCACAGA | GCCTTCTTGG | GTAGAAATGA | 5040 |
|    | TGTCAGCAAT | CTTATTTGCT  | GATGCTGCTA | TGATACCAGG | CCTTAAAAAT | TGACAGTTGA | 5100 |
| 70 | AAAAAAAAG  | AGTGACCAGA  | GGGCAAGGA  | CCCATTTCTA | GTAATGGGAG | ATCTTGAGTT | 5160 |
|    | GCAGTCCACA | GCATTACAT   | TCTCAGGATA | AACATGCTTG | TCTCCATATA | TACTATCTGT | 5220 |
|    | GCCTGTTATG | AATGAAAAAT  | CCATCCACTC | TGCTGCCATT | CACAGCCTAA | TCTTCTGGAG | 5280 |
|    | TAGTCCAAAC | AATGTTTGGG  | AAAACATGGG | ACTGTATGTC | ATTACTATGA | CTGATAGCAG | 5340 |
|    | AATAAATATG | CATCTTACTT  | CTATATAGAG | ATAGACTTAC | ATAGGTTACC | CTTGAAATTC | 5400 |
| 75 | ATTAGTTTGT | CATAAAGTTT  | TAGGAAAAGT | AGGACCCGGA | AAGAAGTTCT | AATTAGTTGT | 5460 |
|    | CTAAATATTT | TTAGTGAGCG  | CAAGAAATTC | ACCATGAAAA | AACAAGAATA | ACAAATAGAA | 5520 |
|    | GGGAAGAGAT | AGGATGGGAA  | AGCTAACAAA | TTAAAGTTTT | GGCAAAAAGG | AATATATGTA | 5580 |
|    | AATAGCTAAT | TATTTTACTT  | TGTGCTTACT | TTATTTAGAT | TATTTCTATC | AGTTACAATC | 5640 |
|    | TTTTTCTAGT | TAAGTGTAAC  | TAATTTATGG | AATGGGTGCT | ATCCTGTTTA | TGTGTGCTTT | 5700 |
| 80 | GGTTTTCTCT | GCTTACAGAA  | AAACTGTTGC | AGGGCAACAC | TAGTTTGATA | TTTGATTTC  | 5760 |
|    | TCTCCAATGA | GACTCAATGG  | CTGGGCCGTG | GTAGACTCAT | AGTTCTCTCT | GTTCTTTATT | 5820 |
|    | AAATTCATCC | TGCTAATTAG  | ATTTCTAGTG | ACTTGTAAAC | TGTAGTTTAC | ACTGAATTGC | 5880 |
|    | AATTACAGAT | GCATACAACT  | ACTATACTAG | AAAAAATTTG | CATTTCTGAT | GTGCCAATAA | 5940 |
|    | ATGATTTTTA | TGAGAGAAAA  | AAAAAAAATA | AAAAAAAATA |            |            | 5978 |

WO 03/025138

PCT/US02/29560

Seq ID NO: 141 DNA Sequence  
Nucleic Acid Accession #: NM\_032636.2  
Coding sequence: 102..1103

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|----|------------|-------------|------------|------------|------------|-------------|------|
|    | 1          | 11          | 21         | 31         | 41         | 51          |      |
| 5  |            |             |            |            |            |             |      |
|    | GGGAGAAAGC | CTGTTGCCGTG | GAAGATAAGG | CGGCGCGGGA | AGTGGACACA | GGGTGGGCTG  | 60   |
|    | GAGCTCAGAT | CTAAGCTGGAC | TCTCGCTCCT | GCTGGCTGGA | CATGGAGGAT | TTGGAGGAAG  | 120  |
|    | ATGTAAGSTT | TATTGTGGAT  | GAGACCTTGG | ACTTTGGGGG | GCTGTCAACA | TCTGACAGCC  | 180  |
|    | GTGAGGACCA | AGACATAACA  | GTGTTGCTGA | CTCCAGAGAA | ACCACTTCGA | CGGGGSCCTCT | 240  |
| 10 |            |             |            |            |            |             |      |
|    | CCCACCGAAG | TGACCCAAAT  | GCAGTGGCAC | CTGCCCCCA  | GGGTGTGAGG | CTCAGCCTAG  | 300  |
|    | GCCCCCTCAG | TCCAGAGAAG  | CTGAGGAGGA | TCCTCGATGA | GGCCAACCGG | CTGGCCGCTC  | 360  |
|    | AGCTGGAGCA | GTGTGCCCTG  | CAGGATCGGG | AGAGCGCAGG | CGAGGGCCTG | GGGCTCGCC   | 420  |
|    | GAGTGAAGCC | CAGTCTCCG   | CGGAGACCT  | TTGTGCTGAA | GGATAGTCT  | GTCCGAGACC  | 480  |
|    | TGCTGCCAC  | TGTGAATCT   | TTGACGCGGA | GCACCCCTC  | CCCAAGCAGC | CTGACGCCTC  | 540  |
| 15 |            |             |            |            |            |             |      |
|    | GACTCCGGAG | TAATGATAG   | AAGGGGTGAG | TCAGGGCTCT | CCGGGTCTCA | TCTGGAAAGA  | 600  |
|    | GGCCCTCCAA | CATGAAGAG   | GAGTCAACCA | CTTGCAATCT | GTTCCCTGCA | TCCAAAAGCC  | 660  |
|    | CAGCATCTTC | TCTCTTACC   | CGATCGACTC | CCCCAGTCCG | GGGGAGAGCC | GGGCCCAAGT  | 720  |
|    | GGAGAGCAGC | AGCCAGCCCA  | CCCACCCCA  | TCAGATCCGT | CCTGGCCCCA | CAGCCTTCTA  | 780  |
|    | CCAGCAACTC | TCAAGCCTG   | CCCCGGCCGC | AGGGAGCAGC | TGCTAAATCT | TCCAGTCAAC  | 840  |
| 20 |            |             |            |            |            |             |      |
|    | TGCCCAATCC | CTCGCCATC   | CCAGGCCCTG | CCAGCCGAAT | GCACTCACC  | AGCCGGAGTG  | 900  |
|    | TGCCACCTGG | CAGAGGTGCC  | CTACCTCCGG | ATTCTCTGTC | AACTCGAAAA | GGGCTTCCAA  | 960  |
|    | GACCAAGCAC | TGCAGGACAC  | AGAGTGGCGG | AAAGTGGACA | CAAGTTCTCT | GTTCCTCCAGC | 1020 |
|    | GACTAAATCT | TCTGTCTATG  | GGTGCCACTC | GCAGCAATCT | GCAGCCCCC  | AGGAAAGTGG  | 1080 |
|    | CAGTCCCAGG | ACCTACCAGG  | TAAAGAGATC | AGGACAGCAA | GCAAGACTTC | AGTAGCAAA   | 1140 |
| 25 |            |             |            |            |            |             |      |
|    | CACTACAGTC | AGTACCTGGA  | CTCGCCTCTA | CCAGCAGAC  | CCTGACTCCA | GCAGATTCTG  | 1200 |
|    | GCCCAGGGAC | AGGAGGAAGA  | GATGCCACCA | GGGCTGGTCT | CCCAGGAGTA | GAGACCAATG  | 1260 |
|    | GAAATGGGGT | GGATTAGGAT  | TGAGCTGGAG | AAGACTTAAA | CTCTCTGGGT | TGAAAGAAGA  | 1320 |
|    | TTAGGGGAAA | AAGGTCACC   | TTCCAGCAGT | GAAATGAACA | AATAGAAGAT | GAGAAGTACA  | 1380 |
|    | GGCAAGTGGT | TTGTCTTTAT  | CCACCCCAAC | TGTTGTGGTC | AGCCCCAGAG | AATTTTATCT  | 1440 |
| 30 |            |             |            |            |            |             |      |
|    | TCTTCTTGG  | CATTGGTTCA  | CTGGACATTT | CCACGTGAGC | GGCCTCCGTA | GCTAACCTCC  | 1500 |
|    | CTGCCCTCTG | AGGAGCCATC  | TTCTGAATC  | GCATTCTCTA | CTGGACTCTG | GCCTGCTTGG  | 1560 |
|    | AGAGGTGCGA | GCAGGCACCT  | GGTCTTCAGA | AATTGTTTCC | TGTGAATTCT | GTGACTCCTA  | 1620 |
|    | ATAGGCCAGT | TTGTGATAAG  | CTTACTCTAT | GAGTCTTCAT | TTTCTAAAA  | TAAAGTGAAT  | 1680 |
| 35 |            |             |            |            |            |             |      |
|    | GTATTTTAA  | AAAAAAAAA   | AAAAA      |            |            |             | 1707 |

Seq ID NO: GAD8 DNA Sequence  
Nucleic Acid Accession #: NM\_022123.1  
Coding sequence: 76..2781

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|----|------------|------------|------------|------------|-------------|-------------|------|
|    | 1          | 11         | 21         | 31         | 41          | 51          |      |
| 40 |            |            |            |            |             |             |      |
|    | CCACGCTGCC | GACGCCCCCC | ACCCGGGAGG | GGGGAGAGAG | GCAAAAAGTA  | AGAGAGGAAA  | 60   |
|    | AAAAATAGCA | GGAGATGGC  | GCCCAACAAG | CCCAGCTTTC | AGCAGGATCC  | TTCCAGGCGA  | 120  |
|    | GAAAGTTTAC | AAGCATTGAG | AAAGGAGAAA | TCCGAGATG  | CTGCTCGCTC  | CCGCCGGGGA  | 180  |
|    | AAAGAAAAC  | TTGAGTTCTA | TGAATTGGCC | AAGTTGTTGC | CTCTTCTGTC  | AGCCATTACC  | 240  |
| 45 |            |            |            |            |             |             |      |
|    | AGCCAGCTCG | ACAAAGCATC | CATCATTGCA | CTTACAATTA | GCTATCTGAA  | AATGAGGGAC  | 300  |
|    | TTTGCTTAAC | AGGGGGACCC | TCCGTGGAAC | TTGCGAATGG | AAGGCCCTCC  | ACCTAACACA  | 360  |
|    | TCAGTAAAG  | GTGCACAGCG | AAGGAGAAGC | CCCAGTGCAC | TAGCCATTGA  | AGTATTGAA   | 420  |
|    | GCACATTTGG | GAAGCCACAT | TTTGCACTCC | CTGGATGGCT | TTGATTTTGC  | ACTAAATCAG  | 480  |
| 50 |            |            |            |            |             |             |      |
|    | GAAGGAAAA  | TTTTGTACAT | TTCCGAAACA | GTCTCCATCT | ACCTAGGCCCT | CTCACAAGTG  | 540  |
|    | GAGCTCAGAG | GCAGCAGTGT | CTTTGACTAT | GTCCACCCCG | GAGATCAGCT  | GGAGATGGCT  | 600  |
|    | GAGCAGCTGG | GCATGAAGCT | CCCCCTGGG  | CGGGGTCTCC | TGTACAGGGG  | CAGTCTGAG   | 660  |
|    | GACGAGGCCA | GCTCAGCATC | TTCTCTCTCT | CAGTCGGAGA | CCCCCGAGCC  | AGTGGAGTCA  | 720  |
|    | ACCAGCCCCA | GCTCGTAAC  | CACTGACAAC | ACTCTTGAGC | GTTCTTTTT   | CATCCGAATG  | 780  |
| 55 |            |            |            |            |             |             |      |
|    | AAATCTACTC | TGACCAAACG | CGGTGTGCAC | ATCAAATCAT | CAGGATATAA  | GCTGATTAC   | 840  |
|    | ATAACAGGCC | GGCTACGCC  | GAGAGTGTG  | CTGTCCACG  | GGAGGACCGT  | CCCCAGCCAA  | 900  |
|    | ATCATGGTTC | TGTTGGTTGT | TGCGCATGCC | TTGCCCTCCC | CTACGATCAA  | TGAAGTCAGA  | 960  |
|    | ATTGACTGCC | ATATGTTCTG | CATCGAGTA  | AATATGGACC | TCAATATCAT  | TTACTGTGAA  | 1020 |
|    | AATAGGATTA | GTGATTATAT | GGATCTGACC | CCTGTAGATA | TGTAAGGAA   | GAGATGCTAT  | 1080 |
|    | CACCTCATCC | ATGCTGAAGA | CGTGGAGGGC | ATCAGGCACA | GTCACCTGGA  | CTTGCTGAAT  | 1140 |
| 60 |            |            |            |            |             |             |      |
|    | AAGGGTCAGT | GTGTGACAAA | GTAATATCGC | TGGATGCAGA | AGAACGGAGG  | ATATATTTGG  | 1200 |
|    | ATACAGTCCA | GTGCCACCAT | AGCTATTAAT | GCCAAGAATG | CAAATGAAAA  | GAATATCATC  | 1260 |
|    | TGGGTGAATT | ACCTTCTTAG | CAATCCTGAG | TACAAGGACA | CACCCATGGA  | CATCGCACAG  | 1320 |
|    | CTCCCCCATC | TGCCGGAGAA | AACTTCCGAA | TCTTCGGAGA | CATCCGACTC  | TGAGTCAGAC  | 1380 |
| 65 |            |            |            |            |             |             |      |
|    | TCTAAAGACA | CCTCAGTAT  | TACAGAGGAC | AACGAGAACT | CCAAGTCCGA  | CGAGAAGGGG  | 1440 |
|    | AACCACTCCG | AGAAGAGCGA | AGACCCGGAG | CCCGACCGGA | AGAAGTCGGG  | CAACCGGTGT  | 1500 |
|    | GACAAGGACA | TGAACTGCAA | CGACGACGGC | CACAGCTCCA | GTAACCCGGA  | CAGCCGCGAC  | 1560 |
|    | AGCGAGGACA | GCTTCGAGCA | CTCGGACTTT | GAGAACCCCA | AGGCGGGCGA  | GGACGGCTTC  | 1620 |
|    | GGTGCTCTGG | GCGCGATGCA | GATCAAGGTG | GAGCGCTACG | TGGAGAGCGA  | GTCCGACCTG  | 1680 |
|    | CGGCTGCAGA | ACTGCGAGTC | ACTCACGTCC | GACAGCGCCA | AGGACTCGGA  | CAGCGCAGGC  | 1740 |
| 70 |            |            |            |            |             |             |      |
|    | GAGGCGGGCG | GCGAGGCCCT | CAGCAAGCAC | CAGAAGCGCA | AGAAAAGGGC  | GAAAACGGCAA | 1800 |
|    | AAGGGCGGCA | GCGCCAGCCG | CGGCGGCTG  | TCCAGCGGCT | CGAGCCACAG  | CGGCTGGAC   | 1860 |
|    | GCGGGCTCGG | TGGAGGCCCT | GCGGCTGCTG | TCTTCCCCCA | ACAGTGCCCT  | GGTGTCTAAG  | 1920 |
|    | ATCAAGACCG | AGATCTCAGA | ACCCATCAAT | TTGCACAATG | ACAGCAGCAT  | CTGGAACCTAC | 1980 |
|    | CCGCCCAACC | GGGAGATCTC | CAGGAACGAG | TCCCCCTACA | GCATGACCAA  | CCCCCCCAGC  | 2040 |
| 75 |            |            |            |            |             |             |      |
|    | TCTGAGCACT | TCCGCTCCCC | GCAGGCGCGC | GGCGGTGGGG | GTGGCGGTGG  | CGGGGGGCTG  | 2100 |
|    | CAGGTGGCCA | TTCCCGACTC | GGTCTCACC  | CCGCCCGGCG | CCGACGGCGC  | GGCCGCCCTG  | 2160 |
|    | AAGACTCAGT | TGCGGCGCTC | GGCCACCGCG | GCCCTGGCCC | CCGTGCGCTC  | CGACCCGCTG  | 2220 |
|    | TCACCCCGCG | TCTCGGGCTC | CCCGCGGCGC | AAGCAACCCG | GGAACGGCGG  | CGGGGGCGGG  | 2280 |
|    | GGCGGGGGCG | GCGGCGGCGG | GGGCGGCGGC | CCGAGCGGCT | CCAATCTCTT  | GCTGTACACT  | 2340 |
| 80 |            |            |            |            |             |             |      |
|    | GGGGACCTGG | AGGCGCTGCA | GAGGTGTCAG | GCGGGCAACG | TCTGTCTCCC  | GCTGGTGCAC  | 2400 |
|    | AGGGTGACCG | GGACCTTGCG | CGCCACCAAG | ACGGCGCGCG | AGAGGGTCTA  | CACCAAGGGC  | 2460 |
|    | ACCATCGCTG | ACGCGCCCGC | CGAGGTGACC | CTGGCCATCG | AGAGCAACCT  | GCTGCCCAAC  | 2520 |
|    | GCGCACGCTG | TTAATCTCGT | GGACGTTAAC | AGCCCCGGCT | TTGGCTCTGA  | CCCCAAGAGC  | 2580 |
|    | CCCATGGAGA | TGCTCTACCA | CCAGGTGCAC | CGGCTCAACA | TGTCAGGACC  | GTTCGGCGGC  | 2640 |



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PCT/US02/29560

5 GCAGTGAGCG CAGCTAGCCT GACGCAGATG CCCGCCGGCA ACGTGTTTAC CACGCCCGAG 2700  
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 CTGGAGCGCA AGGAGGACTG AGGCGCGGCC CGTCCTGGGC CCGGCCAGGC CCCGCTTGGA 2820  
 GGAGGCAATCG TCGGCATTCT CGTTTAGACC TTTAATTCTA GCACCTTGAA TTCGAGCAGG 2880  
 TCAGGCTCTT CTCTCGCCAC GACGCTCCCC ATTCCACCCC CTCTTTCTTT CACCTGACTT 2940  
 ATTCTTTTGT GTAAAGATAT GTTTATTTTT TGCCTTCAGA GGGTCAGACG ACCAGTTGCC 3000  
 TGCCGTTTTG TCTTCTTCTA AGGTGTGTGT TGGGTTGTTT TGCTTTCTTT TGCATCTTTA 3060  
 TTAAGATGTC TTTATGTGT ATATGCCTCT GCCATAGAAT ACTCAGTCTT GTGGTCAAGA 3120  
 GAGTTCTCAA GTGACAACCA TTGGGGTTTC TTCATAAAGA TCTTGATATG ATCAAGATGG 3180  
 10 AAAGAGACAA GCATAACAA TGTGCCCTGT TTGACTAAGT CAAATGAAAT AGGGTGGTTT 3240  
 TTGTTTCTGT TCTTAATTCC TTTAAAAAAT AGGGGGAAAT GTATTTTAGA ATTTTATGCA 3300  
 GAATTTAATT CTCTTTTAC GGTAAAGATT TTAAGATTTT CTTACTTGCA CATAAAAAATA 3360  
 ATTTGGGTTC TTAACCTTAA TTTCTGGCCT GTGACTAGAA TGTTTAAAAA AAAAAAAAC 3420  
 CCTCGTGC 3428

Seq ID NO: 142 DNA Sequence  
 Nucleic Acid Accession #: XM\_166946.2  
 Coding sequence: 1..1641

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 ATGGGCTCTG ACTCTCGGCT TCCTGAGATG GAGGAGAAAG GGTCTGGGGA CAAAGCTGGC 60  
 TGGTCCGAGG CTCTTCTGSC TGAGGTGAAG AACCAAGGCT TGAACCTATG TGAGTGGATG 120  
 CTGGTTTTGA AGGCAGAGCT GGTGGAATGG TACACCTCAG TGATTGTAGG GCAACAGGGG 180  
 25 CATCGATTAA AAATGGACCT TCTTAAGGAG AGGCACCACC GCAAGTACCT GCAGAAGCCT 240  
 ATCAAGCCGT GCAGCGGCCT CATGGGCCCT AACTGGAGTT TGAGACCAGC CATCTCTTCC 300  
 TCACCCCTTG CGAGGATCA AGAGAAACAC CACGGGGCAA AGGGAAACGA AGCAGTTAAG 360  
 CGGTTGAGCT TCAGAAAGCT CAGAAACTA AAGCGACCCC CCACTCTCTC AAGCCAGGCT 420  
 AAGAGCTGSC GGGGGCGCAC GGGCAGCGCT GCGGACAGCC CGGGAGCCGC GGCATGGCG 480  
 GTGCAAGCGG CGCTCTCAG CACGCACCTT TCGTGCCCT TCGGCTTCGG GGGCTCCCCG 540  
 30 GACGGGCTAG GGGGCGCCTT CGGAGCCCTG GACAAGGGCT GCTGTTTCGA GGACGATGAG 600  
 ACCGGGGCTC CGCGGGGTGC GCTGCTGTCG GGAGCCGAAG GAGGGGACGT GCGCGAGGCC 660  
 ACCCGCGATC TACTCAGCTT CATTGACTCG GCGTCCAGCA ACATCAAGCT GCGCTGGAC 720  
 AAGCCGGGCA AGTCGAAGCG GAAGGTGAAC CACCGCAACG CCCCAGACAGT CGCGGCCCGG 780  
 GCCCAGCGCA AGGCTGCCCC CCGCGGGGAG GCGTCGACG CCGCCGCGGC CGCCAGCTTG 840  
 35 CAAAGCCGAA GTCGTGGCGG GCTCTTGAC TCGCTGCGCC ACGTCCCCGG GGGTGCCGAG 900  
 CCGGCGGGGG GTGAGGTGGC TCGCGCCGCG GCCGGGCTAG GAGGTGCGGG CACTGGGGGC 960  
 GCGGGAGGGG ACGTGGCAGG CCCCGCGGGG GCCACGCGCA TCCCAGGGGC CAGGAAGGTC 1020  
 CGGCTGCGGG CAGCAATCT GCCTCCGTCC TTCTTACCG AGCCGTCGCC GGCAAGCGGC 1080  
 GCGCGGCTTG GTCCTGCGGG GCCGACGCTG AGCTTGGGCG ACCTGGAGAA GGGCGCGGAG 1140  
 40 GCGCTGGACT TCTTTGAGCT GCTGGGCCCC GACTACGGCG CCGGCACGGA GGCGGCAGTC 1200  
 TTGCTTGCCG CCGAGCCTCT CGAAGTGTTC CCCGCCGGAG CCTCCGTACT GCGCGCACCC 1260  
 CCGGAGCTGG AGCCCGGCCCT CTTTGAGCCG CCGCCGGCAG TGGTGGGAAA CCTACTGTAC 1320  
 CCGAGCCCTT GAGGCTGCTCC GGGCTGCTCC CCGACCAAAA AGAGCCCCCT GACTGCCCCC 1380  
 CGCGGGCGCT TGACCTTGAA CGAGCCCTTG AGCCCCCTGT ACCCGCCGCG TCGGATTCT 1440  
 45 CCCGGCGGGG AGGACGGGGG GGGCCATTG GCCTCTTTG CCCCCTTCTT TCCAGACTGC 1500  
 GCCTGCCCC CGCCGCGGCC GCCCATCAG GTGTCTTACG ATTACAGCGC GGGCTACAGC 1560  
 CGCACCGCCT ATTCAGCCT TTGAGATCC GACGGGGTTT GGGAAAGGGC GCCGGGGGAG 1620  
 GAGGGGCGC ACCGGAGCTG A 1641

50 Seq ID NO: 143 DNA Sequence  
 Nucleic Acid Accession #: NM\_022123.1  
 Coding sequence: 76..2781

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 AAAAATAGCA GGAAGATGGC GCCACCAAG CCCAGCTTTC AGCAGGATCC TTCAGGCGCA 120  
 GAACGTTTAC AAGCATTGAG AAAGGAGAAA TCCGAGATG CTGCTCGCTC CCGCCGGGGA 180  
 AAAGAAAACT TTGAGTTCTA TGAATTGCC AAGTTGTTGC CTCTTCCTGC AGCCATTACC 240  
 60 AGCCAGCTCG ACAAGGCATC CATCATTCGA CTTACAATTA GCTATCTGAA AATGAGGGAC 300  
 TTTGCTAACC AGGGGGACCC TCCGTGGAAC TTGCGAATGG AAGGCCCTCC ACCTAACACA 360  
 TCAGTAAAG GTGCACAGCG AAGGAGAAGC CCCAGTGAC TAGCCATTGA AGTATTGAA 420  
 GCACATTGCG GAAGCCACAT TTGCGAGTCC CTGGATGGCT TTGTATTGCG ACTAAATCAG 480  
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 65 GAGCAGCTGG GCATGAAGCT CCCCCTGGG CCGGGTCTCC TGTCACAGGG CACTGCTGAG 660  
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 75 ATACAGTCCA GTGCCACCAT AGCTATTAAT GCCAAGAATG CAAATGAAAA GAATATCATC 1260  
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Nucleic Acid Accession #: NM\_005806.1  
Coding sequence: 105..1076

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60 GTGCCCTGAC TTGCAAGACT GGCCTGGGCA GCACCTCGGG GGGGGAGGGG GTGTTATGGG 1500  
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Seq ID NO: 145 DNA Sequence  
Nucleic Acid Accession #: XM\_045127.3  
Coding sequence: 21..4469

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CCTCCAGACC TATCGTCCCA CTTTCTTCTA GATCCATGGA AATCTCAGAG ACGAGTGTG 180

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|    | GCATTCTGCG | CGAGGTGGAT  | ATGAGTAGTG | TTACAACCAC  | ACAGGTTCCC  | CCTGCCACG   | 240  |
|    | GCCGCCTCTC | TGTGCCGGCG  | TCACCTGATC | CTACTGCTGG  | CTCCTTGCTC  | GTGCTGAAG   | 300  |
|    | CCCAAGTGAC | GCCATCCAGC  | GTAGCACTG  | CATTTTCTCT  | GGTCATCACC  | AGCATTTCTCC | 360  |
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|    | CGAGTGTTT  | TACGCCCTAT  | AGTCTGGTTC | CTTCAGTGGA  | GTCTTCACCT  | TTCTCTGACC  | 480  |
|    | AAGAAGCTTC | CAGTTTTTCT  | GAGCATAAAC | CCAGAGGTGC  | TTTGGATTTT  | GCATCCAGCT  | 540  |
|    | TTTTCTCAAC | ACCCCGCGTG  | GAACCTCAGC | GCTCCATCTC  | TTCCGCTTCG  | GAAGCACCTG  | 600  |
|    | CGTCTCTGTC | TCTGATGCCG  | AGTGACTTGT | CCCCCTTCAC  | ATCTCAGTCT  | TTTTCTCCCT  | 660  |
| 10 | TGGTTGAGAC | ATTTCATTG   | TTTGACTCTA | GTGATCTGCA  | GTATCTCAG   | CTGTCTCTTC  | 720  |
|    | CCAGTTCAC  | AAATCTTGAG  | TTTTCGCAGC | TCCAGCCAA   | TTCCGAGCTG  | CCTTTAAACA  | 780  |
|    | CAATCATGTT | GCTACCTAGC  | CGTCTGAGG  | TGTCAACATG  | GTCAAGCTTC  | CCTTCTGATT  | 840  |
|    | CTCTCGAGTT | TGTTGAAGCG  | TCTACGGTTT | CACTGACGGA  | TTCAGAAAGCT | CATTTTACCT  | 900  |
|    | CAGCTTTTAT | TGAAACTACC  | TCCTATCTTG | AGTCTTCACT  | CATTTCCCAT  | GAATCCGCAG  | 960  |
| 15 | TCACTGCAT  | GSTGCCCTCC  | GCTCTGAGT  | CTTTTGACAT  | TTTGACTGCC  | GGGATTCAG   | 1020 |
|    | CAACATCACC | ATTGACCACT  | GTCCACACAA | CGCCCATTTT  | AAGTGAGTCT  | TCTTTGTTCT  | 1080 |
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|    | CCTCTTTCTC | CAGAGCCATT  | CCCACTGGTA | CGGTGTTGAT  | CACTGACGCG  | TACCTGCCAT  | 1200 |
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| 20 | TGGGCCCATC | ACTCACACCC  | ACAGAGGTGC | CACTGAACAC  | CTCCACGGAA  | GTGAGCACAA  | 1320 |
|    | CCAGCACCGG | TGCTGCCACT  | GGTGGTCCCC | TGACTCCAC   | CCTGATGGGT  | GACGCCGCAA  | 1380 |
|    | GTGAGAGCCC | CCGAGAGAGT  | AGTGCTGCTC | CTCCCTGCC   | ATCCCTCGGT  | CCCGTGACTG  | 1440 |
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|    | TTTGTGATAT | CACAGTCCCC  | GATGCCTATC | TGATCACAA   | TGTGCTGGCC  | AGAAGAGCTG  | 1560 |
| 25 | TGCAGGAGTA | CATCATTACA  | GCAATCAAAG | AAGTACTGAG  | GATTCACTTC  | AACCGTGAC   | 1620 |
|    | TGGAAGTGA  | AGGTTACGAA  | CTATTACTG  | ACTTCACTTT  | TCTGGTAACA  | TCCGGTCTTT  | 1680 |
|    | TGCTTTTAC  | GGCAATATCC  | GTCAAAATG  | TGCTTATAAA  | CAGTAAGCTT  | GTCCGTGACG  | 1740 |
|    | AGACTCCTTT | AATCCTGTCT  | GTGAAACCTT | CTTTCTTGT   | GCCAGAGTGC  | AGGTTCCAAG  | 1800 |
|    | TTCAAACAGT | ACTTCAGTTT  | GTGCTCCGA  | GTGTGGATAC  | TGGCTTCTGC  | AACTTCACCC  | 1860 |
| 30 | AGCGCATTTA | GAAAGGCCTA  | ATGACAGCTC | TCTTTGAAGT  | GAGAAACAC   | CACAGGGGAA  | 1920 |
|    | CGTATAACCT | CACGGTGCAG  | ATCTTGAATA | TCACCATCAG  | TTCCCTAAGG  | GTGACTCCTC  | 1980 |
|    | GGCGGGGCC  | GGTGAATATC  | ATCTTGCGG  | TTAAAAGCAC  | ACAGGGATTT  | TTGAATGGGT  | 2040 |
|    | CGGAAGTGAG | CGAGCTGCTC  | AGAAACTTGA | GTGTGGTGA   | GTTCACTTTC  | TATCTGGGAT  | 2100 |
| 35 | ACCCAGTGCT | CGAGATCGCA  | GAGCCCTTCC | AGTATCCACA  | GCTCAACTTA  | TCTCAGTTGC  | 2160 |
|    | TGAAGTCTCT | TTGGGTGAGA  | ACAGTTCTCC | TGGCGTGCAT  | GGAGAAGCAA  | CTCCAGAAATG | 2220 |
|    | AAGTGTTTCA | AGCCGAGATG  | GAAAGCAAGC | TGGCCAGCT   | GCTCAGCGAG  | GTTTCCACCA  | 2280 |
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| 50 | CGCAGAGCGG | GCCACCACTG  | CCAGTTCCGG | GAAATGAGCA  | GCACTCATCA  | CGCTCCATCT  | 3060 |
|    | TCGAGCAGCT | GGACAGGATC  | TCCCGCCCCC | CGGAGGCTAG  | CGGCGGGTTC  | CCCAAGTAA   | 3120 |
|    | TCCAGCTTAT | GGCCATGCAG  | CCGATCCCGG | CACCTCCCGT  | CCAGCGCCCC  | TCCCGAGCGG  | 3180 |
|    | ACCGAGTGGC | GGAAAGCAAT  | AAAATCAACA | AAGAGATTCA  | GACCGCGCTG  | CGGCAACAAGT | 3240 |
|    | CTGAGATCGA | GACCATCTCG  | AACAGATCC  | GCCTGCGCGC  | CAAGCGCGCG  | GGGCACTAAG  | 3300 |
|    | AGTTCCCGGT | GGTAGACGAC  | CTGTCTCCGG | GCGCACTAA   | GGAGCGACAC  | CGGTTGTACC  | 3360 |
| 55 | GCAGGGCACA | GATGCAGATC  | GACAAGATCC | TGGACCCAC   | GGCCAGCGTG  | CCCTCGGTGT  | 3420 |
|    | TCATAGAGCC | CAGGAAGAGC  | TACGGGATAA | AAGCTTCTCC  | CAAGCTCTGC  | CGGAAACACC  | 3480 |
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| 60 | TTCCCTTCCC | GGCCTCCAG   | TACATCCAC  | CCCAGCGTTC  | CATCGAGGAG  | GCAAGCCAGA  | 3720 |
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| 70 | CCGTGCCAAG | GACTTCAGCG  | AGGGAGCCCT | CAGCTCCTTC  | CGGGAACCTC  | CCCCACGGG   | 4320 |
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|    | ACTCCTCGGC | CTCTCTCATC  | AAAGCAATCC | GCGAGGAGCT  | CCTCCGGCTC  | TCCAGAAAC   | 4440 |
|    | AGAGCACCGT | GCAGAACTTC  | CACAGCTGAT | CGGCTCGCC   | TGCGAGATTT  | GCCAAATATC  | 4500 |
|    | CGCTTCTCTG | GGAAAGCAAG  | CCAAAAGGAA | ATCAACTGAG  | TGGGTGTTTG  | GAAGAGGAAG  | 4560 |
| 75 | GAGCAACTCT | CGGGCAGCCT  | GCCAAGGGA  | GGGAGCAAGT  | TGCAATTTAG  | AAGATGCCAT  | 4620 |
|    | AGTCTGTGTG | ACAGCTCATG  | AGCCTTTCAC | TGGCTGGCA   | ATTGTCTGAA  | CACCTGGGTT  | 4680 |
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| 80 | ACCTAAAGTA | ACAAAATGAC  | TGCATTCTG  | TCTTTTAA    | AGGTAGAGAT  | TAAACTGTAT  | 4800 |
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|    | TGATGACTCC | AAACAAAGCC  | ATCACCCGCA | TTCTTCTCTC  | TTCTTCTGGT  | GCTACAGCTC  | 5100 |
|    | CAAGGGCCCT | TCACCTTCAT  | GTCTGAAATG | GAACCTTGGC  | TTTTTCAGTG  | GAAGAATATG  | 5160 |
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TATATTTATT TGATTATCCA AAATACAGAT CAAAGTTTAG ATCT

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Coding sequence: 63..797

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WO 03/025138

PCT/US02/29560

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GGCCAGAGGC TTGTTTTGTC TTTTGGTTTT TATGAGGTGG GATATCCCTA TGCTGCCCTAG 1860  
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AGTAAGAAA CTAAGCTCAT TTCTGCAGC CTGGAGGCCG GGTGCTCAGG GCTGACACGT 2760  
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GAAGAAGGT CCTTCCCTCT CCCCAGACT TGGTGTCTTT TCCTCTCACT TCTTCTGCC 2940  
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Seq ID NO: 149 DNA Sequence  
Nucleic Acid Accession #: L29126.1  
Coding sequence: 445..1845

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TCCCTGGTTC GAAGGGCTGC CCTCACACAC AACGACAACC ACTTCAATTA TGAGAAGACA 1080  
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TCTGGTTTCA CTGAACACAT TGAAGATGTC AAAATGGCAT TTGACAGAGA TGGTGAAAAG 1440  
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ATGAATGAAA AAGACAATTT CATGAATGCA GAAAATCTGG GGATCGTGTT TGGGCCACT 1740  
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CTGATTGTGC AGATTTTAAAT AGAAAACGAA GACGTTTTAT TCTAATCCAT CAGGGAAATG 1860  
AGCTGAATGG CCCAGCACCA TCAAGTTGAC ACAGCTAAGG ATAAACATT TCTTACCAGT 1920  
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Nucleic Acid Accession #: NM\_001936.2  
Coding sequence: 178..2589

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Seq ID NO: 152 DNA Sequence  
Nucleic Acid Accession #: XM\_087461.1  
Coding sequence: 236..1138

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Seq ID NO: 153 DNA Sequence  
Nucleic Acid Accession #: NM\_012261.1  
Coding sequence: 1-843

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CAGACGCACT CGGAGCTGCA AGTGTTCCTG GTGGATCGCG CATATGCAC CAAAATGCTC 360  
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PCT/US02/29560

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15 CGCTGCAGC CGGGGACGCC TCCGCTGCTG TCGCCTCCTC TGATGCGCTT GCCCTCTCCC 240  
GGCCCGGGGA CTCGGGAGGA ATGTGGGTCC TAGGCATCGC GGCAACTTTT TGCGGATTGT 300  
TCTTGCTTCC AGGCTTTGCG CTGCAAAATCC AGTGCTACCA GTGTGAAGAA TTCCAGCTGA 360  
ACAAGGACTG CTCCTCCCCC GAGTTCATTG TGAATTGCAC GGTGAACGTT CAAGACATGT 420  
20 GTCAGAAAGA AGTGTGGAG CAAAGTGCCG GGATCATGTA CCGCAAGTCC TGTGCATCAT 480  
CAGCGGCTCG TCTCATCGCC TCTGCCGGGT ACCAGTCCCT CTGCTCCCCA GGGAAACTGA 540  
ACTCAGTTTG CATCAGCTGC TGCAACACCC GTCTTTGTAA CGGGCCAAAG CCCAAGAAAA 600  
GGGGAAGTTC TGCCTCGGCC CTCAGGCCAC GCCTCCGCAC CACCATCTGT TTCCTCAAAT 660  
TAGCCCTCTT CTCGGCACAC TGCTGAAGCT GAAGGAGATG CCACCCCTCT CTGCATTGTT 720  
25 CTTCCAGCCC TGCCCCCAA CCCCCACCT CCCTGAGTGA GTTTCTCTG GGTGTCCTTT 780  
TATTTCTGGT AGGGAGCGGG AGTCCGTGTT CTCTTTGTT CCTGTGCAAA TAATGAAAGA 840  
GCTCGGTAAA GCATTCTGAA TAAATTCAGC CTGACTGAAT TTTCAGTATG TACTTGAAGG 900  
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Seq ID NO: 155 DNA Sequence  
Nucleic Acid Accession #: NM\_004694  
Coding sequence: 166..1737

30 1 11 21 31 41 51  
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35 AGTGACAGTAG TGTGATCACT TCTTACTGCC GCCTCAAGCT TCCAGCCTCA ACTCAAGCAA 120  
TCCTCCCACC TCAGCCACCC AAGTGGCTGG GACTACAGAT TAAGAATGAC CCAAAATAAA 180  
TTAAAGCTTT GTTCCAAAGC CAATGTGTAT ACTGAAGTGC CTGATGGAGG ATGGGGCTGG 240  
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40 GGTGTCTTCT TTAATGACTT AATGGACAGT TTAATGAAT CCAATAGCAG GATCTCATGG 360  
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GGTCTGGGAT ACTGCTTTAG TTTTCTCCCA ACTGTAACCA TCCTATCACA ATATTTTGGC 600  
45 AAAAGACGTT CCAATAGTCAC TGCAGTTGCT TCCACAGGAG AATGTTTCGC TGTGTTTGTCT 660  
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GTGGGCTTAC TCAGATTAAA CATTGTATC TCGGAGCAG TGCTCAGACC CATCATATC 780  
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50 ACCTCACCTA AAAATGTGCC TACTCACACT AACCTGGAAC TGGAGCCGAA GGCCGACATG 960  
CAGCAGGTCC TGGTGAAGAC CAGCCCCAGG CCAAGCGAAA AGAAAGCCCC GCTATTAGAC 1020  
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CAGGACCGCG CTGCTTTTTT ATTATCTACG ATGGCCATTG CAGAAGTTT CGGAAGGATC 1200  
55 GGAGCTGGTT TTGCTCTCAA CAGGGAGCCC ATTGTAAGA TTTACATTGA GCTCATCTGC 1260  
GTCATCTTAT TGACTGTGTC TCTGTTTGCC TTTACTTTTG CTAATGAATT CTGGGGCTCA 1320  
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60 CAAAGTAAGA TCTACAGCAG GGCCTTCTAC TCCTGCGCAG CTGGCATGGC CCTGGCTGCT 1560  
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65 ACACAAGGAG GCAGAGGAGC TAACCCCTCT ACTCCACTTT CAAAACCTACA TTTTAAAGGG 1860  
AATGTGTATG TGAAGAGCAC TACCAACATC GCTTTTGTTT TGTTTTGTTT TGTTTTAAAG 1920  
TTTTTTT TGTGTTGTTT TAAAGCCAAA AAAAAAACA ACCAAGCACT CTTCCATATA 1980  
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70 TAAATGATT TCTTTTTTTC TTTTCTTCT TCCTATGGTC TTGTCTGAAT AAACACTCTCT 2160  
CCTGAATAAA ACAACATCCA ACCCAGGTCA TTGAAATGAA ATTGGCCAGT C. 2212

Seq ID NO: 156 DNA Sequence  
Nucleic Acid Accession #: NM\_004833.1  
Coding sequence: 246..1277

75 1 11 21 31 41 51  
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80 AGTCACCTAG GTTATTGGG CATGCTCTCC TGAGTCTCTC GCTAGTTAAG CTCTCTGAAA 180  
AGAAGGTGGC AGACCCGGTT TGCTGATCGC CCCAGGGATC AGGAGGCTGA TCCCAAGTT 240  
GTCAGATGGA GAGTAAATAC AAGGAGATAC TCTTGCTAAC AGGCCTGGAT AACATCACTG 300  
ATGAGGACGA GATAGGTTT AAGTTCTTTC TTTGAGACGA GTTTAATATT GCCACAGGCA 360  
AACTACATAC TGCAACAGA ATACAGTAG CTACCTTGAT GATTCAAAAT GCTGGGCGG 420  
TGTCTGCAGT GATGAAGACC ATTCGTATTT TTCAGAAGTT GAATTATATG CTTTGGCCAA 480



WO 03/025138

PCT/US02/29560

5 AACGCTCTTCA GGAGGAGAAG GAGAAAGTTG ATAAGCAATA CAAATCGGTA ACAAAACCAA 540  
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 CAAAGCAACG TGCTGCACCA AAGTCTCTCT CTGATGTTAA GCCTGAACAG AAACAGATGG 660  
 TGGCCACGCA GGAATCTATC AGAGAAGGGT TTCAGAAGCG CTGTTTGCCA GTTATGGTAC 720  
 TGAAAGCAAA GAAGCCCTTC ACGTTTGAGA CCCAAGAAGG CAAGCAGGAG ATGTTTCATG 780  
 CTACAGTGGC TACAGAAAAG GAATCTCTCT TTGTAAAGT TTTTAATACA CTGCTGAAAG 840  
 ATAAATTCAT TCCAAAGAGA ATAATTATAA TAGCAAGATA TTATCGGCAC AGTGGTTTCT 900  
 TAGAGGTAAA TAGCGCTCA CGTGTGTTAG ATGCTGAATC TGACCAAAAG GTTAATGTCC 960  
 CGCTGAACAT TATCAGAAAA GCTGGTCAAA CCCGGAAGAT CAACACGCTT CAAACTCAGC 1020  
 CCCTTGGAAC AATTGTGAAT GGTGTTTGTG TAGTCCAGAA GGTAACAGAA AAGAAGAAAA 1080  
 ACATATTATT TGACCTAAGT GACAACACTG GGAATGGA AGTACTGGGG GTTAGAAACG 1140  
 AGGACACAAT GAAATGTAG GAAGGAGATA AGGTTGACT TACATCTTC ACACGTGCAA 1200  
 AAAATGGAGA AAAACTACAG CTGACATCTG GAGTTCATAG CACCATAAAG GTTATTAAGG 1260  
 CCAAAAAATA AACATAGAGA AGTAAAAAG ACCAATTCAA GCCAACTGGT CTAAGCAGCA 1320  
 TTTAATTGAA GAATATGTGA TACAGCCTCT TCAATCAGAT TGTAAGTTAC CTGAAGCTG 1380  
 CAGTTCACAG GCTCCTCTCT CCACCAAAAT AGGATAGAAT AATTGCTGGA TAAACAAAT 1440  
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20 Seq ID NO: 157 DNA Sequence  
 Nucleic Acid Accession #: NM\_005409.3  
 Coding sequence: 94..378  
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 25 TTCTTTTCAT GTTCAGCATT TCTACTCCTT CCAAGAAGAG CAGCAAAGCT GAAGTAGCAG 60  
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 TTGGCTGTGA TATTGTGTGC TACAGTTGTT CAAGGCTTCC CCATGTTCAA AAGAGGACGC 180  
 TGTCTTTGCA TAGGCCCTGG GGTAAAAGCA GTGAAAGTGG CAGATATTGA GAAAGCCTCC 240  
 ATAATGTACC CAAGTAACAA CTGTGACAAA ATAGAAGTGA TTATTACCCCT GAAAGAAAAAT 300  
 AAAGGACAAC GATGCCCTAA TCCCAATTCG AAGCAAGCAA GGCTTATAAT CAAAAAAGTT 360  
 30 GAAAGAAAGA ATTTTAAAA ATATCAAAAC ATATGAAGTC CTGGAAGGCG GCATCTGAAA 420  
 AACCTAGAAC AAGTTTAACT GTGACTACTG AAATGACAAG AATTCTACAG TAGGAACTG 480  
 AGACTTTTCT ATGTTTGTGT GACTTTCAAC TTTGTACAG TTATGTGAAG GATGAAAGGT 540  
 GGGTGAAAGG ACCAAAAACA GAAATACAGT CTCTCTGAAT GAATGACAAAT CAGAATTCCA 600  
 CTGCCCAAAG GAGTCCAGCA ATTAATGGA TTTCTAGGAA AAGCTACCTT AAGAAAGGCT 660  
 35 GGTTACCTAT CGAGTTTACA AAGTGCTTTC ACGTCTTAC TTGTGTATT ATACATTCAT 720  
 GCATTTCTAG GCTAGAGAAC CTCTAGATT TGATGCTTAC AACTATTCTG TTGTGACTAT 780  
 GAGAACATTT CTGTCTCTAG AAGTTATCTG TCTGTATTGA TCTTTATGCT ATATTACTAT 840  
 CTGTGGTTAC AGTGGAGACA TTGACATTAT TACTGGAGTC AAGCCCTTAT AAGTCAAAAG 900  
 CATCTATGTG TCGTAAAGCA TTCTCAAAAC ATTTTTCAT GCAATACAC ACTTCTTTC 960  
 40 CCAATATATCA TGATAGCAT CAATATGTAG GGAACATTC TTATGCATCA TTTGGTTGT 1020  
 TTTATAACCA ATTCATTAAA TGTAATTCAT AAAATGTACT ATGAAAAAAA TTATACGCTA 1080  
 TGGGATACTG GCAACAGTGC ACATATTTC TAACCAAATT AGCAGCACCG GTCTTAATTT 1140  
 GATGTTTTTC AACTTTTATT CATTGAGATG TTTTGAAGCA ATTAGGATAT GTGTGTTTAC 1200  
 45 TGTACITTTT GTTTTGATCC GTTTGTATAA ATGATAGCAA TATCTTGGAC ACATTTGAAA 1260  
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 TTGTTATGTC CTATATACTG TAAATTTAG GTATACTCAA GACTAGTTTA AAGAATCAAA 1440  
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50 Seq ID NO: DNA Sequence 158  
 Nucleic Acid Accession #: NM\_002562.1  
 Coding sequence: 27..1814  
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 55 AAAACGCGAG GAGGGAGGCT GTCACCATGC CGGCCCTGCTG CAGCTGCAGT GATGTTTTCC 60  
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 AGCGGAAGA GCGCTGCATC AGTTCTGTGC ACACCAAGGT GAAGGGGATA GCAGAGGTGA 240  
 60 AAGAGGAGAT CGTGAGAAAT GGAGTGAAGA AGTTGGTGCA CAGTGTCTTT GACACCGCAG 300  
 ACTACACCTT CCCTTTGCAG GGGAACTCTT TCTTCGTGAT GACAACTTT CTCAAAACAG 360  
 AAGGCCAAGA GCAGCGGTTG TGTCCGAGT ATCCCAACCG CAGGACGCTC TGTTCCTCTG 420  
 ACCGAGGTTG TAAAAAGGGA TGGATGGACC CGCAGAGCAA AGGAATTCAG ACCGGAAGGT 480  
 GTGTAGTGCA TGAAGGGAAC CAGAAGACCT GTGAAGTCTC TGCTCGGTGC CCCATCGAGG 540  
 CAGTGGAAAG GGCCCCCGCG CCTGCTCTCT TGAACAGTGC CGAAAACTTC ACTGTGCTCA 600  
 65 TCAAGAACAA TATCGACTTC CCCGCCACA ACTACACCAC GAGAAACATC CTGCCAGGTT 660  
 TAAACATCAC TTGTACCTTC CACAAGACTC AGAATCCACA GTGTCCCAT TCCGAGTAC 720  
 GAGACATCTT CCGAGAAACA GCGGATAATT TTTCAGATGT GGCAATTCAG GCGGAATAA 780  
 TGGGCATTGA GATCTACTGG GACTGCAACC TAGACCGTTG GTTCCATCAC TGCCATCCA 840  
 AATACAGTTT CCGTCGCTTC GACGACAAGA CCACCAACGT GTCCTTGATC CCTGGCTACA 900  
 70 ACTTCAGATA CGCCAAGTAC TACAAGGAAA ACAATGTTGA GAAACGGACT CTGATAAAG 960  
 TCTTCGGGAT CCGTTTTGAC ATCCTGGTTT TTGGCACCAG AGGAAAAATT GACATTATCC 1020  
 AGCTGGTTGT TGCATCGGC TCAACCTCTC CTAATCTCGG TCTGGCCGCT GTGTTTATCG 1080  
 ACTTCTCTCA CGACACTTAC TCCAGTAAC TGTGTGCTC CCATATTAT CCCTGGTGCA 1140  
 AGTGTCTGCA GCGCTGTGTG GTCAACGAAT ACTACTACAG GAAGAAGTGC GAGTCCATTG 1200  
 75 TGGAGCCAAA GCCGACATTA AAGTATGTGT CCTTTGTGGA TGAATCCAC ATTAGGATGG 1260  
 TGAACCAAGCA GCTACTAGGG AGAAGTCTGC AAGATGTCAA GGGCCAAGAA GTCCCAAGAC 1320  
 CTGCGATGGA CTTCACAGAT TTGTCCAGGC TGCCCTTGGC CCTCCATGAC ACACCCCGA 1380  
 TTCCTGGACA ACCAGAGGAG ATACAGCTGC TTAGAAAGGA GGCGACTCCT AGATCCAGGG 1440  
 80 ATAGCCCGCT CTGGTGCAG TGTGGAAGCT GCCTCCATC TCAACTCCCT GAGAGCCACA 1500  
 GGTGCTTGGG GGAGCTGTGC TGCCGGAATA AGCCGGGGGC CTGCATCACC ACCTCAGAGC 1560  
 GTTTCAGGAA GCTGCTCTGT TCCAGACAG TCCTGCAGTT CCTCTGCTC TACCAGGAGC 1620  
 CCTGTCTGCA GCTGGATGTG GATTCCACCA ACAGCCGGCT GCGGCACTGT GCCTACAGGT 1680  
 GCTACGCCAC CTGGCGCTTC GGCTCCAGG ACATGGCTGA CTTTGCATC CTGCCAGCT 1740  
 GCTGCGCGCTG GAGGATCCGG AAAGAGTTTC CGAAGAGTGA AGGCGAGTAC ATGGCTTCA 1800

WO 03/025138

PCT/US02/29560

AGAGTCCTTA CTGAAGCCAG GCACCGTGGC TCACGTCTGT AATCCCACCT TTT 1853

Seq ID NO: 159 DNA Sequence  
Nucleic Acid Accession #: NM\_001793.2  
Coding sequence: 54-2543

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45  
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60

1 11 21 31 41 51  
| | | | |  
AAAGGGGCAA GAGCTGAGCG GAACACCCGGC CCGCGGTGCG GGCAGCTGCT TCACCCCTCT 60  
CTCTGCAGCC ATGGGGCTCC CTCTGGSACC TCTCGCTCT CTCCTCCTTC TCCAGGTTTG 120  
CTGGCTGCAG TGGCGGGCCT CCGAGCCGTG CCGGGCGGTC TTCAGGGAGG CTGAAGTGAC 180  
CTTGGAGGCG GGAGCGCGG AGCAGGAGCC CGGCCAGGCG CTGGGGAAGG TATTATGTTG 240  
CTGCCCTGGG CAAGAGCCAG CTCTGTTTAG CACTGATAAT GATGACTTCA CTGTGCGGAA 300  
TGGCGAGACA GTCCAGGAAA GAAGGTCACT GAAGGAAAGG AATCCATTGA AGATCTTCCC 360  
ATCCAAACGT ATCTTACGAA GACACAAGAG AGATTGGGTG GTTGCTCCAA TATCTGTCCC 420  
TGAAAAATGGC AAGGTCCTCT TCCCCAGAG ACTGAATCAG CTCAAGTCTA ATAAAGATAG 480  
AGACACCAAG ATTTTCTACA GCATCACGGG GCCGGGGGCA GACAGCCCCC CTGAGGGTGT 540  
CTTCGCTGTA GAGAAGGAGA CAGGCTGGTT GTTGTGAAT AAGCCACTGG ACCGGGAGGA 600  
GATTGCCAAG TATGAGCTCT TTGGCCACGC TGTGTCAGAG AATGGTGCTC CAGTGGAGGA 660  
CCCCATGAAC ATCTCCATCA TCGTGACCGA CCAGAATGAC CACAAGCCCA AGTTTACCCA 720  
GGACACCTTC CGAGGAGTGT TCTTAGAGGG AGTCTTACCA GGTACTTCTG TGATGCAGGT 780  
GACAGCCCAAG GATCAGGATG ATGCCATCTA CACCTACAAT GGGTGGTTTG CTTACTCCAG 840  
CCATAGCCAA GAACAAAGG ACCCACAGA CCTCATGTTT ACCATTACCC GGAGCAGAG 900  
CACCATCAGC GTCACTCTCA GTGGCCTGGA CCGGGAAGAA GTCCCTGAGT ACACACTGAC 960  
CATCCAGGCC ACAGACATGG ATGGGGACGG CTCCACCAAC ACGGCAGTGG CAGTAGTGGG 1020  
GATCCTTGGT GCCAATGACA ATGCTCCCAT GTTTGACCCC CAGAAGTACG AGGCCCATGT 1080  
GCCTGAGAAT GCAGTGGGCC ATGAGGTGCA GAGGCTGACG GTCACTGATC TGGACGCCCC 1140  
CAACTCACCA CGGTGGCGTG CCACCTACCT TATCATGGGC GGTGACGACG GGGACCATTT 1200  
TACCATCACC ACCACCTCTG AGAGCAACCA GGGCATCCTG ACAACCAAGG AGGGTTTGGG 1260  
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GCTGAAGCTC CCAAGCTCCA CAGCCACCAT AGTGGTCCAC GTGGAGGATG TGAATGAGGC 1380  
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GCCTGTGTGT GTCTACACTG CAGAAGACCC TGACAAGGAG AATCAAAAGA TCAGCTACCG 1500  
CATCCTGAGA GACCCAGCAG GGTGGCTAGC CATGGACCCA GACAGTGGGC AGGTCAACAG 1560  
TGTGGGCACC CTGACCGGTG AGGATGAGCA GTTTGTGAGG AACAACTCT ATGAAGTAC 1620  
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ACTGATTGAT GTCAATGACC ATGGCCCACT CCCTGAGCCC CGTCAGATCA CCATCTGCAA 1740  
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GGAAGGTGAC ACAGTGGTCT TGTCCCTGAA GAAGTCTCTG AAGCAGGATA CATATGACGT 1920  
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GAGAAAGAGG GACCAAGATCA AGGAGCCCTC CTAATCCCA GAAGATGACA CCGGTGACAA 2160  
CGTCTTCTAC TATGCGCAAG AGGGGGGTGG GAAAGAGGAC CAGGACTATG ACATCACCCA 2220  
GCTCCACCGA GGTCTGGAGG CCAGGCGGGA GGTGGTTCTC CGCAATGACG TGGCACCAC 2280  
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TATAATTGAG AACCTGAAGG CGGCTAACAC AGACCCCAAC GCCCGGCCCT ACAGACCCCT 2400  
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GACTTCGGAG CTGTGACAGA AGTGGCCGTA GCAACTTGGC GGAGACAGGC TATGAGTCTG 2700  
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GCTGGGCCCA CTGGCCGCTC TGCAATTCTG GTTTCCAGAC CCCAATGCCT CCCATTCCGA 3060  
TGGATCTCTG CGTTTTTATA CTGAGTGTGC CTAGGTTGCC CCTTATTTTT TATTTTCCCT 3120  
GTTGCGTTGC TATAGATGAA GGGTGAGGAC AATCGTGAT ATGTACTAGA ACTTTTTTAT 3180  
TAAAGAACT TTTCCAGAA AAAAA 3205

Seq ID NO: 160 DNA Sequence  
Nucleic Acid Accession #: NM\_002571.1  
Coding sequence: 99..587

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1 11 21 31 41 51  
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AGGACCTGGA GCTCCCAAAG TTGGCAGGGA CCTGGCACTC CATGGCCATG GCGACCAACA 180  
ACATCTCCCT CATGGCGACA CTGAAGGCCCT CTCTGAGGGT CCACATCACC TCACTGTTGC 240  
CCACCCCAAG GGACCAACCTG GAGATCGTTC TGCAAGATG GGAGAACCAAC AGCTGTGTTG 300  
AGAAGAAGGT CCTTGGAGAG AAGACTGGGA ATCCAAAGAA GTTCAAGATC AACTATACGG 360  
TGGCGAAGCA GGCACGCTG CTGATACTG ACTACGACAA TTTCTGTTT CTCTGCCTAC 420  
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CAGGAAGAC CAGACTCCCA CCCTCCACA CCTCCAGAGC AGTGGGACTT CCTCTGCC 660  
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TCCTGCTGCA CACCTGCACC ATTGCCATGG GGAGGCTGCT CCCTGGGGGC AGAGTCTCTG 780  
GCAGAGGTTA TTAATAAACC CTTGGAGCAT G 811

Seq ID NO: 161 DNA Sequence  
Nucleic Acid Accession #: NM\_001327.1

WO 03/025138

PCT/US02/29560

Coding sequence: 89..631

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1      11      21      31      41      51
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5  AGCAGGGGGC GCTGTGTGTA CCGAGAATAC GAGAATACCT CGTGGGCCCT GACCTTCTCT 60
   CTGAGAGCCG GGCAGAGGCT CCGGAGCCAT GCAGGCCGAA GGCCGGGGCA CAGGGGGTTC 120
   GACGGGCGAT GCTGATGGCC CAGGAGGCCC TGGCATTCTT GATGGCCAG GGGGCAATGC 180
   TGGCGGCCCA GGAGAGGCGG GTGCCACGGG CGGCAGAGGT CCGCGGGGCG CAGGGGCAGC 240
   AAGGGCCTCG GGGCCGGGAG GAGCGCCCCC GCGGGGTCCG CATGGCGGCG CGGCTTCAGG 300
10  GCTGAATGGA TGCTGCAGAT GCGGGGCCAG GGGGCCGGAG AGCCCCCTGC TTGACTTCTA 360
   CCTCGCCATG CCTTTCGCGA CACCCATGGA AGCAGAGCTG GCCCGCAGGA GCCTGGCCCA 420
   GGATGCCCCA CCGCTTCCCG TGCCAGGGGT GCTTCTGAAG GAGTTCAC TGCTCGGCAA 480
   CATACTGACT ATCCGACTGA CTGCTGCAGA CCACCGCAA CTGCAGCTCT CCATCAGCTC 540
   CTGCTCCAG CAGCTTTCCT TGTGATGTG GATCACGCAG TGCTTCTGCG CCGTGTITTT 600
   GGCTCAGCCT CCCTCAGGGC AGAGGCGCTA AGCCACGCTT GGCGCCCTT CCTAGGTCAT 660
15  GCCTCCTCCC CCGGGAATG GTCCCAGCAC GAGTGGCCAG TTCATTGTGG GGGCCTGATT 720
   GTTTGTGCTG GGAGGAGGAC GGCTTACATG TTTGTTTCTG TAGAAAATAA AACTGAGCTA 780

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Seq ID NO: 162 DNA Sequence

Nucleic Acid Accession #: NM\_020994

Coding sequence: 53..459

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   GAAGGCCAGG GCACAGGGGG TTGACGGGCG GATGCTGATG GCCCAGGAGG CCCTGGCATT 120
25  CCTGATGGCC CAGGGGGCAA TGCTGGCGGC CCAGGAGAGG CGGTGCCAC GGGCGGCAGA 180
   GGTCCCCGGG GCGCAGGGGC AGCAAGGGCC TCGGGCCGA GAGGAGGCGC CCGCGGGGGT 240
   CCGCATGGCG GTGCCGCTTC TGCGCAGGAT GGAAGGTGCC CTGCGGGGCG CAGGAGGCGC 300
   GACAGCCGCG TCTTTCAGTT CCGACTGACT GCTGCAGACC ACCGCCAAT GCAGCTCTCC 360
30  ATCAGCTCTC GTCTCCAGCA GCTTTCCTG TTGATGTGGA TCACGCACTG CTTTCTGCCC 420
   GTGTTTTTGG CTACGGCTCC CTCAGGCGAG AGGCGCTAAG CCCAGCTTGG GCCTCTTCC 480
   TAGGTCATGC CTCCTCCCCT AGGGAATGGT CCCAGCACGA GTGGCCAGTT CATTGTGGGG 540
   GCCTGATTGT TTGTCGCTGG AGGAGGACGG CTTACATGTT TGTTCGTGTA GAAAATAAAG 600
   CTGAGCTA 608

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Seq ID NO: 163 DNA Sequence

Nucleic Acid Accession #: NM\_006928.2

Coding sequence: 1..1986

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1      11      21      31      41      51
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Seq ID NO: 164 DNA Sequence

Nucleic Acid Accession #: NM\_001922.2

Coding sequence: 415..1974

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WO 03/025138

PCT/US02/29560

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Nucleic Acid Accession #: XM\_059422.3  
Coding sequence: 207..1400

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Seq ID NO: 166 DNA Sequence  
Nucleic Acid Accession #: XM\_040512.3  
Coding sequence: 382..1302

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AATGTGGACT CTAGCAGGGA GCTCTGCCAG AATAAAAGTC AGCCCAACCG GACCTGCACC 1920  
TGTAGCATCC CAACCAAGC AACCTACAAA GATGTTTCAG TTGTCAACGT GATGTTCTCC 1980  
TTGCGTTCTT GGAATTTATC AGACAGATT AACTTTACCA ACTGCTCATC ATTAAGAA 2040  
TGCCAGCATC GCGTAGAAAC TGGCTGCGCG TGGTGTAAAA GTGCAAGAAG GTGTATCCAC 2100  
CCCTTCACAG CTTCGCAACC TTCTGATTAT GAGAGAAACC AGGAACAGTG TCCAGTGCT 2160  
GTGCGACAGA CATCAGGAG AGGAAGACCC AAGGAGAACA AGGGGAACAG AAACCAACAG 2220  
GCTTTACAGG TCTTCTACAT TAAGTCCATT CAGCCACAGA AAGTATCGAC ATTAGGAA 2280  
AGCAACGTGA TAGTAACGGG AGCAAACTTT ACCCGGGCAT CGAACATCAC AATGATCTG 2340  
AAAGGAACCA GTACCTGTGA TAAGATGTG ATACAGGTTA GCCATGTGCT AAATGACACC 2400  
CACATGAAT TCTCTCTTCC ATCAAGCCGG AAGAAATGA AGGATGTGTG TATCCAGTTT 2460  
GATGGTGGGA ACTGCTCTTC TGTGGGATCC TTATCCTACA TTGCTCTGCC ACATTGTTCC 2520  
CTTATATTT CTGCTACCAC CTGGATCAGT GGTGGTCAAA ATATAACCAT GATGGGCAGA 2580  
AATTTTGATG TAATTGACAA CTTAATCATT TCACATGAAT TAAAAGGAAA CATAAATGTC 2640  
TCTGAATATT GTGTGCGGAC TTACTGCGGG TTTTATGCCC CCAGTTTAAA GAGTTCAAAA 2700  
GTGCGCACGA ATGTCACTGT GAAGCTGAGA GTACAAGACA CCTACTTGGA TTGTGGAACC 2760  
CTGCAGTATC GGGAGGACCC CAGATTACG GGGTATCGGG TGAATCCGA GGTGGACACA 2820  
GAACTGGAAG TGAAGAATCA AAAAGAAAAT GACAACCTCA ATATTTCCAA AAAAGACATT 2880  
GAAATTAAG TCTTCCATGG GGAAGATGGG CAATTAAAT GCAGTTTGA AAATATTACT 2940  
AGAAATCAAG ATCTTACCAC CATCTTTGC AAAATTAAG GCATCAAGAC TGCAAGCACC 3000  
ATTGCCAACT CTCTAAGAA AGTTGCGGTC AAGCTGGGAA ACCTGGAGCT CTACGTGAG 3060  
CAGGAGTCAG TTCTTCCAC ATGGTATTTT CTGATTGTGC TCCCTGTCTT GCTAGTGATT 3120  
GTCATTTTGG CGGCCGTGGG GGTGACCAGG CACARATCGA AGGAGCTGAG TCGCAACAG 3180  
AGTCAACAAC TAGAATTGCT GGAAGCGAG CTCCGAAAG AGATACGTGA CGGCTTTGCT 3240  
GAGCTGCAGA TGGATAAATT GGATGTGTTT GATAGTTTGG GAACTGTTCC CTTCCTTGAC 3300  
TACAAACATT TTGCTCTGAG AACTTTCTTC CCTGAGTCAG GTGGCTTAC CCACATCTTC 3360  
ACTGAAGATA TGCATAACAG AGACGCCAAC GACAAGAATG AAAGTCTCAC AGCTTTGGAT 3420  
GCCCTAATCT GTAATAAAG CTTTCTGTGT ACTGTCATCC ACACCTTGA AAAGCAGAAG 3480  
AACTTTCTG TGAAGGACAG GTGCTGTGTT GCCTCTTCC TAACCATGTC ACTGCAAAAC 3540  
AAGCTGGTCT ACCTGACCAG CATCTAGAG GTGCTGACCA GGGACTTGAT GGAACAGTGT 3600  
AGTAACATGC AGCCGAAACT CATGCTGAGA CCGACGGAGT CCGTCTGCGA AAAACTCTCT 3660  
ACAAACTGGA TGTCCGCTGC CTTTCTGGA TTTTCCGGG AGACTGCGG AGAGCCCTTC 3720  
TATTTGCTGG TGACGACTCT GAACCAGAAA ATTAACAAGG GTCCCGTGA TGTAAATCAT 3780  
TGCAAGGCC TGTACACACT TAATGAAGAC TGGCTGTTGT GGCAGGTTCC GGAATTCAGT 3840  
ACTGTGGCAT TAAACGTCGT CTTTGAAGAA ATCCCGGAAA ACGAGAGTGC AGATGTCTGT 3900  
CGGAATATT CAGTCAATGT TCTGACTGT GACACCATTG GCCAAGCCAA AGAAAAGATT 3960

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TTCCAAGCAT TCTTAAGCAA AAATGGCTCT CTTATGGAC TTCAGCTTAA TGAATTGGT 4020
CTTGAGCTTC AAATGGGCAC ACGACAGAAA GAACCTTCTGG ACATCGACAG TTCCTCCGTG 4080
ATTCTTTAAG ATGGAATCAC CAAGCTAAAC ACCATTGGCC ACTATGAGAT ATCAAATGGA 4140
TCCACTATAA AAGTCTTTAA GAAGATAGCA AATTTTACTT CAGATGTGGA GTACTCGGAT 4200
GACCACTGCC ATTTGATTTT ACCAGATTCT GAAGCATTCG AAGATGTGCA AGGAAAGAGA 4260
CATCGAGGGA AGCACAAGTT CAAAGTAAAA GAAATGTATC TGACAAAGCT GCTGTGCACC 4320
AAGGTGGCAA TTCACTTCTG GCTTGAAAAA CTTTTTAGAA GCATTGTGAG TTACCCCAAC 4380
AGCAGAGCTC CATTGTCTAT AAAATACTTT TTTGACTTTT TGGACGCCA GGCTGAAAAC 4440
AAAAAAATCA CAGATCCTGA CGTCGTACAT ATTTGGAAAA CAAACAGCCT TCCTCTTGCG 4500
TTCTGGGTAA ACATCCTGAA GAACCTCAG TTTGTCTTTG ACATTAAGAA GACACCACAT 4560
ATAGACGGCT GTTTGTCTAG GATTGCCAG GCATTCTATG ATGCATTTC TCTCACAGAG 4620
CAGCAACTAG GGAAGGAAGC ACCAACTAAT AAGCTTCTCT ATGCCAAGGA TATCCCAACC 4680
TACAAAGAAG AAGTAAAAATC TTATTACAAA GCAATCAGGG ATTTGCCCTCC ATTGTCATCC 4740
TCAGAAATGG AAGAATTTTIT AACTCAGGAA TCTAAGAAAC ATGAAAATGA ATTTAATGAA 4800
GAAGTGGCTC TGACAGAAAT TTACAAATAC ATCGTAAAAA ATTTTGATGA GATTCTAAAT 4860
AAACTAGAAA GAGAAGCAGG GCTGGAAGAA GCTCAGAAAC AACTCTTGCA TGTAAGAGTC 4920
TTATTTGATG AAAAGAAGAA ATGCAAGTGG ATGTAAGCAC TCTGGGCGCT GGCTTAATCT 4980
GGCAAGATTC TTACAGACGAC TTGGGAGCAA AATGGCTGCT TGAGCTACTC TGTGTCTGTTA 5040
ATTTGTTGTT TGACATAGG TTCCACTTTG GGCACCTGCT TTTTAAGAGA CCAAGGCACA 5100
TGCAAGCTT TTAGAAAGCA A 5121

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Seq ID NO: 169 DNA Sequence  
Nucleic Acid Accession #: XM\_063670.1  
Coding sequence: 1..708

25  
30  
35  
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1 11 21 31 41 51
| | | | |
ATGCAGAGAA TCCTTGAGGA ACCAGCTGAT GATTGCACAT GGTCAACTCG GATTCTTCTT 60
ACCCTGAGTG AATTTATAAT GTCGCTGCAG CGTACTGTTT ATCCCCACAG TGAGAAAGTGG 120
CGTGTCTCTC CAGTCCCTTC ATCTTCTCTAT TTTCAGGAGC TGGTGGGCAC CAGCCAGGAA 180
CTGGCTCTCA CTTTCTGGCA TTTACTGTCT ATGTTTGGAT TCTTCATCGT GTCCTATGGC 240
TTTCTCACAG TTTTGGCAG GACTCTTTTC CACTTGGATC TGCTACAACC CAACCTTACA 300
CCTTCACGCT TTGACAAGTA CACTGTCTTC TTTCTCTATG AAATAGAGGG AGATGGGTTA 360
GATCCATGTT TTCAAAGCAT GGTCCAAGGA ATCCTAGAGG TTTTGTGGAT GTCCAAAGTG 420
GAGAGTGCAT ACCACACTAA TGATGGTGAT ACTGCTGGAG AGGGGGTGGG AAATGGTACC 480
AGTCAAAACC GAGGCGGAGG AGGAGCAGCC CGCAGTCCGT GCCGCGAGAT GGAGGAGCCC 540
ACGCCCGAGC CCGTCTATGT CGACGTAGAC AAAGGGCTGA CCTTGGCCTG CTTCTCTTTC 600
CTCTGCTCTC TCCTTGTCTG GATGATCATC CGCTGTGCCA AGGTCTCATG GGACCTTAC 660
AGGCCATCC CCACATCCAC CTGGGAGGAG CAGCACCTGG ACGACTGA 708

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Seq ID NO: 170 DNA Sequence  
Nucleic Acid Accession #: FGENESH predicted  
Coding sequence: 1-936

45  
50  
55  
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1 11 21 31 41 51
| | | | |
ATGGAGCCAA GCCACAGCCA ACCACAATG GACATGAAGC ACATGCAAGA GCGTCCAGCT 60
GCCTCGCCTT TAAATGGCA GGACGGCCGC GGCTCCGCTC AGAGCCCCCT CTGGCTGTCT 120
GGCCCCGGCT CGCCCGCGCC GCTGGGGGCT CTGACTCCTG CCGAGCCCGG CCTGGGCAGC 180
GCCCGCCGCG CCGCGCGAGC CCGCGCCCCC GTCACCGGGA AACGCCGTAG CCGGCGATCC 240
GCGGTGCGCC TGCGCTCGGC GCGGGCCGAG CCAGGACCCC GGGAGCGCAC GGGACGGGCC 300
TCGCCAGCCC TAGAAAATAA CTCTGACCTC TTGTCCAAGG CATCTGCTAT AGCTACTGGG 360
ACACCACTCT GTGAAGACTC TACCATTGCA AGGTTCTACC TGCCCCACC TCTCACCCT 420
CACCCCGAGC TGGTGGGCAC CAGCCAGGAA CTGGCTCTCA CTTCTGGCA TTTACTGTCT 480
ATGTTTGGAT TCTTCATCGT GTCCTATGGC TTTCTCACAG CATTTGGCAG GACTCTTTTC 540
CACTTGGATC TGCTACAACC CAACCTTACA CCTTCACGCT TTGACAAGTA CACTGGCCAG 600
CTCCTCGAGC TCCAGTTTCA CTCAAAGTAT GTACTGACCA TCCACTGGAG CCAGGGACTG 660
TGCAATTGGT GTCACATCC CTGTGAAGCA GCGGTGGAAG ATGGTACCAG TCAAAACCCA 720
GGCGGAGGAG GAGCAGCCCC CAGTCGCTGC CGCGAGATGG AGGAGCCAC GCCCGAGCCC 780
GTCTATGTGC ACGTAGACAA AGGGCTGACC TTGGCCTGCT TCGTCTTCTT CTGCCTCTTC 840
CTTGTCTGTA TGATCATCCG CTGTGCCAAG GTCATCATGG ACCCTTACAG CGCCATCCCC 900
ACATCCACCT GGGAGGAGCA GCACCTGGAC GACTGA 936

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Seq ID NO: 171 DNA Sequence  
Nucleic Acid Accession #: FGENESH predicted  
Coding sequence: 1-2094

65  
70  
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1 11 21 31 41 51
| | | | |
ATGGGCAAGG ATTTTCATGTC TAAAACACCA AAAGCAATGG CAACACAAGC CAAAATTGAC 60
AAATGGGATC TAATTAACCT AAAGAGCTTC TGACAGCAA AAGAACTAC CATCAGAGTG 120
AACAGACAAC CTCACAGATG GGAGAAAATT TTTGCAATCT ACTCATCTGA CGAAGGCTA 180
ATATCCAGAA TCTACAATGA ACCCAAACAA ATTTACAAGA AAAAAACAAA CAACCTATC 240
AACAAGTGGG CGAAGGATAT GAACAGACAC TTTCTCAAAG AAGACATTTA TGCAGCCAAC 300
AGACACATGA AAAAATGCTC ATCATCACTG GCCATCAGAG AAATGCAAAAT CAAAACACA 360
ACGAGATGCC ATCTCACACC AGTTAGAATG GCGATCATTA AAAAGTCAGG AAACAACAGA 420
ACTGCAGAAG AACAGCCAAA ACTGAGAAAG GAAGCAGTTG GATCTATTGA GATATTCCG 480
TTTGTGATG GACTGGACAT CACACTCATG ATCCTGGGTA TACTGGCATC ACTGGTCAAT 540
GGAGCCTGCC TTCTTTTAAT GCCACTGGTT TTAGGAGAAA TGAGTGATAA CCTTATTAGT 600
GGATGTCTAG TCCAACTTAA CACAACAAAT TATCAGAACT GTACTCAGTC TCAAGAGAAG 660
CTGAATGAAG ATATGACTCT GTTGACCTG TATTATGTTG GAATAGGTGT TGCTGCCTTG 720
ATTTTTGGTT ACATACAGAT TTCCTTGTGG ATTATAACTG CAGCAGGACA GACCAAGAG 780
ATTCGAAAAC AGTTTTTTTCA TTCAGTTTTG GCACAGGACA TCGGCTGGTT TGATAGCTGT 840
GACATCGGTG AACTTAACAC TCGCATGACA GATGACATTG ACAAATACG TGATGGTATT 900
GGAGATAAGA TTGCTCTGTT GTTCAAAC ATGTCTACTT TTTGATTGG CCTGGCAGTT 960
GGTTTGGTGA AGGCTGGAA ACTCACCTTA GTGACTCTAT CCAGTCTCC TCTTATAATG 1020
GCTTCAGCGG CAGCATGTTC TAGGATGGTC ATCTCATTTA CCAGTAAGGA ATTAAGTGCC 1080

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|            |             |            |            |             |             |      |
|------------|-------------|------------|------------|-------------|-------------|------|
| TATTCCAAAG | CTGGGGCTGT  | GGCAGAAGAA | GTCTTGTCAT | CAATCCGAAC  | AGTCATAGCC  | 1140 |
| TTTAGGGCCC | AGGAGAAAGA  | ACTTCAAAGG | TATACACAGA | ATCTCAAAGA  | TGCAAAGGAT  | 1200 |
| TTTGGCATAA | AAAGGACTAT  | AGCTTCAAAA | GTGTCTCTTG | GTGCTGTGTA  | CTTCTTATG   | 1260 |
| AATGGAACCT | ATGGACTTGC  | TTTTTGGTAT | GGAACTCTCT | TGATTCTTAA  | TGGAGAACCT  | 1320 |
| GGATATACCA | TCGGGACTGT  | TCTTGCTGTT | TTCTTTAGTG | TAATCCATAG  | CAGTTATTGC  | 1380 |
| ATTGGAGCAG | CAGTCCCTCA  | CTTTGAAACC | TTCGCAATAG | CCCGAGGAGC  | TGCCTTTCAT  | 1440 |
| ATTTTCCAGG | TTATTGATAA  | GAAACCCAGT | ATAGATAACT | TTTCCACAGC  | TGGATATAAA  | 1500 |
| CCTGAATCCA | TAGAAGGAAC  | TGTGGAATTT | AAAAATGTTT | CTTTCAAATTA | TCCATCAAGA  | 1560 |
| CCATCTATCA | AGATTCTGAA  | AGGTCTGAAT | CTCAGAATTA | AGTCTGGAGA  | GACAGTCGCC  | 1620 |
| TTGGTCCGTC | TCAATGGCAG  | TGGGAAGAGT | ACGGTAGTCC | AGCTTCTGCA  | GAGGTTATAT  | 1680 |
| GATCCGGATG | ATGGCTTTAT  | CATGGTGGAT | GAGAATGACA | TCAGAGCTTT  | AAATGTGCGG  | 1740 |
| CATTATCGAG | ACCATATTGG  | AGTGGTTAGT | CAAGAGCCTG | TTTTGTTCGG  | GACCACCATC  | 1800 |
| AGTAACAATA | TCAAGTATGG  | ACGAGATGAT | GTGACTGATG | AAGAGATGGA  | GAGAGCAGCA  | 1860 |
| AGGGAAGCAA | ATGCGTATGA  | TTTTATCATG | GAGTTTCTTA | ATAAATTTAA  | TACATTGGTA  | 1920 |
| GGGGAAAAAG | GAGCTCAAAAT | GAGTGGAGGG | CAGAAACAGA | GGATCGCAAT  | TGCTCGTGCC  | 1980 |
| TTAGTTCGAA | ACCCCAAGAT  | TCTGATTTTA | GATGAGGCTA | CGTCTGCCCT  | GGATTTCAGAA | 2040 |
| AGCAAGTCAG | CTGTTCAAGC  | TGCACTGGAG | AAGGATACCC | CCAGGTATTTC | ATTTTGA     | 2097 |

Seq ID NO: 172 DNA Sequence

Nucleic Acid Accession #: XM\_166496.1

Coding sequence: 378..773

|            |            |            |             |            |            |     |
|------------|------------|------------|-------------|------------|------------|-----|
| 1          | 11         | 21         | 31          | 41         | 51         |     |
|            |            |            |             |            |            |     |
| CCTAATTCCT | CTAATATCTC | TCTGTTTTCT | TTAGTGTAAAT | CCATAGCAGT | TATTGCATTG | 60  |
| GAGCAGCAGT | CCCTCACTTT | GAAACCTTCG | CAATAGCCCG  | AGGAGCTGCC | TTTCATATTT | 120 |
| TCCAGGTTAT | TGATAAGAAA | CCAGTATAG  | ATAACTTTTC  | CACAGCTGGA | TATAAACCTG | 180 |
| AATCCATAGA | AGGAACCTGT | GAATTAAAA  | ATGTTCTTTT  | CAATTTATCA | TCAAGACCCT | 240 |
| CTATCAAGAT | TCTGAAAGGT | CTGAATCTCA | GAATTAAGTC  | TGGAGAGACA | GTCCGCTTGG | 300 |
| TCGGTCTCAA | TGGCAGTGGG | AAGAGTACGG | TAGTCCAGCT  | TCTGCAGAGG | TTATATGATC | 360 |
| CGGATGATGG | CTTTATCATG | GTGGATGAGA | ATGACATCAG  | AGCTTTAAAT | GTGCGGCATT | 420 |
| ATCGAGACCA | TATTGGAGTG | GTTAGTCAAG | AGCCTGTTT   | GTTCCGGACC | ACCATCAGTA | 480 |
| ACAATATCAA | GTATGGACGA | GATGATGTGA | CTGATGAAGA  | GATGGAGAGA | GCAGCAAGGG | 540 |
| AAGCAAATGC | GTATGATTTT | ATCATGGAGT | TTCTTAATAA  | ATTTAATACA | TGCTAGCGGG | 600 |
| AAAAAGGAGC | TCAAATGAGT | CGAGGGCAGA | AACAGAGGAT  | CGCAATTGCT | CGTGCCTTAG | 660 |
| TTCGAAACCC | CAAGATTCTG | ATTTTAGATG | AGGCTACGTC  | TGCCCTGGAT | TCAGAAAGCA | 720 |
| AGTCAGCTGT | TCAAGCTGCA | CTGGAGAAGG | ATACCCCCAG  | GTATTTCATT | TGACCTAATT | 780 |
| TCACCTCAAG | TGGAGAATCG | CTGACCTTGA | ACCAGCGCCC  | TTTGACAGCT | CTGGCCCTTC | 840 |
| AAACCTCAC  | CTGACCTCCT | GCTGCCTATG | AGTACTG     |            |            | 878 |

Seq ID NO: 173 DNA Sequence

Nucleic Acid Accession #: XM\_166305.2

Coding sequence: 157..1104

|            |            |            |            |            |            |      |
|------------|------------|------------|------------|------------|------------|------|
| 1          | 11         | 21         | 31         | 41         | 51         |      |
|            |            |            |            |            |            |      |
| GAGAAGCCCT | CTTCCCTTTA | AAAAAAAAAA | AAAAAAGGCT | GCTTCTCGCA | GAGTGAAAG  | 60   |
| CCCCGGTCCC | CATCCCACCA | AAACCATTTG | ACAAGCAGGA | CAACGAAGAG | GCAGAAGGAT | 120  |
| CTGGGCTCTG | GCGCGACGCC | CCGGGGGACG | AGGCTCATGG | AGAAGTTTCG | GGCGGTGCTG | 180  |
| GACCTGCAGG | TCAAGCACCA | CAGCGCCTTG | GGCTACGGCC | TGGTAGCCCT | CTGACGGCGG | 240  |
| GGCGGGGAGC | GCATCTTCTC | CGCCGTGGCA | TTCCAGTGCC | CGTGCAGCGC | CGCCTGGAAC | 300  |
| CTGCCCTACG | GCCTGGTCTT | CTTGCTGGTG | CCGGCGCTCG | CGCTCTTCTT | CCTGGGCTAC | 360  |
| GTGCTGAGCG | CACGCACGTG | GCGCCTGCTC | ACCGATGCT  | GCTCCAGCGC | CGCGCGGAGT | 420  |
| TGCGGATCGG | CGCTGCGCGG | CTCCCTGGTG | TGCACGCAAA | TCAGCGCGCG | CGCGCGCTC  | 480  |
| GCGCCCTCA  | CCTGGGTGGC | CGTGGCGCTG | CTCGGGGCGC | CCTTTTACGA | GTGCGCGGCC | 540  |
| ACCGGGAGCG | CGGCCTTCGC | GCAGCGCCTG | TGCCCTCGGC | GCAACCGCAG | CTGCGCGCGG | 600  |
| GAGCTGCCCG | TGGTGCCGTG | CAACCAGGCC | AAGGCGTCGG | ACGTGCAGGA | CCTCCTGAAG | 660  |
| GATCTGAAGG | CTCAGTCCGA | GGTGTGGGGC | TGGATCTTGA | TAGCAGTTGT | TATCATCATT | 720  |
| CTTCTGATTT | TTACATCTGT | CACCCGATGC | CTATCTCCAG | TTAGTTTTCT | GCAGCTGAAA | 780  |
| TTCTGAAAAA | TCTATTTGGA | ACAGGAGCAG | CAGATCCTTA | AAAGTAAAGC | CACAGAGCAT | 840  |
| GCAACTGAAT | TGGCAAAAGA | GAATATTAAA | TGTTTCTTTG | AGGGCTCGCA | TCCAAAAGAA | 900  |
| TATAACACTC | CAAGCATGAA | AGAGTGGCAG | CAAATTTTAT | CACGTGTATC | TTTCAATCCG | 960  |
| AAGGGCCAGT | ACTACAGCAT | GTTGCACAAA | TATGTCAACA | GAAAAGAGAA | GACTCACAGT | 1020 |
| ATCAGGTCTA | CTGAAGGAGA | TACGGTGATT | CCTGTCTCTG | GCTTTGTAGA | TTCATCTGGT | 1080 |
| ATAAACAGCA | CTCCTGAGTT | ATGACCTTTT | GAATGAGTAG | AAAAAAAAT  | TGTTTTGAAT | 1140 |
| TATTGCTTTA | TTAAAAATA  | AACATTGGTA | TTTTT      |            |            | 1175 |

Seq ID NO: 174 DNA Sequence

Nucleic Acid Accession #: NM\_032211.5

Coding sequence: 152..2422

|             |             |             |            |            |            |     |
|-------------|-------------|-------------|------------|------------|------------|-----|
| 1           | 11          | 21          | 31         | 41         | 51         |     |
|             |             |             |            |            |            |     |
| GGCTGGGGGG  | CGCGGGGCGG  | GAGGCGGATA  | AAAAGGCCCC | AGGGCGCCCG | GGGAGGGAGC | 60  |
| CCGTTAGCGC  | TGCTCCGCGG  | CGGCGCCCGC  | CCAGCCCCGG | ACTGTCCGCG | CTCCATCTGG | 120 |
| TATCTTGGCC  | TCAGCTGTCC  | TTGAAGTCAC  | CATGGCGAGG | TCCCCACCAG | CCACCTCTTT | 180 |
| TCTGTTCCCTG | CTGCTGTCTAG | GCCAGCCCCC  | TCCCAGCAGG | CCACAGTCAC | TGGGACCCAC | 240 |
| TAAGCTCCGG  | CTGGTGGGCC  | CAGAGAGCAA  | GCCAGAGGAG | GGCCGCTCGG | AGGTGCTGCA | 300 |
| CCAGGGCCAG  | TGGGGCACCG  | TGTGTGATGA  | CAACTTTGCT | ATCCAGGAGG | CCACAGTGGC | 360 |
| TTGCCCGCCAG | CTGGGCTTGG  | AAGCTGGCCTT | GACCTGGGCC | CACAGTGCCA | AGTACGGCCA | 420 |
| AGGGGAGGGA  | CCCATCTGGC  | TGGACAAATGT | GCACTGTGTG | GGCACAGAGA | GCTCCTTGGA | 480 |
| CCAGTGCCTGG | TCTAATGGCT  | GGGGAGTCAG  | TGACTGCAGT | CACCTCAGAG | CTAGAGGGGT | 540 |
| GATATGCCAC  | CCCCGGCGCC  | ATCGTGGCTA  | CCTTTCTGAA | ACTGTCTCCA | ATGCCCTTGG | 600 |
| GCCCCAGGGC  | CGGCGGCTGG  | AGGAGGTGCG  | GCTCAAGCCC | ATCCTTGCCA | GTGCCAAGCA | 660 |
| GCATAGCCCA  | GTGACCGAGG  | GAGCCGTGGA  | GGTGAAGTAT | GAGGGCCACT | GCGCGCAGGT | 720 |
| GTGTGACCAG  | GGCTGGACCA  | TGAACAACAG  | CAGGGTGGTG | TGCGGGATGC | TGGGCTTCCC | 780 |
| CAGCGAGGTG  | CCTGTGACCA  | GCCACTACTA  | CAGGAAGTGC | TGGGATCTGA | AGATGAGGGA | 840 |



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|    |                                       |             |             |             |             |             |      |
|----|---------------------------------------|-------------|-------------|-------------|-------------|-------------|------|
| 5  | CCCTAAGTCT                            | AGGCTGAAGA  | GCCTGACGAA  | TAAGAACTCC  | TTCTGGATCC  | ACCAGTCCAC  | 900  |
|    | CTGCCTGGGG                            | ACAGAGCCCC  | ACATGGCCAA  | CTGCCAGSTG  | CAGGTGGCTC  | CAGCCCGGGG  | 960  |
|    | CAAGCTGGCG                            | CCAGCCTGCC  | CAGGTGGCAT  | GCATGCTGTG  | GTCAAGTGTG  | TGGCAGGGCC  | 1020 |
|    | TCACCTCCCG                            | CCACCGAAGA  | CAAAGCCACA  | ACGCAAAGGG  | TCCTGGGCAG  | AGGAGCCGAG  | 1080 |
|    | GGTGCCTCTG                            | CGCTCCGGGG  | CCCAGGTGGG  | CGAGGGCCGG  | GTGGAAGTGC  | TCATGAACCG  | 1140 |
|    | CCAGTGGGGC                            | ACGGTCTGTG  | ACCACAGGTG  | GAACCTCATC  | TCTGCCAGTG  | TCGTGTGTCT  | 1200 |
|    | TCAGCTGGGC                            | TTTGGCTCTG  | CTCGGGAGGC  | CCTCTTTGGG  | GCCCGGCTGG  | GCCAAGGGCT  | 1260 |
|    | AGGGCCCATC                            | CACCTGAGTG  | AGGTGCGCTG  | CAGGGGATAT  | GAGCGGACCC  | TCAGCGACTG  | 1320 |
| 10 | CCCTGCCCTG                            | GAAGGGTCCC  | AGAATGGTTG  | CCAACATGAG  | AATGCTGCTG  | CTCTCAGGTG  | 1380 |
|    | CAATGTCCCT                            | AACATGGGCT  | TTCAGAAATCA | GGTGCCTTGG  | GCTGGTGGGC  | GTATCCCTGA  | 1440 |
|    | GGAGGGGCTA                            | TTGGAGGTGC  | AGGTGGAGGT  | GAACGGGGTC  | CCACGCTGGG  | GGAGCGTGTG  | 1500 |
|    | CAGTGAAAAC                            | TGGGGGCTCA  | CCGAAGCCAT  | GGTGGCCTGC  | CGACAGCTCG  | GCCTGGGTTT  | 1560 |
|    | TGCCATCCAT                            | GCCTACAAGG  | AAACCTGGTT  | CTGGTCCGGG  | ACGCCAAGGG  | CCAGGAGGT   | 1620 |
| 15 | GGTGATGAGT                            | GGGGTGGCT   | GCTCAGGCAC  | AGAGCTGGCC  | CTGCAGCAGT  | GCCAGAGGCA  | 1680 |
|    | CGGGCCGGTG                            | CAGTGTCTCC  | ACGGTGGCGG  | GCGCTTCTTG  | GCTGGAGTCT  | CCTGCATGGA  | 1740 |
|    | CAGTGACACA                            | GACCTGGTGA  | TGAACGCCCA  | GCTAGTGCAAG | GAGACGGCCT  | ACTTGGAGGA  | 1800 |
|    | CCGCCCGCTC                            | AGCCAGCTGT  | ATTGTGCCCA  | CGAGGAGAAC  | TGCCTCTCCA  | AGTCTCGGGA  | 1860 |
|    | TCACATGGAC                            | TGGCCCTACG  | GATACCGCCG  | CCTATTGCGC  | TTCTCCACAC  | AGATCTACAA  | 1920 |
| 20 | TCTGGGCGCG                            | ACTGACTTTC  | GTCCAAAGAC  | TGGAGCGCAT  | AGCTGGGTTT  | GGCACCAGTG  | 1980 |
|    | CCACAGGCAT                            | TACCACAGCA  | TTGAGGTCTT  | CACCCACTAC  | GACCTCCTCA  | CTCTCAATGG  | 2040 |
|    | CTCCAAGGTG                            | GCTGAGGGCG  | ACAAGGCCAG  | CTTCTGTCTG  | GAGGACACAA  | ACTGCCCCAT  | 2100 |
|    | AGGACTGCAG                            | CGCGCTACG   | CATGTGCCAA  | CTTTGGAGAA  | CAGGGAGTGA  | CTGTAGGCTG  | 2160 |
|    | CTGGGACACC                            | TACCGGCATG  | ACATTGATTG  | CCAGTGGGTG  | GATATCACAG  | ATGTGGGCCC  | 2220 |
| 25 | CGGGAATTAT                            | ATCTTCCAGG  | TGATTGTGAA  | CCCCACTAT   | GAAGTGGCAG  | AGTCAGATTT  | 2280 |
|    | CTCCAACAAT                            | ATGCTGCAGT  | GCGCTGCAA   | GTATGATGGG  | CACCGGGTCT  | GGCTGCACAA  | 2340 |
|    | TCTGCCACAC                            | GGGAATTCT   | ACCCAGCCAA  | TGCAGAACTC  | TCCTGGAGC   | AGGAACAGCG  | 2400 |
|    | CTCCAGGAAC                            | AACTCATCT   | GAAGCTGTCA  | CTGCACACTC  | CTAGCTGCTG  | CCGATACACC  | 2460 |
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| 30 | CAGTGGCAAG                            | GGGCACCAAG  | AACTGTCTCA  | GGAAAGCCTT  | TGATGGCAAG  | ATCACAATTC  | 2580 |
|    | CAGATGGTAT                            | TGCTCCCTCA  | GGATGGCTCT  | GGGCCTGCCC  | CTAAGGGCCT  | TGGGCTATG   | 2640 |
|    | GAATATGTCC                            | TCCAGGCTTT  | GCTCAGCTGA  | GCTCCTCTTC  | TGTAAGGAAA  | CCCAGTCTATC | 2700 |
|    | CCTGAATCTT                            | GCCACAGAGA  | TCCGGGATTC  | AGGAGCTCTC  | AGTTTCTTAG  | GGATGGACTA  | 2760 |
|    | TGGCCCAAGT                            | CCCCATCTAA  | GTGGTGCTTT  | GCAAAATGTCT | TGGAGGAGTA  | TAGGACAGAG  | 2820 |
| 35 | GACCAAAATA                            | CACAGCAGGT  | AGTGTAGCT   | CTCTGCTAGG  | AGCTCAAAGC  | AACACAATTC  | 2880 |
|    | GTATCAAAAT                            | CACAATCTGC  | AGAGAAGCTG  | GTGGATCCAA  | TCCTTTCTTC  | ATCTGTTGTT  | 2940 |
|    | ATTTAGAACT                            | CACCTCTCAC  | ACTCTGTCT   | TTAGTGCTCT  | TACCTTTATC  | TTACCACACA  | 3000 |
|    | CATGGGTGTT                            | TCTATTATCC  | TTGGAAGCAC  | AGACCTCGGG  | CATCCCTTAT  | TTGCCTGATG  | 3060 |
|    | GGCCAAACAC                            | AAACAGTTACG | GAGTGCTTGA  | GAAGGGGCAA  | GTTCACAGA   | AATGGCCAGA  | 3120 |
| 40 | TAGGGCCTTC                            | CTACAGAGCA  | GCAAGAGTAG  | GCCAAGCAGA  | AAGACTGCTG  | AGGTAACACG  | 3180 |
|    | GACCCAGCAG                            | CCTGTACGGG  | CCTCTGCCAA  | GGAAATAATA  | TGSACCATTT  | ACCTGGCAGG  | 3240 |
|    | CAGTCTGCTC                            | TCTCTCAGGA  | TCACCACGCA  | TCTCAGGATT  | GGTCTAAACT  | TCAAGTCTCA  | 3300 |
|    | ACCAAGTGTC                            | TGAAGTGAAC  | TTTGCAATTGA | ATAAATTTTT  | GCCATGGAAA  | GAACATCAAA  | 3360 |
|    | CAAGCCACTC                            | ATCTCTACAG  | AGATAAGAAA  | ACAAGTTTGG  | CAGAGCAAGA  | GACAGAGAAC  | 3420 |
| 45 | CGTGGAGAAA                            | TCAGAAAGGG  | GAACAGTCAG  | TTTAGTTAAG  | GATGGAACCT  | GGGAAAGGCC  | 3480 |
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|    | TCTTCTTGAC                            | ATGATCTCTG  | ATCTTTTCTC  | CACGTAGACA  | CACCTTAAGTG | ATGATCCTTA  | 3600 |
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| 50 | Seq ID NO: 175 DNA Sequence           |             |             |             |             |             | 3665 |
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|    | TCAAAGTTGGC                           | CAAAATTGACA | AGAGCGAGAG  | GTATACTGCG  | TTCCATCCCG  | ACCGGGGGCC  | 120  |
|    | ACGGTACTGG                            | CGCCTGTTTC  | CCCCTCCTCG  | GCCCCCGAGA  | GCCAGGGTCC  | GCCTTCTGCA  | 180  |
|    | GGGTCTCCAG                            | CGCCCGCTC   | CAGGGCCGGG  | CTGACCCGAC  | TGCTGGCGC   | TTCATGGAGA  | 240  |
| 60 | ACTTCCAAAA                            | GGTGAAAAAG  | ATCGGAGAGG  | GCACTGACGG  | AGTTGTGTAC  | AAAGCCAGAA  | 300  |
|    | ACAAGTTGAC                            | GGGAGAGGTG  | GTGGCGCTTA  | AGAAAAATCCG | CCTGGACACT  | GAGACTGAGG  | 360  |
|    | GTGTGCCAAT                            | TACTGCCATC  | CGAGAGATCT  | CTCTGCTTAA  | GGAGCTTAAC  | CATCCTAATA  | 420  |
|    | TTGTCAAGCT                            | GCTGATGTTC  | ATTCACACAG  | AAAATAAACT  | CTACCTGGTT  | TTTGAATTTC  | 480  |
|    | TGCACCAAGA                            | TCTCAAGAAA  | TTCATGGATG  | CCTCTGCTCT  | CACCTGGCATT | CCTCTTCCCC  | 540  |
| 65 | TCATCAAGAG                            | CTATCTGTTT  | CAGCTGCTCC  | AGGGCCTAGC  | TTTCTGCCAT  | TCTCATCGGG  | 600  |
|    | TCCTCCACCG                            | AGACCTTAAA  | CCTCAGAAAT  | TGCTTATTAA  | CACAGAGGGG  | GCCATCAAGC  | 660  |
|    | TAGCAGACTT                            | TGGACTAGCC  | AGAGCTTTTG  | GAGTCCCTGT  | TGTACTTACT  | ACCCATGAGG  | 720  |
|    | TGGTGACCTT                            | GTGGTACCGA  | GCTCCTGAAA  | TCCTCCTGGG  | CTGCAAAATAT | TATTTCCACAG | 780  |
|    | CTGTGGACAT                            | CTGGAGCCTG  | GGCTGCATCT  | TTGCTGAGAT  | GGTGACTCGC  | CGGGCCCTAT  | 840  |
| 70 | TCCTCGGAGA                            | TTCTGAGATT  | GACCACTCTT  | TCCGGATCTT  | TCGGACTCTG  | GGGACCCAG   | 900  |
|    | ATGAGGTGGT                            | GTGGCCAGGA  | GTTACTTCTA  | TGCCGTGATTA | CAAGCCAAGT  | TTCCCCAAGT  | 960  |
|    | GGGCCCGGCA                            | AGATTTTAGT  | AAAGTTGTAC  | CTCCCCTGGA  | TGAAGATGGA  | CGGAGCTTGT  | 1020 |
|    | TATCGCAAAAT                           | GCTGCACATC  | GACCTTAACA  | AGCGGATTTT  | GGCCAAAGCA  | GCCCTGGCTC  | 1080 |
|    | ACCCCTTCTT                            | CCAGGATGTG  | ACCAAGCCAG  | TACCCCATCT  | TGCACTCTGA  | TAGCCTTCTT  | 1140 |
| 75 | GAAGCCCCCA                            | GCCTTAATCT  | CACCTCTTCC  | TCCAGTGTGG  | GCTTGACAGC  | GCTTGGCCTT  | 1200 |
|    | GGGCTATTTG                            | GACTCAGGTG  | GSCCCTCTGA  | ACTTGCCCTA  | AACACTCACC  | TCTAGTCTT   | 1260 |
|    | GGCCACCCAA                            | CTCTGGGAAT  | ACAGGGGTGA  | AAGGGGGGAA  | CCAGTGAAAA  | TGAAAAGGAG  | 1320 |
|    | TTTCAGTATT                            | AGATGCACAT  | AAGTTAGCCT  | CCACCAACCT  | TCCCCCCTTC  | TCTTAGTTAT  | 1380 |
|    | TGCTGAAGAG                            | GGTTGGTATA  | AAAATAATTT  | TAAAAAGGCC  | TTCTTACACG  | TTAGATTGTC  | 1440 |
| 80 | CGTACCAATC                            | TCTGAATGCC  | CCATAATTAT  | TATTTCCAGT  | GTTTGGGACT  | ACCAGGATCC  | 1500 |
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|    | AAAAAATAGA                            | TCCAATCAGT  | TTATACCCCTA | GTTAGTGTTC  | TGCTTACCTT  | AATAGGCTGG  | 1680 |
|    | CAGACTGAAG                            | ACTCAGCCCG  | GGTGGGGCTG  | CAGAAAAATG  | ATTGGCCCCA  | GTCCCTTGTG  | 1740 |
|    | TTGTCCCTTC                            | TACAGGCATG  | AGGAATCTGG  | GAGGCCCTGA  | GACAGGGATT  | GTGCTTCATT  | 1800 |

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CCAATCTATT GCTTCACCAT GGCCTTATGA GGCAGGTGAG AGATGTTTGA ATTTTCTCT 1860
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GACACITTTT CAGGGCTGTG ATTGAGTGAG GGCATGGGTA AAAATATTTC TTAAAAAGAA 2040
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Seq ID NO: 176 DNA Sequence

Nucleic Acid Accession #: NM\_052827.1

Coding sequence: 234..1028

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GGGTCTCCAG GCCCCGCTC CAGGGCCGGG CTGACCCGAC TCGCTGGGCG TTCTGAGAGA 240
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CAAGTTGACG GGGAGAGGTG GTGGCGCTTA AGAAAATCCG CTGGACACT GAGACTGAGG 360
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TAGCAGACTT TGGACTAGCC AGAGCTTTTG GAGTCCCTGT TCGTACTTAC ACCCATGAGG 720
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CCCCCTTCTC TTAGTTATTG CTGAAGAGGG TTGGTATAAA AATAATTTTA AAAAAGCCTT 1320
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CTTGGGGTTT TGTAATGACA GTGCTAAAAA AAAAAAGCA TTTTTTTT TAATTTGTCT 2100
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Seq ID NO: 177 DNA Sequence

Nucleic Acid Accession #: NM\_032738.1

Coding sequence: 118..1197

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GCCCAGATGC TACTGGCTGC CAGTITTGAG ACGCTGCAGT GTGAGGGACC TGCTGCACT 240
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PCT/US02/29560

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TTGGCGCTGG GCCTTCTGCA GCTGCTGCCC GGC CGCGCGCG CCGGCTCCCC 240  
GGACGCTCCC CGCCGCGCTC GGTCCGCTAT CTGCGCGCTG CCGCTGCCCTG CGACCTTCTC 300  
GGCTGCCTGG GTATGGTGAT CCGGTCCACC GTGTGGTTAG GATTCCCAA TTTTGTGAC 360  
AGCGTCTCGG ATATGAACCA CACGGAATTT TGGCCTGCTG CTTTCTGCGT GGGGAGTCCG 420  
ATGTGGATCC AGCTGTTGTA CAGTGCCTGC TTCTGGTGGC TGTTTTGCTA TGCAGTGGAT 480  
20 GCTTATCTGG TGATCCGGAG ATCGGCAGGA CTGAGCACCA TCCTGCTGTA TCACATCATG 540  
GCGTGGGGCC TGCCACCCTT GCTCTGTGTG GAGGGAGCGG CCATGCTCTA CTACCTTCC 600  
GTGTCCAGGT GTGAGCGGGG CCTGGACCAC GCCATCCCCC ACTATGTAC CATGTACCTG 660  
CCCTGCTGTC TGGTCTCGT GCGGAACCCC ATCCTGTTCC AAAAGACAGT GACTGCAGTG 720  
GCCTCTTTAC TTAAGGAAG ACAAGGCATT TACACGGAGA ACGAGAGGAG GATGGGAGCC 780  
25 GTGATCAAGA TCCGATTTTT CAAAATCATG CTGGTTTTAA TTATTTGTTG GTTGTCGAAT 840  
ATCATCAATG AAAGCCTTTT ATTCTATCTT GAGATGCAAA CAGATATCAA TGGAGTCTCT 900  
TTGAAACCTG TCAGAACTGC AGCCAAGACC ACATGGTTTA TTATGGGAAT CCTGAATCCA 960  
GCCCAGGGAT TTCTCTTGTC TTTGGCCTTC TACGCTGGA CAGGATGCAG CTTGGGTTTT 1020  
CAGTCTCCCA GGAAGGAGAT CCAGTGGGAA TCATGACCA CCTCGGCTGC TGAGGGGGCT 1080  
30 CACCATCCCC CACTGATGCC CCATGAAAC CCTGCTCCG GGAAGGTGTC TCAAGTGGGT 1140  
GGGCAGACTT CTGACGAAGC CCTGAGCATG CTGCTGAAG GTTCTGATGC CAGCACAATT 1200  
GAAATTCACA CTGCAAGTGA ATCTGCAAC AAAAATGAGG GTGACCTGTC TCTCCCAACC 1260  
CATGGAGACC TATGAAGGGG ATGTGCTGGG GGTCCAGACC CCATATTCTT CAGACTCAAC 1320  
AATTCTTGTT CTTTAGAACT GTGTCTCAC CTTCACAACA CTGCACTGCC GAAAGTGTAGC 1380  
35 GGGCCCCAAA CCTTGTCTCT ATCACCAGCT AGAGCTTCTT CCGAAGGGC CTTTAGGATA 1440  
GGAGAAAGGG TTCAATGACA CACGTGTGAG AATGGAAGAG CCCCCTCCAG ACCACTCTAC 1500  
AGCTGCTCTA GCCTTAGTTG CCACTAGGAA GTTTTCTGAG GCTGGCTGTA AAGTAAGTGT 1560  
AAGTCCACA TCCTTGGGGA AGTAGTTAAA TAAATAGTT ATGACTG 1607

40 Seq ID NO: 181 DNA Sequence  
Nucleic Acid Accession #: NM\_139317.1  
Coding sequence: 174..1070

1 11 21 31 41 51  
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45 CCCTGGGATA CTCCCCCTCC AGGGTGTCTG GTGGCAGGCC TGTGCTTATC CCTGCTGTCC 60  
CCAGGGTGGG CCCCAGGGGT CAGGAGCTCC AGAAGGGCCA GCTGGGCATA TTCTGAGATT 120  
GGCCATCAGC CCCCATTCTT GCTGCAAAAC TGGTCAGAGC CAGTGTTCCT TCCATGGGAC 180  
CTAAGACAG TGCCAAAGTG CTGCACCGTG GACCACAGCC GAGCCACTGG GCAGCCGGTG 240  
50 ATGGTCCCAC GCAGGAGCGC TGTGGACCCC GCTCTCTGGG CAGCCCTGTC CTAGGCCTGG 300  
ACACCTGCAG AGCCTGGGAC CACGTGGATG GGCAGATCCT GGGCCAGCTG CCGCCCTGTA 360  
CAGAGGAGGA AGAGGAGGAG GGCAGCGGGG CCACCTTGTC CAGGGGGCCT GCCTTCCCCG 420  
GCATGGGCTC TGAGGAGTTG CGTCTGGCCT CTTCTATGA CTGGCCGCTG ACTGTGAGG 480  
TGCCACCCGA GCTGCTGGCT GCTGCGCGCT TCTTCCACAC AGGCCATCAG GACAAGGTGA 540  
GGTGTCTTCT CTGCTATGGG GGCCTGCAGA GCTGGAAGCG CCGGGACGAC CCTTGGACGG 600  
55 AGCATGCCAA GTGGTTCCCC AGCTGTCAGT TCCTGCTCCG GTCAAAAGGA AGAGACTTTG 660  
TCCACATGTT GCAGGAGACT CACTCCCAGC TGCTGGGCTC CTGGGACCCG TGGGAAGAAC 720  
CGGAAGACGC AGCCCCCTGT GCCCCCTCCG TCCCTGCCTC TGGGTACCTT GAGCTGCCCA 780  
CACCCAGGAG AGAGGTCCAG TCTGAAAGTG CCCAGGAGCC AGGAGGGGTC AGTCCAGCCG 840  
60 AGGCCAGAG GGCCTGTGGG GTTCTTGAGC CCCCAGGAGC CAGGGATGTG GAGGCGCAGC 900  
TGCGCGGGCT GCAGGAGGAG AGGACGTGCA AGGTGTGCTT GGACCGCGCC GTGTCCATGC 960  
TCTTTGTGCC GTGCGGCCAC CTGGTCTGTG CTGAGTGTGC CCCCAGCCTG CAGCTGTGCC 1020  
CCATCTGCAG AGCCCCCGTC CGCAGCCGCG TGGGCACCTT CCTGTCTTAG GCCAGGTGCC 1080  
ATGGCGGGCC AGGTGGGCTG CAGAGTGGGC TCCCTGCCCC TCTCTGCCTG TTCTGAGACTG 1140  
75 TGTTCTGGGC CTGCTGAGGA TGGCAGAGCT GGTGTCCATC CAGCACTGAC CAGCCCTGAT 1200  
TCCCGACCA CCGCCAGGGG TGGAGAAGGA GGCCTTGCT TGGCGTGGGG GATGGCTTAA 1260  
CTGTACCTGT TTGGATGCTT CTGAATAGAA ATAAAGTGGG TTTTCCCTGG AGGTACCCAG 1320  
CA 1322

70 Seq ID NO: 182 DNA Sequence  
Nucleic Acid Accession #: NM\_022161.2  
Coding sequence: 174..1016

1 11 21 31 41 51  
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75 CCCTGGGATA CTCCCCCTCC AGGGTGTCTG GTGGCAGGCC TGTGCTTATC CCTGCTGTCC 60  
CCAGGGTGGG CCCCAGGGGT CAGGAGCTCC AGAAGGGCCA GCTGGGCATA TTCTGAGATT 120  
GGCCATCAGC CCCCATTCTT GCTGCAAAAC TGGTCAGAGC CAGTGTTCCT TCCATGGGAC 180  
CTAAGACAG TGCCAAAGTG CTGCACCGTG GACCACAGCC GAGCCACTGG GCAGCCGGTG 240  
ATGGTCCCAC GCAGGAGCGC TGTGGACCCC GCTCTCTGGG CAGCCCTGTC CTAGGCCTGG 300  
80 ACACCTGCAG AGCCTGGGAC CACSTGGATG GGCAGATCCT GGGCCAGCTG CCGCCCTGTA 360  
CAGAGGAGGA AGAGGAGGAG GGCAGCGGGG CCACCTTGTC CAGGGGGCCT GCCTTCCCCG 420  
GCATGGGCTC TGAGGAGTTG CGTCTGGCCT CTTTCTATGA CTGGCCGCTG ACTGTGAGG 480  
TGCCACCCGA GCTGCTGGCT GCTGCGGGCT TCTTCCACAC AGGCCATCAG GACAAGGTGA 540  
GGTGTCTTCT CTGCTATGGG GGCCTGCAGA GCTGGAAGCG CCGGAGAGAC CCCTGGACCG 600  
AGCATGCCAA GTGGTTCCTC AGCTGTCTAG TCTGTCTCCG GTCAAAAGGA AGAGACTTTG 660

**PCT/US02/29560**

|    | Seq ID NO: 183 DNA Sequence           |             |            |            |             |            |      |  |
|----|---------------------------------------|-------------|------------|------------|-------------|------------|------|--|
|    | Nucleic Acid Accession #: NM_021020.1 |             |            |            |             |            |      |  |
|    | Coding sequence: 112..1902            |             |            |            |             |            |      |  |
|    | 1                                     | 11          | 21         | 31         | 41          | 51         |      |  |
| 15 | 1                                     | 11          | 21         | 31         | 41          | 51         |      |  |
|    | TGAGGGCTTT                            | GCTATGACCT  | CAGTCCCCTC | ACGGAGCCAC | GACTGCCCTT  | TGCTGCCACA | 60   |  |
|    | GCCTTTCCAA                            | GACCTCTGCC  | GGCCCTTGCC | CATCTTCAGC | CCCAGATCAC  | CATGGGAGCA | 120  |  |
| 20 | GTCACTGACC                            | TCAATCTCCG  | CCACAGCTTC | CACAGCAAGC | CTCGCCGGGC  | TTCCGAGTAC | 180  |  |
|    | AAGCTGCACA                            | AGTCTCTCCA  | CCTCAAGAAG | CTCAACCGGT | ATTCCGACAG  | GCTGCTCGAG | 240  |  |
|    | TTTGGCTTCT                            | CCCCAGGACTC | CGGTCCACGG | AAGTCCAGCT | CCAAAATGGG  | CAAGAGCGAA | 300  |  |
|    | GACTTCTCTT                            | ACATCAAGGT  | CAGCCAGAAA | CGCCGGGGCT | CCCATCACCC  | AGATTACACG | 360  |  |
| 25 | GCACGTGTCA                            | CGCGGGATTT  | AAGGGGCCAG | GCTGGGTGTG | ACTTTGACCC  | GTCCACACCC | 420  |  |
|    | CCCAAGCTCA                            | TGGCCTTTCT  | CGGTGACGTA | GAAATTGGCT | CCGAGAAGGG  | TGCAGTGAAG | 480  |  |
|    | CCCAAGACCT                            | TCAGGCTGTG  | GCTGCCACGG | TCAGGAGCCA | TCCTGCATCT  | CTCCCCGGAG | 540  |  |
|    | AGTGCACGCT                            | ACCGACTGCA  | CCCCGGCCCT | CCAGACAAGC | CCAAAGGAGCA | GGAGCTGAAG | 600  |  |
|    | CTCGCCTGTG                            | GCTCTGGGGC  | GCTGTGCAGC | TCGGCCCGGA | ACTCCATGTC  | CAGCCTTGCC | 660  |  |
| 30 | ACACACAGCA                            | CCAGACGAGT  | CTACAGCTGC | GACCCGCTGG | TCACACCCGT  | GGGACCCACA | 720  |  |
|    | AGCGCTTTTG                            | GGGGCTCCGC  | CCACAACATC | ACCCAGGGCA | TCGTCTCTCA  | GGACAGCAAC | 780  |  |
|    | ATGATGAGCC                            | TGAAGGCTCT  | GTCTCTCTCC | GACGAGGTA  | GCAAGCTGGG  | CCACTCGAAC | 840  |  |
|    | AAGGCAGACA                            | AGGGCCCTCT  | GTGTGTCCGG | TGCCCATCTT | CCACGGAGCA  | GTGCGACGAT | 900  |  |
|    | CAGGAGCTGG                            | ACGAGAAGCT  | GTGGGCGGCT | GAGGGCCCTC | TCCAGAAGCT  | CAGAGCGCAG | 960  |  |
| 35 | TTTGAGGAGA                            | AGGAGCTTGC  | CTCAGCCTTG | GCTTACAGG  | AGCGCCCGCG  | GGCGTTCGAG | 1020 |  |
|    | GACGAGCTGG                            | AGGGCCCGGA  | GCCCAAAAGG | GGCAACAAGC | TCAAGCAGCT  | CTCGACGAAG | 1080 |  |
|    | AGCCACGCGC                            | CGCAGCAGST  | CCTGCACCTG | CAGGTACTGC | AGCTTCAGCA  | GGAGAAGCGG | 1140 |  |
|    | CAGCTCTCCG                            | AGGAGCTCGA  | GAGCCTCATG | AAGGAGCAGG | ACCTGTCTGA  | GACCAAGCTC | 1200 |  |
|    | AGGTCTCTAG                            | AGAGGGAGAA  | GACCAGCTTG | GGCCCGCGCG | TGGAGGAGAT  | CCAGTGGGAG | 1260 |  |
| 40 | GTGTGCCAGA                            | AGTCAAGCGA  | GATCTCCCTC | CTGAAGCAGC | AGCTGAAGGA  | GTCCACAGCG | 1320 |  |
|    | GAGGTGAACC                            | CCAAAGGCTAG | CGAGATCCCT | GGTCTCAAG  | CACAGCTGAA  | GGACACCGCG | 1380 |  |
|    | GGCAAGCTGG                            | AGGGCCCTGA  | GCTGAGGACC | CAGGACCTGG | AGGGCGCCCT  | GGCGACCAAG | 1440 |  |
|    | GGCCTGGAGC                            | TGGAGGCTCT  | TGAGAATGAG | CTGACGCGCA | AGAAGAAGCA  | GGCGGAGCTG | 1500 |  |
|    | CTGCGGAGAA                            | AGGTGAACCT  | GCTGGAGCAG | GAGCTGCAAG | AGCTGCGCGC  | CAGGACGCC  | 1560 |  |
| 45 | CTGGCCCGCG                            | ACATGGGGCC  | GCCACACCTT | CCGAGGACG  | TCCCTGCCCT  | GCAGCGGGAG | 1620 |  |
|    | CTGGAGCGCG                            | TGCGGGCGGA  | GCTGCGGGAG | GAGCGGCAAG | GCCATGACCA  | GATGTCCCTG | 1680 |  |
|    | GGCTTCCAGC                            | ATGAGCGGCT  | CGTGTGGAAG | GAGGAGAAGC | AGAAGGTGAT  | TCAGTACGAC | 1740 |  |
|    | AAACGATGCT                            | AGCAGAGACT  | CGTGSGCATG | TACCAAGCGA | ACACGCGCTT  | CAGAGAAGCC | 1800 |  |
|    | CTGCAGCAGC                            | TGCGACGTGG  | GTCGAGCGCC | GGGAGGCCCT | TGAGGGTTGA  | CTGTGAAGGG | 1860 |  |
| 50 | GCTGACATCC                            | CCTACGAGGA  | CATCATAGCC | ACTGAGATCT | GAGGGGCTGC  | CTGGGAAGGC | 1920 |  |
|    | GAGTCTGGGG                            | ACCTGGGACT  | GGGAGGAGCG | GCTCTCCCGT | GCATCCCCCC  | TCGCTCAGAA | 1980 |  |
|    | TTACAGACCC                            | CTGTGAGAGC  | GCCACTCCCT | GGGACACAGA | CCGAGGACCC  | GGGCGGGGAG | 2040 |  |
|    | GGCAGGATGG                            | CCTTTCTCTT  | CCCTCTCTAT | GTCCGAGTGC | TCCACGAGCT  | TGCAGCCACT | 2100 |  |
|    | CAGAGCTCAG                            | GCCTTGACTC  | CTCTGGCTTT | CCGAGGAGAT | GGGTCCAGGG  | GTCTGTCTGC | 2160 |  |
| 55 | TTTGTTTAAG                            | GGCTCCCTAA  | ACTTTGGCCT | TTGTTTGAAG | TAGATATCCT  | CTCCCCCTCC | 2220 |  |
|    | TCCAGGGGAG                            | GTGGCCACAG  | CAGAAGACAG | GGCTCCCCCT | CGCTTCTCAT  | CCCAACCTCT | 2280 |  |
|    | TTTTCCTCTT                            | GGACACATTA  | GATTGCTCTT | GAAATAGAAA | GAAAGCATAT  | ATGACACGAA | 2340 |  |
|    | GCCTTGGAA                             | CAGCCCATCT  | AGAACCTTGG | CTATTTCCTT | CTGGCCGACG  | AGGTGTAGGG | 2400 |  |
|    | GTGGAATGAG                            | CCCGCGGGAA  | GCTGGCTTTG | AAACCTCAGG | GCTGTCCCCG  | CCCCGCGAAG | 2460 |  |
|    |                                       |             |            |            |             |            |      |  |

WO 03/025138

PCT/US02/29560

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ACCATTGCTC TTAGTCCCAA GCTAGGCTTA AACCTGGAAT CTACAAGCCA AAAGTCCCTC 4080
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TTCCTTGGCG CTCAGCCCTC AGTTCCCTTA TTTCCACCAG GCCGTGCCTT GTTTGAGTTT 4200
TTCCTTCCCA TGAGACTGCC CCACGGAGAC AGAGGAAAGG GCTGGCTCCC CCTCCCAGG 4260
CTGGAGACCC CCCCCAACTC CAGGAAAGAG CAGTCAGAGT CCAGTGCTCT GCCTCAGACG 4320
TTGCCTGAGA AGAAGTGGCT GCCACACCCA GGGGAAGGCC CTGAGGCGGA GGCTGTGCTC 4380
CGCCATGGTG TCCCGGTACC TTCCATACAC AGAGGAGTGC AGCCTTCTCC ATATCTCCAT 4440
GGCCCTGTCC CAGGCGGGCC CAGATGTGTC CCCCCCAGGC CTTGTCTTAC GTCCAAGGTG 4500
GCAGATGTCT TCCCTGGGCT GCCACCAGCC CCGGCCCCAG AGTGGCCAC CGTGGCACTA 4560
GAATGCAAGT ATCCTGCGAC CTTGCAACCT CACCTTCTTG TGGGTGTCTT TTCCTGCCCT 4620
TGCCAAAAGC GCCCTCACTA TTCTTGGACC ATGCCAGATT CTGCCTCTCT GGAAGAGGGC 4680
TCTGGACAGC AGAAGCCTCC AAGCACAGAG CCTGGCCCCA GGCCCCAGAC AGGGTGGGCT 4740
TCCTGCCCTT CCCTCTGGGC ACGCCTGCTG GCCGACCCAC TGACCCACTC GGATGGACCA 4800
ACCTGCTCTG TCCCCAAAGG ACGCCTGCAG GAGAGAGCAG CACTCCGCAT CACCTCACCA 4860
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CTGGGATATG GGGGCACTCT TCCCCAGAG AGGCACTCAG TGAGCTCCT GTGCTGGGCC 5040
CCAGTCTGGG CCATCTCTTA GGTGAGACAG TTGCCCGAAA CTAAGCCAGG CCTGGCTGGA 5100
GGAGCAGCAG CTGTGGGAGA GGGATTTCCT TGCAGACCTC AAGCCATCAT GCGGTGGGTG 5160
CTGCCATGAC AGAGGCTGCA CCCCCTGGCC AGCGGGGCTG CTCACCCACC TCTTGTGCAA 5220
GGTGGCCTTT GTGCTGCGCC TGCAGGCAGA GCTTGGAGCC CCAGCAGAGG CAGGCTGGGA 5280
CGGACCAGCA TCTGGAAGAT GTACATAGTT ATTTTCTCT TTGTGGTTC TTGTTGGTT 5340
TGGTTTGCTT TTGACAGCTT CATTTTATTT TTGACGTAC TTTTGGCCA TGTAACATAT 5400
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AAAAA AAAA AAAAAA AA 5492

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Seq ID NO: 184 DNA Sequence  
Nucleic Acid Accession #: AF265577  
Coding sequence: 1..2193

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65  
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1 11 21 31 41 51
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AAAGACCTTC TTTCCAATGA AGACGCAGCT GATGATGCTT TTAAGACAAG TGAACATAAT 120
GTTGATGGCC AGGAAGAGAA AGATACAGAT GTTGAAGAAG GATCTGAAGT CGAAGATGAA 180
AGACCAGCTT GGAACAGTAA ACTACAATAC ATCCTGGCCC AAGTTGGATT TTCTGTAGGT 240
TTAGGAAATG TGTGGCGATT TCCATACCTA TGTGAGAAGA ATGGGGGCGG TGCATATCTT 300
TTACCATATT TAATACTACT TATGGTAATA GGTATTCCTT TTTTTCCTT GGAACCTCTT 360
GTGGGTCAAA GAATTTCGGG AGGCAGCATT GGTGTATGGA ATTACATAAG CCTTAAACTG 420
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TCTGCCACCA CCTATTACTG GTACAGGGAA GCACCTGAATA TTTCAAGTTC CATTTCTGAA 660
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TTGGCTATGA TCAAAGGCAT TCAGTCTTCT GGAATAATCA TATATTTTAG TTCTCTGTTT 780
CCATATGTGG TACTTATTTG CTTCCTCATC AGAGCATTC TTTTAAATGG TTCAATTGAT 840
GGCATTCGCC ACATGTTTAC CCCTAAGCTT GAAATAATGC TGGAGCCCAA GGTCTGGAGA 900
GAAGCTGCTA CTCAGTGTGT CTTTGCCTTA GGTCTGGGAT TTGGTGGTGT CATTGCCCTT 960
TCAAGCTACA ACAAGAGAGA CAACAACCTG CACTTTGATG CTGTCTCTGT GTCTTCATC 1020
AATTTTTTCA CTCTCTGCTT GGCAACATTG GTGGTGTGTT CAGTCTCTGG CTTCAAAGCA 1080
AATGTATATA ATAGAAAAAT CATTACACAA AATTACAGAG CGATCATGAA ATTTTTGAAA 1140
ATGGGGAACA TTAGTCAGGA TATTATTCCC CATCATATCA ACCTTTCAAC TGTACTGCA 1200
GAAGATTATC ATTTAGTTTA TGACATCAT CAAAAAGTGA AAGAAGAAGA GTTTCCTGCT 1260
CTTCATCTCA ATTCTGTAA AATTGAAGAA GAGCTAAATA AAGCTGTTCA GGGGACCGG 1320
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GTGATGTTT TCCTCATGCT GGTCAATCTA GGCCTTGGCA GTATGTTTGG AACCATTGAA 1440
GGGATTTTGA CGCCTATTGT GGACACTTTC AAAGTGAGGA AAGAAATTCT TACTGTATC 1500
TGTTGCTTTC TGGCATTTTG TATTGGCCTG ATATTGTGC AACGCTCTGG AATTACTTT 1560
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AATATTGCTT TTATGCTTTT TTATGGCATA GATAAGTTTA TGAAGACCTT AAAAGATATG 1680
CTGGGCTTTG CTCCAGCAG ATATTACTAC TATATGTGGA AATATATTTC TCCTCTAATG 1740
CTATTATCAT TGCTAATAGC TAGTGTGTG AATATGGGAT TAAGTCTCTC TGGCTATAAC 1800
GCATGGATTG AAGATAAGGC ATCTGAAGAA TTTCTGAGCT ATCCAACATG GGGACTGGTT 1860
GTTTGTGCT CTCTGGTTGT CTTTGCATA CTCCCAGTCC CTGTAGTTT CATGTTCGT 1920
CGCTTCAACC TTATAGATGA TAGTCTGGT AATTTAGCAT CTGTGACCTA TAAGAGAGGA 1980
AGGGTCTGA AAGAGCCTGT GAACTTAGAG GCGATGATA CAAGCCTCAT TCACGGAAAA 2040
ATACCGAGCG AGATGCCATC TCCAAATTTT GGTAAAAATA TTTATCGAAA ACAGAGTGGA 2100
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ATTATGCCAG ATATGCCAGA ATCTGATTG TAG 2193

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Seq ID NO: 185 DNA Sequence  
Nucleic Acid Accession #: NM\_031945.1  
Coding sequence: 65..1132

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CCTCTCTGTG CACAGGCCAC CCACCTCAGG CTGCCTAGGT CCAGTGCCCA GGGAGGACCA 180
GGCGGAGGCG TGGGCTGCA GCTGCTGTCC CCGGAGACC AAGCACCAGG CCTTGAGTGG 240
CACTCCCAAC AAAGGACCA GCCCTTCCCT CTCCCAGGG AGCAGCTGCG TCAAGTATCT 300
GATCTTCTC TCCAACCTC CTTTCTCCCT GCTGGGGCTG CTGGCCCTGG CCATCGGGCT 360
CTGGGGCTG GCTGTCAAG GGTCTCTGGG AAGTGTATCT GGGGGGCCCC TGCCACAGA 420
CCCATGTG GGGCTGGCAC TGGGAGGGCT GGTGGTCAGC GCAGCGAGCC TGGCTGGCTG 480
CCTGGGCGCC CTCTGCGAGA ACACCTGCCT GTTACGTGGC TTCTCGGGG GCATCCTTGC 540
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WO 03/025138

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GGACTGGCAG CAGAACCTGT ACTTTAACTG CAGCTCCCCC GGGGTGCAGG CTTGCAGCCT 780
TCCC GCCCTCC TGCTGCATCG ACCCCCGCGA AGATGGAGCC TCTGTCAACG ACCAGTGGCG 840
CTTCGGGGTC TTGCGGCTGG ATGCGGACGC AGCTCAGAGA GTGGTGTACC TGGAGGGCTG 900
CGGCCCGCGC CTCGCGCGGT GGCTGCGCGC GAACCTGGCT GCCTCGGCGC GCTACGCAAT 960
CGCGGTGGTG CTGCTGCAGG GGGCGGAGCT CCTGCTGGCC GCCCGGCTAC TCGGGGCCCT 1020
CGCTGCCCGC AGTGGGGCGG CSTACGGCCC CGGAGCGCAC GGGGAGGACC GCGCTGGCCC 1080
CCAGAGCCCC AGCCCCGGCG CCCCGCCCCG TGCCAAACCC GCCCGGGGCT GAGCGCACGC 1140
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CGCTGCCTGC GCCCGCGCGC CCGCTGATT TCGCTCGGGC TTCGGGTGAC TTCGCCGAG 1260
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GGCGCCCGCG GAAGCCACGG GACTGGCGGG AGGAGCACGC GGGGCGGAG GAAATCCTGG 1380
AGCTGACCTT CACTTCGAG CCCCCACTCC CACCCAGGCC GCACAGTTC CACCTCCTGG 1440
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TTCATACAGT AAAGACACCA ATCTTCAAAA AAAAAAAAAA A 1601

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Seq ID NO: 186 DNA Sequence  
Nucleic Acid Accession #: AF475085.1  
Coding sequence: 54..1715

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ATCTTGAGGT AGTTGTGAGT AGCTGCAGCT CTCATGAAGA GGAAAAATCGC TGCAATTTTA 120
ACCAGCAAAC ATCTCCATCT GAGGAGCTTC TATTAGAAGA CCAGATGAGG CGAAAAACTCA 180
AATTTTTTTT CATGAATCCC TGTGAGAAAT TCTGGGCTCG AGGTAGAAAA CCATGGAAAC 240
TTGCCATACA AATTCTAAAA ATTGCAATGG TGAATATCCA GCTGGTCTTA TTTGGGCTAA 300
GTAACAGATG GGTGGTAGCT TTCAAGGAAG AGAATACTAT AGCATTCAAA CACCTTTTCC 360
TAAAGGATA TATGGACCGA ATGGATGACA CATATGCAGT GTACACACAA AGTGACGTGT 420
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ACAAGCGAGG AACCATCTAC CCTGGAATG ATACCTTGA CATCGATCCA GAAATTGAAA 600
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ATTACATGAT GATCTTTGAT GCCITTGTCA TTCTGACTTG CTGGTTTCA TTAATCCTCT 960
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TCGTGTGGCT TGGAGTCATC CGATACCTCG GTTTCTTTGC AAAGTACAAC CTCCTCATTT 1260
TGACCCCTCA GGCAGCGCTG CCCAATGTCA TCAGGTTCTG CTGCTGTGCA GCTATGATTT 1320
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Nucleic Acid Accession #: NM\_000114.1  
Coding sequence: 194..910

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|    | AACATCCAGC  | CTGTGGGCAC  | ACCATTTGAA | GAGCTCCCCT | CTGAGCGCCC  | CACCCCTGGAG | 1740 |
|    | CCAGCCACCA  | GCCCCCTGGT  | GGTGACAGAA | GTCCCGGAAG | AGCCCAGCCA  | GAGAGCCACC  | 1800 |
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| 35 | GCACAGACAC  | CATTGCCCAC  | ACTATCACCA | TATTTTCACT | CAGTCACACA  | CAAGACAAAA  | 3420 |
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| 45 | AGAGGGGGAG  | GTTTGGGGCC  | AGACCCCCAC | TAGCTGGGAG | CCTGGGGGCT  | CCTCTAAGGC  | 4020 |
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PCT/US02/29560

Seq ID NO: 190 DNA Sequence  
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| 10 | GAGTAAACAT | GTATGGAAAT | TATTCTCACT | TCATGAAGTT | TCCCGCAGGC | TATGGAGGCT | 240  |
|    | CCCTGGGCA  | CACTGGCTCT | ACATCCATGA | GCCCATCAGC | AGCCTTGTC  | ACAGGGAAGC | 300  |
|    | CAATGGACAG | CCACCCGAGC | TACACAGATA | CCCCAGTGAG | TGCCCCACGG | ACTCTGAGTG | 360  |
|    | CAGTGGGGAC | CCCCCTCAAT | GCCCTGGGCT | CTCCATATCG | AGTCATCACC | TCTGCCATGG | 420  |
|    | GCCACCCCTC | AGGAGCACTT | GCAGCGCCTC | CAGGAATCAA | CTTGGTTGCC | CCACCCAGCT | 480  |
| 15 | CTCAGCTAAA | TGTGGTCAAC | AGTGTGAGCA | GTTGAGAGGA | CATCAAGGCC | TTACCAAGGC | 540  |
|    | TTCCCGGGAT | TGGAACAATG | AATACCCAT  | CCACCAAGCC | CGGATCTCTG | GTTAAACACA | 600  |
|    | TCTGTGCCAT | CTGTGGAGAC | AGATCTCCAG | GAAAGCACTA | CGGGGTATAC | AGTTGTGAAG | 660  |
|    | GCTGCAAAAG | GTTCTTCAAG | AGGACGATAA | GGAAGGACCT | CATCTACACG | TGTGGGATA  | 720  |
|    | ATAAAGACTG | CCTCATTGAC | AAGCGTCAGC | GCAACCGCTG | CCAGTACTGT | CGCTATCAGA | 780  |
| 20 | AGTGCCTTGT | CATGGGCATG | AAGAGGGAAG | CTGTGCAAGA | AGAAAGACAG | AGGAGCCGAG | 840  |
|    | AGCGAGCTGA | GAGTGAGGCA | GAATGTGCTA | CCAGTGGTCA | TGAAGACATG | CCTGTGGAGA | 900  |
|    | GGATTCTAGA | AGCTGAACCT | GCTGTGAAC  | CAAAGACAGA | ATCCTATGGT | GACATGAATA | 960  |
|    | TGGAGAATCT | GACAAATGAC | CCTGTTACCA | ACATATGTCA | TGCTGCTGAC | AAGCAGCTTT | 1020 |
|    | TCACCTCTGT | TGAATGGGCC | AAGCGTATTC | CCCACCTCTC | TGACCTCACC | TTGGAGGACC | 1080 |
| 25 | AGGTCTATTT | GCTTCGGGCA | GGGTGGAATG | AATTGCTGAT | TGCTCTTTC  | TCCACCCGCT | 1140 |
|    | CAGTTTCCGT | GCAGGATGGC | ATCCTTCTGG | CCACGGGTTC | ACATGTCCAC | CGGAGCAGTG | 1200 |
|    | CCACAGTGT  | TGGGGTGGCG | TCCATCTTTG | ACAGAGTCTT | AACGTAGCTG | GGTTCCAAAA | 1260 |
|    | TGAAGACAT  | GCAGATGGAC | AAGTCGGAAC | TGGGATGGCT | GCGAGCCATT | GTACTCTTTA | 1320 |
|    | ACCCAGATGC | CAAGGGGCTG | TCCAACCCCT | CTGAGGTGGA | GACTCTGCGA | GAGAAGGTTT | 1380 |
| 30 | ATGCCACCTT | TGAGCCCTAC | ACCAAGCAGA | AGTATCCGGA | ACAGCCAGGC | AGGTTTGCCA | 1440 |
|    | AGCTGCTGCT | GCGCTCCCA  | GCTCTGCGTT | CCATTGGCTT | GAAATGCCTG | GAGCACCTCT | 1500 |
|    | TCTTCTTCAA | GCTCATCGGG | GACACCCCA  | TTGACACCTT | CCTCATGGAG | ATGTTGGAGA | 1560 |
|    | CCCCTGTGCA | GATCACCTGA | GCCCCACGAG | CCACAGCCTC | CCCACCCAGG | ATGACCCCTG | 1620 |
|    | GGCAGGTGTG | TGTGGACCCC | CACCTGCAC  | TTCTCTCCAC | CTCCACCCCT | GACCCCTTTC | 1680 |
| 35 | CTGTCCCAAA | AATGTGATGC | TTATAATAAA | GAAAACCTTT | CTACAAAAAA | AAAAAAAAAA | 1740 |
|    | AA         |            |            |            |            |            | 1742 |

Seq ID NO: 191 DNA Sequence  
Nucleic Acid Accession #: NM\_002185.1  
Coding sequence: 23..1402

|    |            |            |            |            |            |            |      |
|----|------------|------------|------------|------------|------------|------------|------|
| 40 | 1          | 11         | 21         | 31         | 41         | 51         |      |
|    |            |            |            |            |            |            |      |
|    | CTCTCTCTCT | ATCTCTCTCA | GAATGACAAT | TCTAGGTACA | ACTTTTGGCA | TGGTTTTTTC | 60   |
|    | TTTACTTCAA | GTCGTTTCTG | GAGAAAGTGG | CTATGCTCAA | AATGGAGACT | TGGAAGATGC | 120  |
| 45 | AGAAGTGGAT | GACTACTCAT | TCTCATGCTA | TAGCCAGTTG | GAAGTGAATG | GATCGCAGCA | 180  |
|    | TTCACTGACC | TGTGCTTTTG | AGGACCCAGA | TGTCAACACC | ACCAATCTGG | AATTTGAAAT | 240  |
|    | ATGTGGGGCC | CTCGTGGAGG | TAAAGTGCC  | GAATTTCAAG | AACTACAAG  | AGATATATT  | 300  |
|    | CATCGAGACA | AAGAAATTCT | TACTGATTGG | AAAGAGCAAT | ATATGTGTGA | AGGTGGAGA  | 360  |
| 50 | AAAGAGTCTA | ACCTGCAAAA | AAATAGACCT | AACCACTATA | GTAAACCTG  | AGGCTCTTT  | 420  |
|    | TGACCTGAGT | GTCATCTATC | GGGAAGGAGC | CAATGACTTT | GTGGTGACAT | TTAATACATC | 480  |
|    | ACACTTGCAA | AAGAAGTATG | TAAAAGTTTT | AATGCATGAT | GTAGCTTACC | GCCAGGAAAA | 540  |
|    | GGATGAAAC  | AAATGGAGCG | ATGTGAATTT | ATCCAGCACA | AAGCTGACAC | TCCTGCAGAG | 600  |
|    | AAAGCTCCAA | CCGGCAGCAA | TGTATGAGAT | TAAAGTTGGA | TCCATCCCTG | ATCACTATT  | 660  |
| 55 | TAAAGGCTTC | TGGAGTGAAT | GGAGTCCAAG | TTATTACTTC | AGAACTCCAG | AGATCAATAA | 720  |
|    | TAGCTCAGGG | GAGATGGATC | CTATCTTACT | AACCATCAGC | ATTTTGAGTT | TTTTCTCTGT | 780  |
|    | CGCTCTGTTG | GTCATCTTGG | CCTGTGTGTT | ATGGAAGAAA | AGGATTAAAG | CTATCGTATG | 840  |
|    | GCCCACTCTC | CCCGATCAT  | AGAAGACTCT | GGAACATCTT | TGTAAGAAAT | CAAGAAAAAA | 900  |
|    | TTTAAATGTC | ACTTTCAATC | CTGAAAGTTT | CCTGGACTGC | CAGATTCTA  | GGGTGGATGA | 960  |
|    | CATTCAAGCT | AGAGATGAAG | TGGAAGGTTT | TCTGCAAGAT | ACGTTTCTCT | AGCAACTAGA | 1020 |
| 60 | AGAATCTGAG | AAGCAGAGGC | TTGGAGGGGA | TGTGCAGAGC | CCCACTGCC  | CATCTGAGGA | 1080 |
|    | TGTAGTCGTC | ACTCCAGAAA | GCTTTGGAAG | AGATTCTACC | CTCACATGCC | TGGCTGGGAA | 1140 |
|    | TGTCAAGTCA | TGTACGCCC  | CTATTCTCTC | CTCTCCAGG  | TCCCTAGACT | GCAGGAGAG  | 1200 |
|    | TGGCAAGAAT | GGGCCTCATG | TGTACCAGGA | CCTCTGCTT  | AGCCTTGGGA | CTACAAACAG | 1260 |
|    | CACGCTGCCC | CCTCCATTTT | CTCTCCAATC | TGGAATCCTG | ACATTGAACC | CAGTTGCTCA | 1320 |
| 65 | GGGTGAGCCC | ATTCTTACTT | CCCTGGGATC | AAATCAAGAA | GAAACATATG | TCACCATGTC | 1380 |
|    | CAGCTTCTAC | CAAAACCAAT | GAAAGTGAAG | AAACCCAGAC | TGAACCTACC | GTGAGCGACA | 1440 |
|    | AAGATGATTT | AAAAAGGAAG | TCTAGAGTTC | CTAGTCTCCC | TCACAGCACA | GAGAAGACAA | 1500 |
|    | AATTAGCAAA | ACCCCACTAC | ACAGTCTGCA | AGATTCTGAA | ACATTGCTTT | GACCACTCTT | 1560 |
|    | CCTGAGTTCA | GTGGCACTCA | ACATGAGTCA | AGAGCATCCT | GCTTCTACCA | TGTGGATTTC | 1620 |
| 70 | GTCACAAGGT | TTAAGGTGAC | CCAATGATTC | AGCTATTT   |            |            | 1658 |

Seq ID NO: 192 DNA Sequence  
Nucleic Acid Accession #: NM\_006272.1  
Coding sequence: 73..351

|    |            |            |             |            |            |            |     |
|----|------------|------------|-------------|------------|------------|------------|-----|
| 75 | 1          | 11         | 21          | 31         | 41         | 51         |     |
|    |            |            |             |            |            |            |     |
|    | TGCCGCCAG  | GACCCGAGC  | AGAGACGAGC  | CCTGCAGCAA | GGAGACCAGG | AAGGGGTGAG | 60  |
|    | ACAAGGAAGA | GGATGTCTGA | GCTGGAGAAG  | GCCATGGTGG | CCCTCATCGA | CGTTTCCAC  | 120 |
|    | CAATATTCTG | GAAAGGAGGG | AGACAAGCAC  | AAGCTGAAGA | AATCCGAAC  | CAAGGAGCTC | 180 |
| 80 | ATCAACAATG | AGCTTTCCCA | TTTCTTAGAG  | GAAATCAAAG | AGCAGGAGGT | TGTGGACAAA | 240 |
|    | GTCAATGAAA | CACTGGACAA | TGATGGAGAC  | GCGGAATGTG | ACTTCCAGGA | ATTCATGGCC | 300 |
|    | TTTGTGCTCA | TGGTTACTAC | TGCCCTGCCAC | GAGTTCTTTG | AACATGAGTG | AGATTAGAAA | 360 |
|    | GCAGCCAAAC | CTTTCTGTGA | ACAGAGACGG  | TCATGCAAGA | AAGCAGACAG | CAAGGGCTTG | 420 |
|    | CAGCTAGTA  | GGAGCTGAGC | TTTCCAGCCG  | TGTTGTAGCT | AATTAGGAAG | CTTGATTTCG | 480 |

WO 03/025138

PCT/US02/29560

5  
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15  
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35  
40  
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70  
75  
80

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TTTGTGATTG AAAAATTGAA AACCTCTTTC CAAAGGCTGT TTTAACGGCC TGCATCATTG 540
TTTCTGCTAT ATTAGGCCCTG TGTGTAAGCT GACTGGCCCC AGGGACTCTT GTTAAACAGTA 600
ACTTAGAGCT CAGGCTCTCAG TGATAAAGCG TGCACCGTGC AGCCCGCCAT GGCCGTGTGAG 660
ACCCTAAACC GGAGGGAAAC CTGACTACAG AAATTACCCC GGGGCACCCCT TAAAACTTCC 720
ACTACCTTTA AAAACAAAG CCTTATCCAG CATTATTGGA AAACACTGCT GTTCTTTAAA 780
TGCGTTCCTC ATCCATGCAG ATAACAGCTG GTTGGCCGGT GTGGCCCTGC AAGGGCGTGG 840
TGGCTTCGGC CTGCTTCCCG GGATGCGCCT GATCACCAGS TGAACGCTCA GCGCTGGCAG 900
CGTCTCGGAA AAAGCAACTC CATCAGAACT CGCAATCCGA GCCAGCTCTG GGGGCTCCAG 960
CGTGGCCTCC GTGACCCATG CGATTCAAGT CGCGGCTGCA GGATCCTTGC CTCCAACGTG 1020
CCTCCAGCAC ATGCGGCTTC CGAGGGCACT ACCGGGGGCT CTGAGCCACC GCGAGGGCCT 1080
GCGTTCAATA AAAAG

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Seq ID NO: 193 DNA Sequence  
Nucleic Acid Accession #: NM\_006157.1  
Coding sequence: 103..2535

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1      11      21      31      41      51
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TAGCAAGTTT GGGCGCTCCA AGCCAGSGCG GCCTCAGGAT CCAGGCTCAT TTGCTTCCAC 60
CTAGCTTCGG TGCCCCCTGC TAGGCGGGGA CCTTCGAGAG CGATGCCGAT GGATTGTGATT 120
TTAGTTGTGT GGTTCCTGTG GTGCACTGCC AGGACAGTGG TGGGCTTTGG GATGGACCCT 180
GACCTTCAGA TGGATATCGT CACCGAGCTT GACCTTGTGA ACACCACCCCT TGGAGTTGCT 240
CAGGTGTCTG GAATGCACAA TGCCAGCAAA GCATTTTTAT TTCAAGACAT AGAAAGAGAG 300
ATCCATGCAG CTCCTCATGT GAGTGAGAAA TTAATTCAAG TGTTCAGAA CAAGAGTGAA 360
TTCAACATTT TGGCCACTGT ACAGCAGAAG CCATCCACTT CAGGAGTGAT ACTGTCCATT 420
CGAGAACTGG AGCAGAGCTA TTTTGAAC TGAGAGCAGT GCCTGAGGGA TGAGATTCCG 480
TATCACTACA TACACATGG GAAGCCAAAG ACAGAGGCAC TTCCTTACCG CATGGCAGAT 540
GGACAACTGC ACAAGTGGC ACTGTCAGTT AGCGCCTCTC ATCTCTGCTC CCATGTCCGAC 600
TGTAACAGSA TTTATGAGCG TGTGATAGAC CCTCCAGATA CCAACCTTCC CCCAGGAATC 660
AATTTATGSC TTTGGCCAGCG CAACCAAAG CATGGCTTAT TCAAAGGGAT CATCCAAGAT 720
GGGAAGATGA TCTTTATGCC GAATGGATAT ATAACACAGT GTCCAAATCT AAATCACACT 780
TGCCCAACCT CGAGTGATT CTAAAGCCTG GTGCAAGGAA TAATGGATT ACAAGAGCTT 840
TTGGCCCAAG TGAAGTCAA ACTAAATTAT GCAGAGACAA GACTTAGTCA ATTGAAAAAC 900
TGTCAATTGT AGAAGACTTG TCAAGTGAGT GGACTGCTCT ATCGAGATCA AGACTCTTGG 960
GTAGATGGTG ACCATTGCAG GAAGTGCAGT TGCAAAAGTG GTGCCGTGGA ATGCCGAAGG 1020
ATGTCTCTGC CCCCTCTCAA TTGCTCCCCA GACTCCCTCC CAGTACACAT TGCTGGCCAG 1080
TGCTGTAAAG TCTGCGGACC AAAATGTATC TATGGAGGAA AAGTCTTGC AGAAGGCCAG 1140
CGGATTTTAA CCAAGAGCTG TCGGGAATGC CGAGGTGGAG TTTTAGTAAA AATTACAGAA 1200
ATGTGTCTCT CTTTGAAC TGTCAGAAAAG GATCACATTC TTCTGAGAA TCAGTGTCTG 1260
CGTGTCTGTA GAGGTATATA CTTTGTGCA GAAGGACCTA AATGTGGTGA AAACCTCAGAG 1320
TGCAAAACTG GGAATACAAA AGCTACTTGT GAGTGCAAGA GTGGTTACAT CTCTGTCCAG 1380
GGAGACTCTG CTAAGTGAAG AGATATTGAT GAGTGTGCAG CTAAGATGCA TTAAGTGCAT 1440
GCCAATAGTG TGTGTGTCAA CCTTCCTGGG TTATATGCTG GTGACTGTGT CCCAGGATAC 1500
ATTGCTGTGG ATGACTTCTC TTGTACAGAA CACGATGAAT GTGGCAGCGG CCAGCACAA 1560
TGTGATGAGA ATGCCATCTG CACCAACACT GTCCAGGACG ACAGCTGCAC CTGCAAAACG 1620
GGCTACGTGG GGAACGGGAC CATCTGCAGA GCTTCTGTG AAGAGGGCTG CAGATACGGT 1680
GGAACGTGTG TGGCTCCCAA CAAATGTGTC TGTCCATCTG GATTACAGG AAGCCACTGC 1740
GAGAAAGATA TTGATGAATG TTCAGAGGGA ATCATTTGAGT GCCACAAACA TTCCCGCTGC 1800
GTAAACCTGC CAGGTGGGTA CCACTGTGAG TGCAGAAAGG GTTTCATGTA CGATGGGACC 1860
TATTACTGTG CCGGGGAGTC CTGTATTGAC ATTGATGAAT GTGCCCTAAG AACTCACACC 1920
TGTTGGAAGC ATTTGCTGCT CATCAACCTG GCAGGGGGTT TTGACTGTCT CTGCCCTCT 1980
GGGCCCTCTC GCTCTGTGTA CTGCTCTCAT GAAGGGGGGC TGAAGCACAA TGGCCAGGTG 2040
TGGACCTTGA AAGAAGACAG GTGTTCTGTC TGCTCCTGCA AGGATGGCAA GATATTCTGC 2100
CGACGGACAG TCTGTGATT CCAGAATCCA AGTGCTGACC TATTCTGTTG CCAGAAATGT 2160
GACACAGAG TCACAAGTCA ATGTTTAGAC CAAATGTGTC ACAAGCTGTA TCGAAGTGGA 2220
GACAATTGGA CCCATAGCTG TCAGCAGTGT CGGTGTCTGG AAGGAGAGGT AGATTGCTGG 2280
CCACTCACTT GCCTCAACTT GAGCTGTGAG TATACAGCTA TCTTAGAAGG GGAATGTTGT 2340
CCCCGCTGTG CTGATGACCC CTGCTAGCTT CAGTAACATCA CCTATGACAT CAGAAAACCT 2400
TGCCCTGGACA GCTATGTGTT TTCACGGCTT AGTGCTCAG TGTGGAAGAT GGCTGATCT 2460
CCCTGCACAA CCTGTAATG CAAGAATGGA AGAGTCTGTT GTTCTGTGGA TTTTGAAGT 2520
CTTCAAAATA ATTGAAGTAT TTACAGTGA CTCAACGCAG AAGAATGGAC GAAATGACCA 2580
TCCAACGTGA TTAAGGATAG GAATCGGTAG TTTGTTTTTT TTGTTTTTTT TGTTTTTTTA 2640
ACCAAGATTA ATTGCCAAAG TTTCCACCTG AGGACGGTGT TCGGAGGTG GCCTTTTGGA 2700
CCTACCACTT TGCTCATTTT TGCTAACCTA GTCTAGGTGA CCTACAGTGC CGTGCATTTA 2760
AGTCAATGGT TGTAAAAGA AGTTTCCGT GTTGTAATC ATGTTTCCCT TATCAGATCA 2820
TTTGCAATAA CATTTAAATG ATCTCATGGT AAATGGTTGA TGTATTTTTT GGGTTTATTT 2880
TGTGTACTAA CCATAATAGA GAGAGACTCA GCTCCTTTTA TTTATTTTGT TGATTATATG 2940
ATCAAAATCT AAAATAAAGT TGCTGTGTGT GACTTTT 2977

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Seq ID NO: 194 DNA Sequence  
Nucleic Acid Accession #: NM\_016180.1  
Coding sequence: 26..1618

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1      11      21      31      41      51
|      |      |      |      |      |
CAGGAAGGTT CCTCTCCGAG TGGCCATGGG TAGCAACAGT GGGCAGGCTG GCCGCCACAT 60
CTATAAATCC CTAGCTGATG ATGGCCCCCT TGACTCTGTG GAGCGCGCTA AAAGACCCAC 120
CAGCAGACTC ATCATGCACA GCATGGCCAT GTTCGGAAGA GAGTTCTGCT ACGCGGTGGA 180
GGCAGCGTAT GTGACCCGAG TCCTGCTCAG CGTAGSTCTG CCCAGCAGCC TGTACAGCAT 240
TGTGTGTTTC CTCAGCCCCA TCCTGGGATT CCTGCTGCAG CCGGTGGTGC GATCGGCCAG 300
CGACCACTGC CGGTCCAGGT GGGGCCGCGG GAGACCCCTAC ATCCTCACCC TGGGAGTCT 360
GATGCTCGTG GGCAATGGCT TGTACCTCAA TGGGGCTACT GTTGTAGCAG CTTTGATTGC 420
TAACCCAAGG AGGAAGCTGG TTTGGGCCAT AAGTGTACAC ATGATAGGTG TCGTTCTCTT 480
TGATTTTGTG GCCCACTTCA TTGATGGGCC CATCAAAGCC TACTTATTTG ATGCTGCTC 540
CCATCAGGAC AAGGAGAAGG GCCTCCACTA CCATGCCCTC TTCACAGGTT TTGGAGGTGC 600
CCTGGGTTAC CTTTGGGGTG CTATAGACTG GGCCCATCTG GAGCTGGGAA GACTGTGGG 660

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WO 03/025138

PCT/US02/29560

TACAGAATTC CAGGTCATGT TCTTCTCTC TGCAITGGTG CTCACITTTGT GTTTTACTGT 720  
 TCATCTGTGC AGTATCTCTG AAGCCCCACT TACAGAGGTT GCAAAGGGCA TTCCCCCACA 780  
 GCAAACCCCT CAGGACCCCTC CATTGTCACT AGATGGAATG TACGAGTATG GTTCTATCGA 840  
 5 GAAAGTTAAA AATGTTTACG TAAATCCAGA GCTGGCAATG CAGGGAGCAA AAAACAAAAA 900  
 TCATGCTGAA CAGACTCGCA GGGCAATGAC ATTAAAGTCA CTGCTGAGAG CACTGGTGAA 960  
 CATGCTCCT CACTACCGCT ACCTTTGCAT CAGCCACCTC ATTGGATGGA CGGCCTTCTT 1020  
 GTCCAAACATG CTGTTCTTCA CAGATTTCAT GGGCCAGATT GTGTACCGCG GGGATCCCTA 1080  
 TAGTGACAC AACTCCACAG AGTTTCTCAT CTACGAAAGA GGAGTCGAGG TTGATGTTG 1140  
 10 GGGCTTCTGC ATCAACTCG TGTTTTCTC ACITTTATTCT TACTTTCAGA AAGTTTTGGT 1200  
 ATCCTACATT GGATTAAAGG GTCTTTACTT CACGGGATAT TTGCTGTTT GCCTGGGGAC 1260  
 GGGATTATT GGGCTCTTCC CGAATGTCTA CTCACCCCTG GTCCTGTGCA GCCTGTTTGG 1320  
 TGTAATGTCC AGCACCCCTGT ACACGTGTCC CTTTAACTTC ATTACTGAGT ACCACCGCGA 1380  
 GGAAGAAAA GAGAGGCAGC AGGCCCCAGG AGGGGACCCA GACAACAGCG TGAGAGGGAA 1440  
 15 GGGCATGGAC TGGCCACCC TCACATGCAT GGTGCAGCTG GCTCAGATCC TGGTCGGAGG 1500  
 TGGCCTGGCC TTTCTGGTCA ACACAGCCCG GACCGTTGTC GTCGTGGTGA TCACAGCGTC 1560  
 TCGGTGGCA CTGATAGGCT GTTGCTTTGT GCCTCTCTT GTTAGATATG TGGATTAGGT 1620  
 CAATAAGAG ACAATGACCC TAAAAAATAA 1650

Seq ID NO: 195 DNA Sequence  
 Nucleic Acid Accession #: NM\_012400.2  
 Coding sequence: 18..455

|    |            |            |            |             |            |                 |
|----|------------|------------|------------|-------------|------------|-----------------|
| 1  | 11         | 21         | 31         | 41          | 51         |                 |
|    |            |            |            |             |            |                 |
| 25 | TGCTCTGTGC | TGGGATCATG | GAACTTGAC  | TGCTGTGTGG  | GCTGSGTGG  | ATGGCTGGTG 60   |
|    | TGATTCGAAT | CCAGGGCGGG | ATCCTGAACC | TGAACAAGAT  | GGTCAAGCAA | GTGACTGGGA 120  |
|    | AAATGCCCAT | CCTCTCTAC  | TGGCCCTACG | GCTGTCACTG  | CGGACTAGGT | GGCAGAGGCC 180  |
|    | AAACCAAGAA | TGCCACGGAC | TGGTGCTGCC | AGACCCATGA  | CTGCTGCTAT | GACCACCTGA 240  |
|    | AGACCCAGGG | GTGCAGCATC | TACAAGGACT | ATTACAGATA  | CAACTTTTCC | CAGGGGAACA 300  |
| 30 | TCCACTGTCT | TGACAAGGGA | AGCTGGTGTG | AGCAGCAGCT  | GTGTGCCTGT | GACAAGGAGG 360  |
|    | TGGCCTTCTG | CTGTAAGCGC | AACCTGGACA | CCTACCAGAA  | GCGACTGCGT | TTCTACTGGC 420  |
|    | GGCCCCACTG | CCGGGGGCG  | ACCCCTGGGT | GCTAGAAACC  | CACACCCTCT | ACCTGTGTCC 480  |
|    | TCAGCATGGA | GCTCTGGCAT | CCCCACCTCA | GTATCTAACC  | TGAACAGGCC | TGGCTTTTCA 540  |
|    | AACACTCCGG | GGGAGGAGT  | TCCAGCCTC  | CCCCGGAACC  | CTCTACCAAT | GCCTTCTGAC 600  |
| 35 | CTTCTGAAGC | TTTCCGAATC | CTCCAGTTG  | AGGCAGTAGC  | TGTGTCTCT  | GAGGGTGGAT 660  |
|    | GGGAATCTTG | GGAGAAGCCC | AAGCAAGGGA | GCCCTCAGAG  | GTGGTGTG   | GACCAAGACA 720  |
|    | TGGGGTGGG  | GGAGGGGTCT | GCCGCTGTCC | CCCACCTGCT  | GGCCCCCTTG | TCCTTCTTCA 780  |
|    | CCCCCTCCAA | TATAGTCTCG | GAGCTACAAC | CGCAGCAGCC  | ACTATAAAGG | GCAATATTGA 840  |
|    | TCCTTCTGTC | CCTGTGGCTC | TATCTTTTAA | AACCTCAAGG  | CCCTCCACTG | TCCTAAGATA 900  |
| 40 | AAGCCTCTCA | TAGGCACTGG | GGACCTGCA  | CAGTCTGSCC  | ATGTGACCTT | CTCCCCAGGC 960  |
|    | AAGCTCTGAA | GTCCCTGCG  | GTGGAGGCCA | TGCTGTCTT   | AAACTCAGTT | GCATCCCTGG 1020 |
|    | TGCCAAAGC  | AACACAGAA  | CCAAGAAGGA | GCTCCATAAA  | TCCTTCTTGG | GTGAAGCCTA 1080 |
|    | GACAAAGCCG | CCAGGTCTTG | TGGCTCCAGG | CACCAGAGCC  | TTGAGTACTT | TCTCCTGCCT 1140 |
|    | CCAGGCATTG | GCTCAGGGTG | AATTACAAGG | GGCTACTGAA  | TGGCTATTAC | TTTCATCAGC 1200 |
| 45 | ACTGATCCCC | ACCTCCTCAG | GGTCAAAGGG | CTACTTTCTG  | GAACTCTCCC | CAGGCTGACT 1260 |
|    | CCTTCTCCCT | GACTGCAAGG | GCTCACTCCC | TCCTCCAAGC  | TCCCACAATG | CTTCATGGCT 1320 |
|    | CTGCCGCTTA | CCTAGCTTGG | CCTAGAGTGG | CAAAATGGAAC | TTCTCTGATC | TCCCCCAACT 1380 |
|    | AGACTGGAGC | CCCCGAAGGA | TGGAGACCAT | GTCTGTGCCA  | TCTCTGTTTC | CCCTGTTTTT 1440 |
|    | CCACATACTA | GGTGCTCAAT | TCATGCCCTG | GAATGGCGTG  | AGCCCATAA  | GGATACACAG 1500 |
| 50 | AGTTGTCAGC | AGATGGTGTG | GGTACCTCAC | CCAGATATCA  | TCCAGGCCCA | AGGCCCTCTT 1560 |
|    | CCCTGAGTGA | GGCCAGGTGT | TGGCAGCCAA | CTGCTCCAA   | CTGCCTCCTT | CCCCTAAATA 1620 |
|    | CTGCCCTGGT | CTAGTGGGAG | CTGCCTTCCC | CCTGCCCAAC  | CTCTCCCAAC | AAGAGGCCAC 1680 |
|    | CTGTCACTCA | TGGCCAGGAG | AGTGACACCA | TGGAGGGTAC  | AATTGCCAGC | TCCCCCGTGT 1740 |
|    | CTGTGCAGGA | TGTCTGGGT  | TGAATGACAC | TCTCAAATG   | TTCTTGGGAT | CGGCTGAGG 1800  |
| 55 | CCAGGCCTCT | CCTGGAACCA | CCTCTGTGCT | TGGTCTGACC  | CCTTGGCCTA | TCCAGTTTTC 1860 |
|    | CTGGTTCCTC | CACAGGTTTC | TCCAGAAAGT | ACTCCCTCAG  | TAAAGCATT  | GCACAAGATA 1920 |
|    | CCTTGTCTCA | GGCTCTGCTT | CTAAGGAAAG | AGACTGAAGA  | GGGACAACTT | TTTCTATGA 1980  |
|    | GGACTCCCAA | TCTGCCATTT | GTGTGTGGCT | AGCTGTTTCC  | AGCCAGGGGG | CTGAGGCACC 2040 |
|    | TGCAGTCACC | CACACTCTGG | GCCTGTGGCA | CCATCTGTGC  | CTCAGCTGAC | TGAGCAGTTC 2100 |
| 60 | TGAGATGTGG | TGACTCATGT | GAAGTGGTGT | CATAGGAATG  | AAGGACTGTG | GGCGTGGGT 2160  |
|    | TCAAATCCAA | GTCTATGCA  | CAACTCCAGG | TAGGGATACC  | CATGGGGGCA | GCTGTGCCTG 2220 |
|    | TGTGGGGGAA | CAGGTAGGG  | AAATCTCCAT | ACCTTCTCAA  | TTTTGCTGTG | AACCTAAAAA 2280 |
|    | TGCCATATAA | AGATAAAGTC | TAGGCCAGGC | ATGGTGGCTC  | ATGCCTGTAA | TCCCAACACT 2340 |
|    | TAGGTGGCT  | GAGGCAGGCA | GATCACCTGG | GGTCAGGAGT  | TCAAGACCAG | CCTGCCCAAC 2400 |
| 65 | ATGGCAAAAC | CTCGTCTCTA | CTAAAAATAC | AAAAATTAGC  | CAGGCATCGT | GGTGGGTGCC 2460 |
|    | TGTAATCCCA | GCTATTACAG | AGGCTGAGGC | AGGAGAATCA  | CTTGACCTG  | GGAGGCAGAG 2520 |
|    | GTTTCAGTGA | GGCCAGATCG | CGACACTGCA | CTCCAGCCCTG | GGCAACAGAG | TGACACTCTG 2580 |
|    | TCTCAAAAAA | TAAAAATAAA | TAAAAATAAA | TAAAAATAAA  | AAAAATAAAA | AAAAATAAAA 2640 |
|    | AAAAATAAAA | AAAAATAAAA | AAAAATAAAA | AAAAATAAAA  | AAAAATAAAA | AAAAATAAAA 2700 |
| 70 | AAAAATAAAA | AAAAATAAAA | AAAAATAAAA | AAAAATAAAA  | AAAAATAAAA | AAAAATAAAA 2747 |

Seq ID NO: 196 DNA Sequence  
 Nucleic Acid Accession #: NM\_018833.1  
 Coding sequence: 80..2041

|    |            |            |            |            |            |                |
|----|------------|------------|------------|------------|------------|----------------|
| 1  | 11         | 21         | 31         | 41         | 51         |                |
|    |            |            |            |            |            |                |
| 75 | GAGGTTGGGA | GAGACGGAGC | GGACCTCAGC | GCTGAAGCAG | AAGTCCCCCG | AGCTGCGGTC 60  |
|    | TCCCGCGCGC | GGCTGAGCCA | TGCGGCTCCC | TGACCTGAGA | CCCTGGACCT | CCCTGCTGCT 120 |
|    | GGTGAACGCG | GCTTTACTGT | GGCTGCTTCA | GGGCCCTCTG | GGGACTTTGC | TTCTCTAAGG 180 |
|    | GCTGCCAGGA | CTATGGCTGG | AGGGGACCCT | CGGCTGGGGA | GGGCTGTGGG | GGCTGTAAAA 240 |
| 80 | GCTAAGAGGG | CTGCTGGGAT | TTGTGGGGAC | ACTGCTGCTC | CCGCTCTGTC | TGGCCACCCC 300 |
|    | CTGACTGTC  | TCCTGAGAG  | CCCTGGTCGC | GGGGGCTCA  | CGTGTCTCCC | CAGCCAGAGT 360 |
|    | CGCTTCAGGC | CCTTGGAGCT | GGCTGCTGGT | GGGGTACGGG | GCTGCGGGGC | TCAGTGTGTC 420 |
|    | ACTGTGGGCT | GTCTGAGCC  | CTCTGGAGC  | CCAGGAGAGG | GAGCAGGACC | AGGTGAACAA 480 |
|    | CAAAGTCTTG | ATGTGGAGGC | TGCTGAAGCT | CTCCAGGCCG | GACCTGCCTC | TCCTGTTGTC 540 |

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PCT/US02/29560

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CGCCTTCTTC TTCCTTGTC TTGCTGTTTT GGGTGAGACA TTAATCCCTC ACTATTCTGG 600  
TCGTGTCAIT GACATCCTGG GAGGTGATTT TGACCCCAT GCCTTGCCA GTGCCATCTT 660  
CTTCATGTGC CTCTTCTCCT TTGGCAGCTC ACTGTCTGCA GGTGCGGAG GAGGCTGCTT 720  
CACCTACACC ATGTCTCGAA TCAACTTCGG SATCCGGGAG CAGCTTTTCT CCTCCCTGCT 780  
GCGCCAGGAG CTCGGTTTCT TCCAGGAGAC TAAGACAGGG GAGCTGAACT CACGGCTGAG 840  
CTCGGATACC ACCCTGATGA GTAACTGGCT TCCTTTAAAT GCCAATGTGC TCTTGCGAAG 900  
CCTGGTGAAA GTGGTGGGGC TGTATGGCTT CATGCTCAGC ATATCGCCTC GACTCACCT 960  
CCTTCTCTG CTGCACATGC CCTTCACAAT AGCAGCGGAG AAGGTGTACA ACACCCGCCA 1020  
TCAGGAAGTG CTTCGGGAGA TCCAGGATGC AGTGGCCAGG GCGGGGCAGG TCGTGCCGGA 1080  
AGCGGTTGGA GGGCTGCGA CCGTTGCGAG TTTTGGGGCC GAGGAGCATG AAGTCTGTG 1140  
CTATAAAGAG GCCCTGAAC AATGTGCGCA GCTGTATTGG CGGAGAGACC TGGAACGCGC 1200  
CTTTGACCTG CTCATAAGGA GGGTGCTGCA CTGGGTGTG CAGATGCTGA TGCTGAGCTG 1260  
TGGGCTGCAG CAGATGCAGG ATGGGGAGCT CACCCAGGGC AGCCTGCTTT CCTTTATGAT 1320  
CTACCAGGAG AGCGTGGGGA GCTATGTGCA GACCTTGTTA TACATATATG GGGATATGCT 1380  
CAGCAAGCTG GAGCTGCGA AGAAGGTTTT CTCCTACATG GACCCGACAG CAAATCTGCC 1440  
TTCACCTGGC AGCTTGGCCC CCACCACTCT GCAGGGGTT GTGAAATTCC AAGACGCTCT 1500  
CTTTGCATAT CCCAATCGCC CTGACAGGCC TGTGCTCAAG GGGCTGACGT TTACCTACG 1560  
TCCTGGTGAG GTGACGGGCG TGGTGGGACC CAATGGGTCT GCGAAGAGCA CAGTGGCTGC 1620  
CTGCTGCAG AATCTGTACC AGCCACAGG GGGACAGGTG CTGCTGGATG AAAAGCCCAT 1680  
CTCACAGTAT GAACACTGCT ACCTGCACAG CCAGGTGGTT TCAGTTGGGC AGGAGCCTGT 1740  
GCTGTTCTCC GGTTCGTGA GGAACAACAT TGCTTATGGG CTGCAGAGCT GCGAAGATGA 1800  
TAAGGTGATG GCGGCTGCCC AGGCTGCCCA CGCAGATGAC TTCATCCAGG AAATGGAGCA 1860  
TGGAATATAC ACAGATGTAG GGGAGAAGGG AAGCCAGCTG GCTGCGGAC AGAAACAACG 1920  
TCTGGCCATT GCCCGGGCCC TTGTACGAGA CCGCGGGTCT CTCATCCTGG ATGAGGCTAC 1980  
TAGTGCCCTA GATGTGCAGT GCGAGCAGGC CAAAACCTTT TGGAAGTTCA TGATATTTG 2040  
AATTTCATG GATATTTCT GGAATAATG AGTTCAAATG AACGAATATG TGGAACAAAG 2100  
CATCACCAAC ATTTATTTTT TCAGGATGAG GTGATGGACA AAACCATCAC AGGGAATG 2160  
AGGCAATATG TACATGTAAA ACAATACTTC GGGTGAGTCC ACCTATCCCA AAGTGGATC 2220  
AAAGAAGTGG CTGCAGATTG GAGCCCAAAG CCTTGGTTTC CTCAGTTTCC AAATGGATT 2280  
TCACATAGTG GGATCATGAG TTTGCTTGG ACACCCCAAA TTCTAACTAT TTCITTTGTT 2340  
TCTTACATCC TTTCCCTCTT CCCCAGCCCC TTCCCCTCAT GTTACACCTC TTGCTGGTTT 2400  
GAGACGTCAA TCACCACTGA GAAAGAATTA AACCAGTATT TTGAGCTGGC AAAATTCTTA 2460  
GCCTAGTACA ATTCTTCAA TTAAACTGTA GCTCAAC 2497

Seq ID NO: 197 DNA Sequence  
Nucleic Acid Accession #: NM\_002416  
Coding sequence: 40-417

1 11 21 31 41 51  
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80

ATCCAATACA GGAGTGACTT GGAACCTCCAT TCTATCACTA TGAAGAAAAG TGGTGTCTT 60  
TTCTCTCTGG GCATCATCTT GCTGGTTCG ATTGGAGTGC AAGGAAACCC AGTAGTGAGA 120  
AAGGGTGCT GTTCCTGCAT CAGCACCAAC CAAGGGACTA TCCACCTACA ATCCTTGAAA 180  
GACCTTAAAC AATTTGCCCC AAGCCCTTCC TGCGAGAAAA TTGAAATCAT TGCTACACTG 240  
AAGAATGGAG TTCAAACATG TCTAAACCCA GATTACAGCAG ATGTGAAGGA ACTGATTAAA 300  
AAGTGGGAGA AACAGGTCAG CCAAAAGAAA AAGCAAAAGA ATGGGAAAAA ACATCAAAAA 360  
AAGAAAGTTG TGAAGTTTCG AAAATCTCAA CGTTCTGTC AAAAGAAGAC TACATAAGAG 420  
ACCACCTCAC CAATAAGTAT TCTGTGTTAA AAATGTTCTA TTTTAATTAT ACCGCTATCA 480  
TTCCAAAGGA GGATGGCATA TAATACAAAG GCTTATTAAT TTGACTAGAA AATTTAAAC 540  
ATTACTCTGA AATTGTAAC AAAGTTAGAA AGTTGATTTT AAGAATCCAA ACGTTAAGAA 600  
TTGTTAAAGG CTATGATTGT CTTTGTCTT CTACCAACCA CCAGTTGAAT TTCATCATGC 660  
TTAAGGCCAT GATTTTAGCA ATACCCATGT CTACACAGAT GTTACCCCAA CCACATCCCA 720  
CTCACACAG CTGCTCGGAA GAGCAGCCCT AGGCTTCCAC GTACTGCAGC CTCCAGAGAG 780  
TATCTGAGG ACATGTCAGC AAGTCCTAAG CCTGTTAGCA TGCTGGTGAG CCAAGCAGTT 840  
TGAAATTGAG CTGGACCTCA CCAAGCTGCT GTGGCCATCA ACCTCTGTAT TTGAATCAGC 900  
CTACAGGCT CACACAAAT GTGTCTGAGA GATTCTGCT GATTGTTATT GGGTATCACC 960  
ACTGAGATC ACCAGTGTG GGCCTTTCAG GCCTCTTTC TGGCTTGGA AGCCATGTGA 1020  
TTCCATCTTG CCCGCTCAGG CTGACCACCT TATTTCTTTT TGTTCCCTT TGCTTCATTC 1080  
AAGTCAGCTC TTCTCCATCC TACCACAAAG CAGTGCCCTT CTCTCTCCA GTGCACCTGT 1140  
CATATGCTCT GATTATCTG AGTCAACTCC TTCTCATCT TGTCCCCAAC ACCCCACAGA 1200  
AGTGCTTTCT TCTCCCAAT CATCTCACT CAGTCCAGCT TAGTTCAAGT CCTGCCTCTT 1260  
AAATAAACCT TTTTGGACAC ACAAAATTATC TTAAACTCC TGTTCACCT GGTTCAGTAC 1320  
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AGATTGTGAG CTCCTTGAGG GCAAGAGCCA CAGTATATTT CCTGTTTCT TCCACAGTGC 1440  
CTAATAATAC TGTGGAACCT GGTTTTAATA ATTTTAAAT TGATGTTGTT ATGGGCAGGA 1500  
TGGCAACCAG ACCATTGTCT CAGAGCAGGT GCTGGCTCTT TCCTGGCTAC TCCATGTTGG 1560  
CTAGCCTCTG GTAACCTCTT ACTTATTATC TTCAGGACAC TCACTACAGG GACCAGGAT 1620  
GATGCAACAT CCTTGTCTT TTATGACAGG ATGTTTGCTC AGCTTCTCCA ACAATAAGAA 1680  
GCACGTGGTA AAACACTTGC GGATATTCTG GACTGTTTTT AAAAAATATA CAGTTTACCG 1740  
AAAATCATAT AATCTTACAA TGAAAAAGSAC TTTATAGATC AGCCAGTGAC CAACCTTTTC 1800  
CCAACCATAC AAAAATTCCT TTTCCCGAAG GAAAAGGCT TTCTCAATAA GCCTCAGCTT 1860  
TCTAAGATCT AACAGATAG CCACCGAGAT CCTTATCGAA ACTCATTTTA GGCAAAATATG 1920  
AGTTTATTTG TCCGTTTACT TGTTCAGAG TTTGATTGT GATTATCAAT TACCACCA 1980  
TCTCCCATGA AGAAGGGAA CGGTGAAGTA CTAAGCGCTA GAGGAAGCAG CCAAGTCGGT 2040  
TAGTGGAAAC ATGATTGGTG CCCAGTTAGC CTCTGCAGGA TGTGGAACCC TCCTCCAGG 2100  
GGAGGTTTCA TGAATTGTT AGGAGAGGTT GTCTGTGGCC AGAATTTAAA CCTATACTCA 2160  
CTTTCCCAAA TTGAATCACT GCTCACACTG CTGATGATT AGAGTGCTGT CCGGTGGAGA 2220  
TCCACCCGTA ACGTCTTATC TAATCATGAA ACTCCCTAGT TCCTTCATGT AACTTCCCTG 2280  
AAAAATCTAA GTGTTTCATA AATTTGAGAG TCTGTGACCC ACTTACCTTG CATCTCACAG 2340  
GTAGACAGTA TATAACTAAC AACCAAGAC TACATATTG CACTGACACA CACGTTATAA 2400  
TCATTTATCA TATATATACA TACATGCATA CACTCTCAAA GCAATAAATT TTTCACTTCA 2460  
AAACAGTATT GACTTGTATA CTTTGTAAAT TGAAATATT TCTTTGTTAA AATAGAATG 2520  
TATCAATAAA TAGACCATTA ATCAG

Seq ID NO: 198 DNA Sequence

WO 03/025138

PCT/US02/29560

Nucleic Acid Accession #: NM\_006533.1

Coding sequence: 72..467

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1      11      21      31      41      51
|      |      |      |      |
5  AGGGAGAGAG GGAGGGGAGG AAATTGGAGA CCCCAGCACC CCCTTGCTCA CTCTCTTGCT 60
   CACAGTCCAC GATGGCCCGG TCCCTGGTGT GCCTTGGTGT CATCATCTTG CTGTCTGCCT 120
   TCTCCGACC  TGGTGTACAG GGTGGTCCTA TGCCCAAGCT GGCTGACCGG AAGCTGTGTG 180
   CGGACCAGGA GTGCAGCCAC CCTATCTCCA TGGCTGTGGC CCTTCAGGAC TACATGGCCC 240
   CGCACTGCCG ATTCCTGACC ATTCACCGGG GCCAAGTGGT GTATGTCTTC TCCAAGCTGA 300
10  AGGGCCGTGG GCGGCTCTTC TGGGGAGGCA GCGTTCAGGG AGATTACTAT GGAGATCTGG 360
   CTGCTCGCCT GGGCTATTTC CCCAGTAGCA TTGTCCGAGA GGACCAGACC CTGAAACCTG 420
   GCAAAGTCGA TGTGAAGACA GACAAATGGG ATTTCTACTG CCAGTGAGCT CAGCCTACCG 480
   CTGGCCCTGC CGTTTCCCTT CCTTGGGTTT ATGCAAATAC AATCAGCCCA GTGCAAAC 538

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Seq ID NO: 199 Protein sequence

Protein Accession #: NP\_002412.1

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1      11      21      31      41      51
|      |      |      |      |
20  MHSFPPLLLL LFWGVVSHSF PATLETQEED VDLVQKYLEK YYNLKNDGRQ VEKRRNSGPV 60
   VEKLKQMGEF FGLKVTGKPD AETLKVMKQP RCGVPDVAQF VLTGEGNPRWE QTHLTYRIEN 120
   YTPDLPRADV DHAIEKAFQL WSNVTPLTFT KVSSEQADIM ISFVRGDHRD NSPFDGPGGN 180
   LAHAFQPGPG IGGDAHFDED ERWTTNMFREY NLHRVAAHAL GHSLGLSHST DIGALMYPST 240
   TFSGDVQLAQ DDIDIGIAIY GRSQNPVQPI GPQTPKACDS KLTFDAITTI RGEVMFFKDR 300
   FYMRTNPFYP EVELNFIIVF WPQLPNGLEA AYEFADRDEV RFFKGNKYWA VQQQNVLHGY 360
25  PKDIYSSFGF PRTVKHIDAA LSEENTGKTY FVANKYWRV DEYKRSMDFG YPKMIAHDFP 420
   GIGHKVDVAV MKDGFYFFH GTRQYKFDPK TKRILTLQKA NSWFNCRKN

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Seq ID NO: 200 Protein sequence

Protein Accession #: NP\_002412.1

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1      11      21      31      41      51
|      |      |      |      |
30  MHSFPPLLLL LFWGVVSHSF PATLETQEED VDLVQKYLEK YYNLKNDGRQ VEKRRNSGPV 60
   VEKLKQMGEF FGLKVTGKPD AETLKVMKQP RCGVPDVAQF VLTGEGNPRWE QTHLTYRIEN 120
   YTPDLPRADV DHAIEKAFQL WSNVTPLTFT KVSSEQADIM ISFVRGDHRD NSPFDGPGGN 180
35  LAHAFQPGPG IGGDAHFDED ERWTTNMFREY NLHRVAAHAL GHSLGLSHST DIGALMYPST 240
   TFSGDVQLAQ DDIDIGIAIY GRSQNPVQPI GPQTPKACDS KLTFDAITTI RGEVMFFKDR 300
   FYMRTNPFYP EVELNFIIVF WPQLPNGLEA AYEFADRDEV RFFKGNKYWA VQQQNVLHGY 360
   PKDIYSSFGF PRTVKHIDAA LSEENTGKTY FVANKYWRV DEYKRSMDFG YPKMIAHDFP 420
40  GIGHKVDVAV MKDGFYFFH GTRQYKFDPK TKRILTLQKA NSWFNCRKN

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Seq ID NO: 201 Protein sequence

Protein Accession #: NP\_002413

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1      11      21      31      41      51
|      |      |      |      |
45  MKSLPILLLL CVAVCSAYPL DGAARGEDTS MNLVQKYLEN YYDLEKDVQK FVRRKDSGPV 60
   VKKIREMQKF LGLLEVTKLD SDTLEVVRKP RCGVPDVGHF RTFPGIPKWR QTHLTYRIEN 120
   YTPDLPKDAV DSAVEKALKV WEEVTPLTFS RLYEGEADIM ISFAVREHGD FYFDFGPGNV 180
   LAHAYAPGPG INGDHAFDDI EQWTKDTGT NLFLVAAHEI GHSLGLFHSA NTEALMPLY 240
50  HSLTDLTRFR LSQDDINGIQ SLYGPPDPS ETPLVPTPEV PPEPGTPANC DPALSFDVAV 300
   TLRGELLIFK DRHFWRKSLR KLEPELHLIS SFWPSLPSGV DAAYEVTSKD LVFIFKGNQF 360
   WAIRGENEVR GYPRGHTLIG FPPTVRKIDA AISDKEKNKT YFFVEDKYWR FDEKRNSEMP 420
   GFPKQIAEDF PGIDSKIDAV FEFGFFYFF TGSSQLEFDP NAKKVTHTLK NSWNLNC

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Seq ID NO: 202 Protein Sequence

Protein Accession #: NP\_001845

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1      11      21      31      41      51
|      |      |      |      |
55  MEPWSSRWKT KRWLWDFTVT TLALTFLFQA REVRGAAPVD VLKALDFHNS PEGISKTTGF 60
   CTNRKNSKGS DTAYRVSKQA QLSAPTKQLF PGGTFFPEDFS ILFTVKPKKG IQSFLLSIYN 120
   EHGIQQIGVE VGRSPVLFDE DHTGKPAPEL YPLFRVTNIA DGKWHRAVIS VEKKTVTMIV 180
60  DCKKKTKTPL DRSERAIVDT NGITVFGTRI LDEEVFEGDI QQFLITGDPK AAYDYCEHYS 240
   PDCDSSAPKA AQAQEPQIDE YAPEDIIEYD YEYGEAEYKE AESVTGPTV TEETIAQTEA 300
   NIYDDPFQYN YGTMESYQTE APRHVSQNE PNPVEEITFE EYLTGEDYDS QRKNSDITLY 360
65  ENKEIDGRDS DLLVDGDLGE YDFYKEYEY DKFTSPPNEE FGPVPAETD ITETSIINGHG 420
   AYGEKGQKGE PAVVEPGMLV EGPPGPAGFA GIMGPPGLQG PTGPPGDPGD RGPFGPRPGL 480
   GADGLPGPPG TMLMLPFYRG GDGSKGPTIS AQEAQAQAIL QQARIALRGP PGPMGLTGRP 540
   GPVGGPGSSG AKGESGDPGP QGPRGVQGGP GTGKPKGRG RPDAGGGRGM PGEPGAKGDR 600
   GFADGLPLPG DKGHRGERGP QGPPGPPGDD GMRGEDGEIG PRGLPGEAGP RGLLGPRTGP 660
70  GAPGQPMAG VDGPPGPKGN MGPPQGEPPG GQQGNPQPQG LPPGQPIGP PGEKGPQKGP 720
   GLAGLPAGADG PPGHPGKEGQ SGEKGALGPP GPQGPIGXPG PRGVKGADGV RGLKGSKEKE 780
   GEDGFPFGPK DMGLKGRDGE VGQIGPRGXD GPEGPKGRAG PTGDPGPSQ AGKKGKLGVP 840
   GLPGYPRGQ PKGSTGPPGF PGANGKGRG GVAGKPGPRG QRGTGPRGS RGARGPTGKP 900
   GPKGTSGGDD PPGPPGERGP QGPQGPVGF PPVGPVGGP RMGCPGHPGQ RGETGFQKGT 960
75  GPPGPGGVVG PQGPTGETGP IGERGYPGPP GPPGEQGLPG AAGKEGAKGD PGPQGISGKD 1020
   GPAGLRGFP ERGLPGAQGA PGLKGGEGPQ GPPGPVGSFG ERGSAGTAGP IGLRGRFPQP 1080
   GPPGPAGEKG APGEKGPPGP AGRDGVQGPV GLPGPAGPAG SPGEDGDKGE IGEPPGQKGS 1140
   GGKGGPPGP PPGLPQGPVGA PGIAAGDGEPP GPRGQGMFG QKGDGARGF PGPPGPILGQ 1200
   GLPGPPGPKG ENCDVGPWCP PGPPGPRGPQ GPNGADGPPG PPGSVGSVGG VGEKGEPEGA 1260
80  GNPGPPEAG VGGPKGERGE KGEAGPPGAA GPPGAKGPPG DDGPKNPFP VGFPPDGPPP 1320
   GELGPAGQDG VGGDKGEDGD PQQPGPPGPS GEAGPPGPPG KRGPPGAAGA EGRQGEKGA 1380
   GEAGAEPPG KTGPPVGPQP AGKPGPEGLR GIPGPVGEQG LPGAAGQDGP PGPMGPPGLP 1440
   GLKGDPPGK EKGHPGLIGL IGPPGEQGEK GDRGLPGTQG SPGAKGDDGI PGAPAGPLGP 1500
   GPPGLPGPQG PKNGKSGTGP AQKGDGSLP GPPGPPGPPG EVIQPLPILS SKKTRRHTEG 1560
   MQADADDNIL DYSDGMEIF GSNLSLKQDI EHKFPMPGTQ TNPARTCKDL QLSHPDFPDG 1620

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PCT/US02/29560

EYWIDPNQGC SGDSFKVYCN FTSGGETCIY PDKKSEGVRI SSWPKEKPGS WFSEFKRGKL 1680  
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 EMSYDNFFFI KTLYDGCTSR KGYEKTIVIEI NTPKIDQVPI VDVMSISDFGD QNQKFGFEVG 1800  
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Seq ID NO: 203 Protein sequence  
 Protein Accession #: XP\_057014

1 11 21 31 41 51  
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 10 MRPQGAASP QRLRGLLLLL LLQLPAPSSA SEIPKGKQKA QLRQREVVDL YNGMCLQGPA 60  
 GVPGRDGSFG ANGIGTGPFI PGRDGFKEGK GECLRESFEE SWTPNYKQCS WSSLNYGIDL 120  
 GKIAECTFTK MRSNSALRVL FSGSLRLKCR NACCQRWYFT FNGAECSGPL PIEAIIYLDQ 180  
 GSPEMNSTIN IHRTSSVEGL CEGIGAGLVD VAIWVGTCSD YPKGDASTGW NSVSRIIIEE 240  
 LPK

15

Seq ID NO: 204 Protein sequence  
 Protein Accession #: Eos sequence

1 11 21 31 41 51  
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 20 MPGTLKTRTG APADYRVILK TSQEDELDPV DDISVRVMSS QSVLVSVDLP VLEKQKKVVA 60  
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 TPESAPTAP ENLNVWVPMG KPTVVAASWD ALPETEGKVK VCLLDTGLFS VSSFQPSAKS 180  
 FQNTFFHTPR LSNHLEQSPS PILETLLLPW WMVCSLGNAI FSKSGPQTGE AWDLTPKPSL 240  
 25 SLCOQECSCST QKDFSCLAYL IDIQTQVVK DPQLEGSVFG PCFLFYFLTF MLDIGGFSFI 300  
 MCYEDPVSSL TGNLSKSVAA SKADVQONTE DNGKPEKPEP SSPSPRAPAS SQHPSVPASP 360  
 QGRNAKDLILL DLKNKILANG GAPRKPQLRA KKAEEELDQS TEITGEEELG SREDSPMSPS 420  
 DTQDQKRTL RPPSRHGSVV APGRATAVRAR MPALPRREGV DKPGFSLATQ PRPGAPPSAS 480  
 ASPAHIASTQ GTHSRPSLPA SLNDNDLVDS DEDERAVGSL HPKGAFAPQR PALSPSRQSP 540  
 SSVLRDRSSV HPGAKPASPA RRTPHSGAAE EDSSASAPPS RLSPPHGGSS RLLPTQPHLS 600  
 30 SPLSKGKDG EDAPATNSNA PSRSTMSSTV SSSLSSRTQV SEGAEASDGE SHGDGREDG 660  
 GRQAEATAQT LRARPASGHF HLLRHKPFPA NGRSPSRFSI GRGPRLPQSS SPQSTVPSRA 720  
 HPRVPSHSDS HPKLSSGIHG DEEDEKPLPA TVVNDHVPSS SRQPISRGWE DLRRSPQRGA 780  
 SLHRKEPIPE NPKSTGADTH PQGKYSSLAS KAQDVQQSTD ADTEGHSPKA QPGSTDRHAS 840  
 PARPPAARSQ QHPSVPRRMT PGRAPEQOPP PPVATSQHHP GPQSRDAGRS PQOPRLSLTQ 900  
 35 AGRPRPTSQ RSHSSSDPYT ASSRGLMPTA LQNDQEDAQG SYDDDDSTEVE AQDVRAPAHA 960  
 ARAKEAAASL PKHQVESPT GAGAGGDHRS QRGHASPAR PSRPGGPQSR ARVPSRAAPG 1020  
 KSEPPSKRFL SSKSQQSVSA EDEEEEDAGF FKGGKEDLLS SSVPKWPPSS TPRGGKDADG 1080  
 SLAKEEREPA IALAPRGSL APVKRPLPPP PGSSPRASHV PSRPPPSAA TVSPVAGTHP 1140  
 WPRYTTTRAP GHFTTTPMLS LRQRMHARF RNPLSRQPAR PSYRQGYNGR PNVEGKVLPG 1200  
 40 SNGKPNQRI INGPQGTQW VDLDRGLVLN AEGRYLQDSH GNPLRIKLG DGRITVDLEG 1260  
 TPVVSVDGLP LFGQGRHGT LANAQDKPIL SLGGKPLVGL EVIKKTHHP TTTMQPTTTT 1320  
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 TPKPTPIPT CPGTTLERHD DGNLIMSSN GIPECYAED EFGSLETDTA VPTEAYVIV 1440  
 45 DEDYEFETSR PPTTTEPST ATTTPRPIEE GAISFFPEE FDLAGRKRFB APYVTYLNKD 1500  
 PSAPCSLTD LDFHQVDSLD EIIINDLKKS DLPPQHAHPR ITVVAVEGCH SFVIVDWDKA 1560  
 TPGDLVTGYL VYSASYEDFI RNKFTQASS VTHLPDENLK PNTRYFFKVQ AQNPHGYGPI 1620  
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50

Seq ID NO: 205 Protein Sequence  
 Protein Accession #: NP\_055059

1 11 21 31 41 51  
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 PVRTDAQRL VSHVSAATS RAGVRARRAA PVRTSPFPGG NEEEPGSHLF YNVTVFGRDL 120  
 HLRLRRPNAR VAPGATMEWQ GEKGTTTREV LLGSCLYVGD VAGLAEASSV ALSNCDGLAG 180  
 LIRMEEEEF LEPLEKGLAA QEAEGQGVHV VYRRPPTSP LGGPQALDTG ASDSLDLSL 240  
 RALGVLEEHA NSSRRRARRH AADDYDNIEV LLCVDSVQV FHGKEHVQKY LLLTMNIVNE 300  
 IYHDESLGAH INVVLVRIIL LSYGKMSLI EIGNPSQSLE NVCRAWYLLQ KPDTHGDEYH 360  
 60 DHAIFLTRQD FPGSQMGQYA PVTGMCHPVR SCTLNHEDGF SSAFVVAHET GHVLGMEHDG 420  
 QGNRCQDEVR LGSIMAPLVQ AAFHRFHWSR CSQQLSRYL HSYDCLLDDP FAHDWPALPQ 480  
 LPLGLHYSMNE QCRFDGLGY MMCTAFRTFD PCKQLWCSHP DNPYFCKTKK GPPLDGTMA 540  
 PGKHCFFKGHC IWLTPDILKR DGSWGAWSFF GSCSRTCCTG VKFRTRQCDN PHPANGGRTC 600  
 SGLAYDFQLC SRQDCPDLSA DFREEQCRQW DLYFEHDAQ HHWLPHEHRD AKERCHLYCE 660  
 65 SRETGEVVM KRMVIDGTRC SYKDAFSLCV RGDCKRVGCD GVIGSSKQED KCGVCGGDNS 720  
 HCKVVKGTFT RSPKKGVIK MFEIPAGARH LLIQEV DATS HHLAVKNLET GKFILNEEND 780  
 VDASSKTFIA MGVEWEYRDE DGRETLQTMG PLHGTITVLV IPVGDTRVSL TYKYMIEDS 840  
 LNVDDNNVLE EDSVVYEWAL KKWSPCSKPC GGSQPTKYG CRRRLDHKMV HRGFCAALSK 900  
 PKAIRRACNP QECSPVWVT GEWEPCSVTC GRTGMQVRSV RCIQPLHDNT TRSVHAKHCN 960  
 70 DARPESRRAC SRELCPGRWR AGPWSQCSVT CGNGTQERP PCRTADDSFG ICQEERPEA 1020  
 RTCRLGPCPR NISDPKSKSY VQWLSRPDP DSPIRKISSK GHCOGDKSIF CRMEVLSRYC 1080  
 SIPGYNLSC KSCNLNLYNT NVEGRIEPPP GKHNIDIVFM PTLPVPTVAM EVRPSPTPL 1140  
 EVPLNASSTN ATEDHPETNA VDEPYKIHGL EDEVQPPNLI PRRPSPYEKT RNQRIQELID 1200  
 EMRKKEMLGK F 1211

75

Seq ID NO: 206 Protein sequence  
 Protein Accession #: NP\_076927

1 11 21 31 41 51  
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 80 MGENDPPAVE APFSFRSLFG LDDLKISPA PDADAVAAQI LSLLPLKFFP IIVIGIILI 60  
 LALAIGLGIH FDCSGKYRCR SSFKCIELIA RCDGVSDCKD GEDEYRCVRV GGQNAVVLQVF 120  
 TAASWKTMCS DDWKGHYANV ACAQLGFPYS VSSDNLRVSS LEGQFREEFV SIDHLLPDDK 180  
 VTALHHSYVV REGCASGHVV TLQCTACGHR RGYSSRIVGG NMSLLSQWPW QASLQFGQYH 240  
 LCGGSVITPL WIITAAHCYV DLYLPKSWTI QVGLVSLLDN PAPSHLVEKI VYHSKYKPKR 300  
 LGNDIALMKL AGPLTFNEMI QPVCLNSEE NFDPGKVCWT SGWGATEDGG DASPVNLHAA 360

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VPLISNKICN HRDVYGGIIS PSMLCAGYLT GGVDSCQGDS GGPLVCQERR LWKLVGATSF 420  
GIGCAEVNKP GUYTRVTSFL DWIHEQMERT LKT

Seq ID NO: 207 Protein Sequence  
Protein Accession #: CAC03433.2

1 11 21 31 41 51  
| | | | |  
MLSSDTDFTA SWELVVRVDH PNEEQQKDVT LRVSGDLHVG GVMLKLVEQI NISQDWSDF 60  
LWWEQKHCWL LKTHWTLDKY GVQADAKLLF TPQHKMLRLR LPNLKMVRLR VSFSAVVFKA 120  
VSDICKILNI RRSEELSLK PSQDYFKKKK KKDKNKKEPI IEDILNLESS PTASGSSVSP 180  
GLYSKTMPTI YDPINGTPAS STMTWFSDSP LTEQNCSILA FSQPPQSPEA LADMYQPRSL 240  
VDKAKLNAGW LDSSRSLSMEQ GIQDEDEQLLL RFKYYSFFDL NPKYDAVRIN QLYEQARWAI 300  
LLEEIDCTEE EMLIFAALQY HISKLSLSAE TODFAGESEV DEIEAALSNI EVTLEGGKAD 360  
SLLEEDITDIP KLANDNLKFR PKKLLPKAFK QYWFIFKDT S IAYFNKKELE QGEPLKLN 420  
RGCEVVPDVN VAGRKFGIKL LIPVADGMNE MYLRCDHENQ YAQWMAACML ASKGKTMADS 480  
SYQPEVLNLI SFLRMKNRNS ASQVASSLEN MDMNPECFVS PRCACKHKSK QLAARILEAH 540  
QNVAQMPLEVE AKLRFIAQWQ SLPEFGLTYY LVRFKGSKKD DILGVSYNRL IKIDAATGIP 600  
VTTWRFTNIK QMNVNWEETRQ VVIEFDQNVF TAFTCLSDAC KIVHEYIGGY IFLSTRSKDQ 660  
NETLDEDLFH KLTGGQD 677

Seq ID NO: 208 Protein Sequence  
Protein Accession #: NP\_114433.1

1 11 21 31 41 51  
| | | | |  
MASRSMRLLL LLSCLAKTGV LGDIIMRPS APGWFYHKSN CYGYFRKLNR WSDAELECQS 60  
YNGAHLASI LSLKEASTIA EYISGYQRSQ PIWIGLHDPQ KRQWQWIDG AMYLYRSWSG 120  
KSMGGNKHCA EMSSNNFLT WSSNECNKRQ HFLCKYRP 158

Seq ID NO: 209 Protein Sequence  
Protein Accession #: XP\_051860.2

1 11 21 31 41 51  
| | | | |  
MGAAGRQDFL FKAMLTISWL TLTCFPGATS TVAAGCPDQS PELQPWNPGH DQDHHVHIGQ 60  
GKTLTLLTSSA TVYSIHISEG GKLVIKDHDE PIVLRTRHIL IDNGGELHAG SALCPFQGNF 120  
TIILYGRADE GIQDPDYYGL KYIGVGKGGG LELHGQKKLS WTFNLKTLHP GGMAGEGYFF 180  
ERSWCHRGVI VVUIDPKSGT VIHSDFRFTY RSKKESERLV QYLNAVDPGR ILSVAVNDEG 240  
SRNLDDMARK AMTKLGSKHF LHLGFRHPWS FLTVMGNPSS SVEDHIEYHG HRGSAARVF 300  
KLFQTEHGEY FNVSLSSEW QDVETEWFD HDKVSQTKGG EKISDLWKAH PGKICNRPID 360  
IQATTMDGVN LSTEVVYKKG QDYRFACYDR GRACRSYVRV FLCGKPVPRK LTVTIDTNVN 420  
STILNLNDNV QSNKPGDTLV IASTDYSMYQ ABEFQVLPCR SCAPNQVKVA GKPMYLHIGE 480  
EIDGVDMARE VGLLSRNIIV MGEMEDKCYP YRNHICNFFD FDTFGGHIKF ALGFKAHLE 540  
GTELKHMGOQ LVQYPIPHF LAGDVDERGG YDPPYIRDL SIHHTFSRCV TVHGSNGLLI 600  
KDVVGYNLGL HCFETEDGPE ERNTFDHCLG LLVKSGLTLLP SDRDSKMKCM ITEDSYPGYI 660  
PKPRQDCNAV STFWMANPNH NLINCAAAGS EETGFWFIFH HVPTGPSVGM YSPGYSEHIP 720  
LGKFYNNRAH SNYRAGMIID NGVKTTEASA KDKRPFLSII SARYSPHODA DPLKPREPAI 780  
IRHFIAYKNQ DHGAWLRGGD VWLDSRCFAD NGIGLTLASG GTFFPYDDGSK QEIKNSLFPV 840  
ESGNVGTENN DNRIWPGGL DHSRTLPIC QNFPIRGIQL YDGPINIQC TFRKFVALEG 900  
RHTSALAFLR NNAWQSCPHN NVTGIAFEDV PITSRVFFGE PGPFWNQDLM DGDKTSVFHD 960  
VDGSVSEYFG SYLTKNNDNL VRHPDCINVP DWRGAICSGC YAQMYIQAYK TSNLRMKI 1020  
NDFPSHPLYL EGALTRSTHY QYQPVVTLQ KGYTIHWDQT APAELAIWLI NFNKGDWIRV 1080  
GLCYPRGTF SILSDVHNRL LKQTSKTGVF VRTLQMDKVE QSYPRSHYY WDESGLLFL 1140  
KLKAQNEREK FAFCSMKGCE RIKIKALIPK NAGVSDCTAT AYPKFTERAV VDVPMPPKLF 1200  
GSQKTKDHF LEVKMESSQ HFFHLWNDA YIEVDGKKYP SSEDGIQVVV IDGNQGRVVS 1260  
HTSFRNSILO GIPWOLFNYV ATIPDNSIVL MASKGRYVSR GPWTRVLEKL GADRGCLKLE 1320  
QMAFVGFKGS FRPIWVTLDT EDHKAKIFQV VPIPVVKKK L 1361

Seq ID NO: 210 Protein Sequence  
Protein Accession #: NP\_036244.1

1 11 21 31 41 51  
| | | | |  
MSQVKSYSY DAPSDFINFS SLDDEGDTQN IDSWFEEKAN LENKLLGKNG TGGLFQGKTP 60  
LRKANLQQA VTLPLKPDVNT YKAEAKENL VEQSIPSNAC SSLEVEAAS RKTPAQPQR 120  
SLRLSAQKDL EQKEKHVHK KAKRCATPVI IDEILPSKKM KVMNKKKPE EEGSAHQDTA 180  
EKNASSPEKA KGRHTVPCMP PAKQKFLKST EEQELEKSMK MQQEVVEMRK KNEEFKLLAL 240  
AGIGQPVKKS VSQVTKSVDF HFTDERIKQ HPKNQEEYKE VNFTSELRKH PSSPARVTGK 300  
CTIVKPFNL S QGKKRTFDET VSTYVPLAQQ VEDFHKRTPN RYHLRSKKDD INLLPSKSSV 360  
TKICRDPQTP VLQTKHRARA VTCKSTAELE AEELEKLQY KFKARELDP ILEGGPILPK 420  
KPPVKPPTPE IGFDLEIEKR IQERESKKKT EDEHFEFHSR PCPTKILEDV VGVPEKKVLP 480  
ITVPKSPAPA LKNRIRMPK EDEEEDPVV IKAQPVPHYG VPPKQIPEA RTVEICPFSP 540  
DSRDKERQLO KEKKIKELQK GEVPKFKALP LPHFDITNLP EKKVKNVTQI EPFCLETDRR 600  
GALKAQTWKH QLEEEELRQQ EAACFKARPV TVISQEPFVP KKEKKSVAEG LSGSLVQEPF 660  
QLATEKRAKE RQELEKRMAR VEAQKAQQL EARLQEEQK KEELARLRRE LVHKANPIRK 720  
YQGLEIKSSD QPLTVPVSPK FSTRFHC 747

Seq ID NO: 211 Protein Sequence  
Protein Accession #: NP\_065169.1

1 11 21 31 41 51  
| | | | |  
MSRRKQAKPO HINSEEDQGE OPOQOQTPEF ADAAPAAPAA GELGAPVNH GNDEVASEDE 60  
ATVKRLRREE THVCEKCAAE FFSISEFLEH KNCTKNPPV LIMNDSEGPV PSEDFSGAVL 120  
SHQTPSPGSK DCHRENGSS EDMKEKPAE SVVYLKTETA LPPTPDISY LAKGKVANTN 180  
VTLQALRGT VAVNQRSADA LPAPVPGANS IPWVLEQILC LQQQLQQIQ LQEQIRIQVN 240  
MWASHALHSS GAGADTLKTL GSHMSQQVSA AVALLSOKAG SOGLSLDALK QAKLPANIP 300  
SATSSLSPLG APFTLKP DGT RVLPNVMSRL PSALLPQAP SVLFQSPFST VALDTSKKGK 360



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5 GKPPNISAVD VKPKDEAALY KHKCKYCSKV FGTDSSSLQIH LRSHTGERPF VCSVCGHRFT 420  
TKGNLKVHFF RHPQVKANPQ LFAEFQDKVA AGNGIPYALS VPDPIDEPSL SLDSPVPLVT 480  
TSVGLPQNLG SGTNPDKDLTG GSLFPGDLQPG PSPSEGGGPT LPGVGPNYNS PRAGGFQGSQ 540  
TPEPGSETLK LQQLVENIDK ATTDPNELI CHRVLSCQSS LKMHYRTHTG ERPFQCKICG 600  
10 RAPSTKGNLK THLGVHRTNT SIKTQHSCPI CQKKFTNAV M LQQHIRMHMG GQIPNTPLPE 660  
NPcdfTGSEP MTVGENGSTG AICHDDVIES IDVEEVSSQE APSSSSKVPT PLPSIHSASP 720  
TLGFAMMASL DAPGKVGPPAP FNLRQGSRE NGSVESDGLT NDSSSLMGDQ EYQSRSPDIL 780  
ETTSFQALSP ANSQAESIKS KSPDAGSKAE SSENSRTEME GRSSLPSTFI RAPPTYVKVE 840  
VPGTfVUGPST LSPGMTPLLA AQPRRQAKQH CTRCGKNFS SASALQIHER THTGEKPFVC 900  
10 NIGGRAFTTK GNLKVIHYMTK GANNNSARRG RKLAIENMA LLGTDGKRVS EIFPKEILAP 960  
SVNVDPVVMN QYTSMLNGGL AVKTNEISVI QSGGVPTLPV SLGATSVVNN ATVSKMDGSQ 1020  
SGISADVEKP SATDGVPKHQ FPHFLEENKI AVS 1053

15 Seq ID NO: 212 Protein Sequence  
Protein Accession #: NP\_005092  
1 11 21 31 41 51  
| | | | |  
MGWDLTVKML AGNEFQVSLG SSMSVSELKA QITQKIGVHA FQQLRAVHPS GVALQDRVPL 60  
20 ASQGLPGST VLLVVDKDE PLSILVRNNK GRSSTYEVRL TQTVAHLKQQ VSGLEGVQDD 120  
LFWLTfEGKP LEDQLPLGEY GLKPLSTVMF NLRLRGGTE PGGRS 165

25 Seq ID NO: 213 Protein sequence  
Protein Accession #: Eos sequence  
1 11 21 31 41 51  
| | | | |  
MIILIYLFLL LWEDTOGWGF KDGIFHNSIW LERAAGVYHR EARSQKYKLT YAEAKAVCEF 60  
EGGHLATYKQ LEAARKIGFH VCAAGWMAKG RVGYPIVKPG PNCGFGKTGI IDYGIRLNRS 120  
ERWDAYCYNP HAKECGGVFT DPKQIFKSPG FPNEYEDNQI CYWHIRLKYG QRIHLSFLDF 180  
30 DLEDDPGCLA DYVEIYDSYD DVHGFVGRYC GDELPDDIIS TGNVMTLKFL SDASVTAGGF 240  
QIKYVAMDPV SKSSQGNKTS TTSTGNKNFL AGRFSLH

35 Seq ID NO: 214 Protein sequence  
Protein Accession #: NP\_009046.1  
1 11 21 31 41 51  
| | | | |  
MIILIYLFLL LWEDTOGWGF KDGIFHNSIW LERAAGVYHR EARSQKYKLT YAEAKAVCEF 60  
EGGHLATYKQ LEAARKIGFH VCAAGWMAKG RVGYPIVKPG PNXGFGKTGI IDYGIRLNRS 120  
ERWDAYCYNP HAKECGGVFT DPKQIFKSPG FPNEYEDNQI CYWHIRLKYG QRIHLSFLDF 180  
40 DLEDDPGCLA DYVEIYDSYD DVHGFVGRYC GDELPDDIIS TGNVMTLKFL SDASVTAGGF 240  
QIKYVAMDPV SKSSQGNKTS TTSTGNKNFL AGRFSLH

45 Seq ID NO: 215 Protein Sequence  
Protein Accession #: NP\_006389.1  
1 11 21 31 41 51  
| | | | |  
MAPNASCLCV HVRSEEDWLM TFDANPYDSV KKIKEHVRSK TKVPVQDQVL LLSKILKPR 60  
RSLSSYGIDK EKTTHLTLKV VKPSDEELPL FLVESGDEAK RHLLQVRRSS SVAQVKAMIE 120  
TKGTIIPETQ IVTCNGKRLE DGKMMADYGI RKGNNLFLAS YCIGG 165

50 Seq ID NO: 216 Protein Sequence  
Protein Accession #: NP\_002349.1  
1 11 21 31 41 51  
| | | | |  
MALQLSREQG ITLRGSAEIV AEFFSFGINS ILYQRGIYPS ETFTRVQKYG LTLVTTDLLE 60  
55 LIKYLNNVVE QLKDWLYKCS VQKLVVVISN IESGEVLERN QFDIECDKTA KDDSAPREKS 120  
QKAIQDEIRS VIRQITATVT FLPLLEVSCS FDLLIYTDKD LUVPEKWEES GPQFITNSEE 180  
VRLRSFTTTI HKVNSMVAYK IPVND 205

60 Seq ID NO: 217 Protein sequence  
Protein Accession #: NP\_001889.1  
1 11 21 31 41 51  
| | | | |  
MAQYLSTLLL LLATLAVALA WSPKEEDRII PGGIYNADLN DEWVQRALHF AISEYNKATK 60  
65 DDYRRPLRV LRARQQTVGG VNYFFDVEVG RTICTKSQPN LDTCAFHEQP ELQKKQLCSF 120  
EIYEVWENR RSLVKSRQCE S

70 Seq ID NO: 218 Protein sequence  
Protein Accession #: NP\_009162.1  
1 11 21 31 41 51  
| | | | |  
MDKLKCPSPF KCREKEKVS A SENFHVGEN DENQDRGNWS KKS DYLLSMI GYAVGLGNVW 60  
RFPYLTYSNG GGAFLIPIAI MLALAGLPLF FLECSLGQFA SLGPVSVVRI LPLFQGVGIT 120  
MVLISIFVTI YNVIIAYSL YYMFASFQSE LPWKNCSSWS DKNCRSPIV THCNVSTVVK 180  
75 GIGIIGQMK SWVDIINNFTC INGSEIYQPG QLPSEQYWNK VALQRSSGMN ETGVIVWYLA 240  
LCLLLAWLIV GAALFKGIKS SGKVVYFTAL FPYVVLILL VRGATLEGAS KGISYYIGAQ 300  
SNFTKLKEAE VWKDAATQIF YLSVAVGGL VALSSYNKFK NNCFSDAIVV CLTNCLTSVF 360  
AGFAIFSILG HMAHISGKEV SQVVKSGFDL AFIAYPEALA QLPGGFPWSI LFFFMLLTLG 420  
LDSQFASLET ITTTIQDLFP KVMKKMRVPI TLGCCLVLFL LGLVCVTQAG IYVWHLIDHF 480  
80 CAGWGILIAA ILELVGIIWI YGKRFIEDT EMMIGAKRWI FWLWWRACNF VITPILLIAI 540  
FIWSLVQFHR PNYGAIPYDP WGVALGWCMV VFCIIWIPIM AIIKIIQAKG NIFQRLISCC 600  
RPASNWGPYL EQHGERYKD MVDPKKEADH EIPTVSGSRK PE

Seq ID NO: 219 Protein sequence  
Protein Accession #: NP\_006389.1

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1 11 21 31 41 51  
 MAPNASCLCV HVRSEEWDLN TFDANPYDSV KKIKEHVRSK TKVPVQDQVL LLGSKILKPR 60  
 RSLSSYGIDK EKTIIHLTKV VKPSDEELPL FLVESGDEAK RHLQVRRSS SVAQVKAMIE 120  
 TKTGIIIPETQ IVTCNGKRLE DGKMMADYGI RKGNNLLFLAS YCIGG

Seq ID NO: 220 Protein sequence  
 Protein Accession #: XP\_094741.1

1 11 21 31 41 51  
 MKANYSAEER FLLLGFSWDP SLQPVLFALV LLCYLLTLTG NSALVLLAVR DPRIHTPMYY 60  
 FLCHLALVDA GFTTSVVPPL LANLRGPALW LPRSHCTAQL CASLALGSAE CVLLAVMALD 120  
 RAAAVCRPLR YAGLVSPRLC RTLASASWLS GLTNSVAQTA LLAERPLCAP RLLDHFICEL 180  
 PALLKLACGG DGDITENQMF AARVVILLPL FAVILASYGA VARAVCCMRP SGGRRRAVGT 240  
 CGSHLTAVCL FYGSAIYTYL QPAQRYNQAR GKFSVSLFYTV VTPALNPLIY TLRNKKVKGA 300  
 ARRLRLSLGR GQAGQ

20 Seq ID NO: 221 Protein Sequence  
 Protein Accession #: NP\_061155.1

1 11 21 31 41 51  
 MDPFTEKLE RTRARRENLO RKMAERPTAA PRSMTHAKRA RQPLSEASNQ QPLSGGEEKS 60  
 CTKPSPSKKR CSDNTEVEVS NLENKQPVES TSAKSCSPSP VSPQVQQA DTISDSVAVP 120  
 ASLLGMRRGL NSRLEATAAS SVKTRMOKLA EQRRRWNDND MTDDIPESL FSPMPSEKA 180  
 ASPPKPLLNS ASATPVGRRG RLANLAATIC SWEDDVNHSF AKQNSVQEQP GTACLSKFSS 240  
 ASGASARINS SSVKQEAATFC SQRDGDASLN KALSSSADDA SLVNASISSS VKATSPVKST 300  
 TSITDAKSCG GQNPPELLPKT PISPLKTGVS KPIVKSTLSQ TVPSKGELSR EICLQSQSKD 360  
 KSTTPGGTGI KPFLERFGER CQEHKSKEPA RSTPHRTPII TPNTKAIQER LFKQDTSST 420  
 THLAQLQKE RQKELACLGR RFDKGNISWA EKGGSNSKQ LETKQETHCQ STPLKKHOGV 480  
 SKTQSLPVT EKVTEQIPAK NSSTEPKGFT ECETMKSSPL KITLFLEEDK SLKVTSDPKV 540  
 EQKIEVIREI EMSVDDDDIN SSKVINDLFS DVLEEGELDM EKSQEMDQA LAESSEBQED 600  
 ALNISSMSLL APLAQTVGVV SPESLVSTPR LELKDTSRSD ESPKPGKFQR TRVPRAESGD 660  
 SLGSEDRDLL YSIDAYRSQR FKETERPSIK QVIVRKEDVT SKLDEKNNAF PCQVNIKQKM 720  
 QELANNEINMQ QTVIYQASQA LNCCVDEEHG KGSLEAEAE RLLLIATGKR TLLIDELNKL 780  
 KNEGQQRKNN ASPQSEFMPS KGSVTLSEIR LPLKADPVCS TVQKPDAAANY YYLIILKAGA 840  
 ENMVATPLAS TSNSLNGDAL TFTTTFTLQD VSNDFEINIE VYSLVQKQDP SGLDKKKKTS 900  
 KSKAITPKRL LSTITTKSNI HSSVMAASPGG LSAVRTSNFA LVGSYTLSSL SVGNTKFVLD 960  
 KVPFLSSLEG HIYLIKIKQV NSSVEERGFL TIFEDVSGFG AWHRRWCVLG GNCISYWTYP 1020  
 DDEKRNPIG RINLANCTSR QIEPANREPC ARRNTFELIT VRPQREDDRE TLVSQCRDTL 1080  
 CVTKNWLSD TKEERDLWMQ KLNQVLVDIR LWQPDACYKP IGKP 1124

Seq ID NO: 222 Protein Sequence  
 Protein Accession #: Q9H8V3

1 11 21 31 41 51  
 MAENSVLTST TGRTSLADSS IFDSKVTEIS KENLLIGSTS YVEEEMPQIE TRVILVQEAG 60  
 KQEELTKALK DIKVGFKVME SVEEFEGLDS PEFENVFVVT DFQDSVFNDL YKADCRVIGP 120  
 PVVLNCSQKG EPLPFSRPL YCTSMNNLVL CFTGFRKKEE LVRLVTLVHH MGVVIRKDFN 180  
 SKVTHLVANC TQGEKFRVAV SLGTPIMKPE WIYKAWERRN EQDFYAAVDD FRNEFKVPPF 240  
 QDCIFSFGLG SDEEKTNMEE MTEMQGGKYL PLGDERCTHL VVEENIVKDL PFEPKSKLYV 300  
 VKQEWFWGSI QMDARAGETM YLYEKANTPE LKKSVSMSLSL NTPNSNRKRR RLKETLAQLS 360  
 RDTDVSPFPFP RKRPSAEHSL SIGSLLDISN TPRESSYNGD TPKSCTKSSK SSTPVPSKQS 420  
 ARWQVAKELY QTESNYVNL ATIIQLFQVP LEEEGQRGGP ILAPEEIKTI FGSIPDIFDV 480  
 HTKIKDDLED LIVNWDESKS IGDIFLKYSK DLVKTYPPFV NFEMSKETI IKCEKQKPRF 540  
 HAFLLKNQAK PECCGRSLVE LLIRPVQRLP SVALLNDLKH KHTADENPDK STLEKAIGSL 600  
 KEVMTNINED KRKTEAQKQI FVVYEVDDGC PANLLSSHRS LVQRVETISL GEHPCDRGEQ 660  
 VTFLFLNDCL ELARKRHVI GTFRSPHGQT RPPASLKHII LMPLSQIKKV LDIRETEDCH 720  
 NAFALLVRPP TEQANVLLSF QMTSDELPKE NWLKMCLRHV ANTICKADAE NLIYTADPES 780  
 FEVNTKMDMS TLRASRAIK KTSKCVTRAF SFSTKPKRAL RRALMTSHGS VEGRSPSSND 840  
 KHVMSRLSST SSLAGIPSPS LVSLPSFFER RSHTLSTRST HLI 883

Seq ID NO: 223 Protein Sequence  
 Protein Accession #: NP\_002488.1

1 11 21 31 41 51  
 MPSRAEDYEV LYTIGTGSYG RCQKIRRKSD GKILVWKELD YGSMTEAEKQ MLVSEVNLLR 60  
 ELKHPNIVRY YDRIIDRTNT TLYIVMEYCE GGDLASVITK GTKERQYLDE EFVLRVMTQL 120  
 TLALKECHRR SDGGHTVLHR DLKPANVFLD GKQNVKLGDF GLARILNHDT SFAKTFVGT 180  
 YYMSPEQMNR MSYNEKSDIW SLGCLLYELC ALMPPTAFS QKELAGKIRE GKFRRIPIRY 240  
 SDELNEIITR MLNLKDYHRP SVEEILENPL IADLVADQR RNLERGRQL GEPEKSDQSS 300  
 PVLSELKKE IQLQERERAR KAREERLEQK EQELCVRERL AEDKLARAEN LLKNYSLLE 360  
 RKFLSLASNP ELLNLPSVSI KKKVHFSGES KENIMRSENS ESQLTSKSKC KDLKKRLHAA 420  
 QLRAQALSDI EKNYQLKSRQ ILGMR 445

Seq ID NO: 224 Protein Sequence  
 Protein Accession #: Eos sequence

1 11 21 31 41 51  
 DISYENENYN SSWIPGSHIV SPSLLLNLNN QQLPLQLQG PLNSWIPPF S GILQQQQQAQ 60  
 IPLGSQFSLS ALDQFAGLLP NQIPLTGEAS FAQQAQAGQV DPLQLQTPPQ TQPGPSHVMP 120  
 YVFSKMPQE QGOMFYYPV YMVLPWEQPO QTVPRSPQQT RQQQYEEQIP FYAQFGYIPQ 180  
 LAEPAISGGQ QQLAFDPQLG TAPEIAVMST GEEIPLYLKE AINFRHDSAG VFMPSTSPKP 240  
 STTNVFTSAV DQITPELPE EKDKTDSLRE P 271

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Seq ID NO: 225 Protein Sequence  
Protein Accession #: eos sequence

|    | 1          | 11         | 21         | 31         | 41         | 51         |     |
|----|------------|------------|------------|------------|------------|------------|-----|
| 5  |            |            |            |            |            |            |     |
|    | RGKEHRSRMV | QIFLFRSRSK | IYHTKMIII  | LLGFLGATLS | APLIPQRLMS | ASNSNELLLN | 60  |
|    | LNNGQLLPQ  | LQGPLNSWIP | PFSGILQOQQ | QAQIPGLSQF | SLSALDQFAG | LLPNQIPLTG | 120 |
|    | EASFAQGAQA | GOVDPLQLQT | PPQTQPGPSH | VMPYVFSFKM | POECGQMFQY | YPVYVLPWE  | 180 |
| 10 | QPQQTVPSPR | QQTROQQYEE | QIPFYAQFGY | IPQLAEPAIS | GGQQLAFDP  | QLGTAPEIAV | 240 |
|    | MSTGEEIPYL | KQEAINFHRD | SAGVFMPSTS | PKPSTTNVFT | SAVDQTTIPE | LPEEKDKTDS | 300 |
|    | LREP       |            |            |            |            |            | 304 |

Seq ID NO: 226 Protein Sequence  
Protein Accession #: NP\_003970.1

|    | 1          | 11         | 21         | 31         | 41         | 51         |     |
|----|------------|------------|------------|------------|------------|------------|-----|
| 15 |            |            |            |            |            |            |     |
|    | MATTVPDGR  | NGLKSKYYRL | CDKAEAWGIV | LETVATAGVV | TSVAFMLTLP | ILVCKVQDSN | 60  |
|    | RRKMLPTQFL | FLGLVGLIFG | LTFAFIIGLD | GSTGPTRFLL | FGILFSICFS | CLLAHAVSLT | 120 |
| 20 | KLVRGRKPLS | LLVILGLAVG | FSLVQDVIAI | EYIVLTMNRT | MVNVFSELSA | PRRNEDFVLL | 180 |
|    | LTYVLFMLAL | TFLMSSFTFC | GSFTGWRKHG | AHIYLTMLLS | IAIWWANITL | LMLPDFDRRW | 240 |
|    | DDTILSSALA | ANGWVFLLAY | VSPFELLTK  | QRNPMQYVPE | DAFCKPQLVK | KSYGVENRAY | 300 |
|    | SQEEITQGFE | ETGDTLYAPY | STHFQLQNQP | PQKEFSIPRA | HAWPSPYKDY | EVKKEGS    | 357 |

Seq ID NO: 227 Protein Sequence  
Protein Accession #: NP\_116575.1

|    | 1          | 11         | 21         | 31         | 41         | 51         |      |
|----|------------|------------|------------|------------|------------|------------|------|
| 25 |            |            |            |            |            |            |      |
|    | MPKIVLNGVT | VDPPFPQYKC | QQEYMTKVLE | CLQQKVNGIL | ESPTGTGKTL | CLLCTTLAWR | 60   |
| 30 | EHLRDGISAR | KIAERAQGLL | FPDRALSSWG | NAAAAAGDPI | ACYTDIPKII | YASRTHSOLT | 120  |
|    | QVINELRNTS | YRPKVCVLGS | REQLCIHPEV | KKQESNHLQI | HLCRKKVASR | SCHFYNVVEE | 180  |
|    | KSLEQELASP | ILDIEDLVKS | GSKHRVCPPY | LSRNLKQAD  | IIFMPYNYLL | DAKSRRAHNI | 240  |
|    | DLKGTVVIFD | EAHNVKMCCE | ESASFDTLPH | DLASGLDVID | QVLEEQTKAA | QQGEPHPFES | 300  |
|    | ADSPSPGLNM | ELEDIAKLKM | ILLRLEGAI  | AVELPGDDSG | VTKPGSYIFE | LFAAEQITFQ | 360  |
| 35 | TKGCILDSLD | QIQHLAGRA  | GVFTNTAGLQ | KLADIIQIVF | SVDPSGSPG  | SPAGLGALQS | 420  |
|    | YKVHIHPDAG | HRRTAQRSDA | WSTTAARKRG | KVLSYWCFSF | GHSMHLEVRQ | GVRSLILTS  | 480  |
|    | TLAPVSSFAL | EMQIPFPVCL | ENPHIIDKHQ | IWVGVPVPRG | DGAQLSSAFD | RRFSEECSS  | 540  |
|    | LKGALGNIAR | VVPYGLLIFF | PSYPVMEKSL | EFWRARDLAR | KMEALKPLFV | EPRSKGSFSE | 600  |
|    | TISAYYARVA | APGSTGATFL | AVCRGKASEG | LDFSDTNGRG | VIVTGLPYPP | RMDPRVVLKM | 660  |
| 40 | QFLDEMKGQG | GAGGQFLSGQ | EWYRQQASRA | VNQAIGRVIR | HRQDYGAVFL | CDHRFAFADA | 720  |
|    | RAQLPSWVRP | HVRVYDNFGH | VIRDVAQFFR | VAERTMPAPA | PRATAPSVRG | EDAVSEAKSP | 780  |
|    | GPFFSTRKAK | SLDLHVPSLK | QRSSGSPAAG | DPESSLCVEY | EQEPVPARQR | PRGLLAALAH | 840  |
|    | SEQRAGSPGE | EQAHSCSTLS | LLSEKRPAEE | PRGGRKKIRL | VSHPEEPVAG | AQTDRAKLFM | 900  |
|    | VAVKQELSDA | NFATFTQALQ | DYKGSDDFAA | LAACLGPLFA | EDPKKHNLQ  | GFYQFVRPHH | 960  |
| 45 | KQGFEEVCIQ | LTGRGCGYRP | EHSIPRRQRA | QPVLDPTGRT | APDPKLTVST | AAAQQLDPQE | 1020 |
|    | HLNQGRPHLS | PRPPPTGDPG | SQPQWGSQVP | RAGKQGOHAV | SAYLADARRA | LGSAGCSQLL | 1080 |
|    | AALTAYKQDD | DLDKVLAVLA | ALTAKPEDF  | PLLHRFSMFV | RPHHKQRFSS | TCTDLTGRPY | 1140 |
|    | PGMEPPGPQE | ERLAVPPVLT | HRAPQPGPSR | SEKTGKTQSK | ISSFLRQRP  | GTVGAGGEDA | 1200 |
|    | GPSQSSGPPH | GPAASEWGEF | HGRDIAGQQA | TGAPGGPLSA | GCVCQCGGAE | DVVPPQCPAC | 1260 |
| 50 | DFQRCQACWQ | RHLQASRMCP | ACHTASRKQS | VMQVFWPEPH | KDHEGAGGAR | PVAAVPGVGA | 1320 |
|    | ACPAAGAGCT | RSGRNTHLPL | AGRDRGAAG  | VCPVPPRHLC | AAAVPPRQPH | DVMPVSTAPL | 1380 |
|    | HAVLELPGAL | PLLQRPLRGA |            |            |            |            | 1400 |

Seq ID NO: 228 Protein Sequence  
Protein Accession #: NP\_057518.1

|    | 1          | 11         | 21         | 31         | 41         | 51         |      |
|----|------------|------------|------------|------------|------------|------------|------|
| 55 |            |            |            |            |            |            |      |
|    | MPKIVLNGVT | VDPPFPQYKC | QQEYMTKVLE | CLQQKVNGIL | ESPTGTGKTL | CLLCTTLAWR | 60   |
|    | EHLRDGISAR | KIAERAQGLL | FPDRALSSWG | NAAAAAGDPI | ACYTDIPKII | YASRTHSOLT | 120  |
| 60 | QVINELRNTS | YRPKVCVLGS | REQLCIHPEV | KKQESNHLQI | HLCRKKVASR | SCHFYNVVEE | 180  |
|    | KSLEQELASP | ILDIEDLVKS | GSKHRVCPPY | LSRNLKQAD  | IIFMPYNYLL | DAKSRRAHNI | 240  |
|    | DLKGTVVIFD | EAHNVKMCCE | ESASFDTLPH | DLASGLDVID | QVLEEQTKAA | QQGEPHPFES | 300  |
|    | ADSPSPGLNM | ELEDIAKLKM | ILLRLEGAI  | AVELPGDDSG | VTKPGSYIFE | LFAAEQITFQ | 360  |
|    | TKGCILDSLD | QIQHLAGRA  | GVFTNTAGLQ | KLADIIQIVF | SVDPSGSPG  | SPAGLGALQS | 420  |
| 65 | YKVHIHPDAG | HRRTAQRSDA | WSTTAARKRG | KVLSYWCFSF | GHSMHLEVRQ | GVRSLILTS  | 480  |
|    | TLAPVSSFAL | EMQIPFPVCL | ENPHIIDKHQ | IWVGVPVPRG | DGAQLSSAFD | RRFSEECSS  | 540  |
|    | LKGALGNIAR | VVPYGLLIFF | PSYPVMEKSL | EFWRARDLAR | KMEALKPLFV | EPRSKGSFSE | 600  |
|    | TISAYYARVA | APGSTGATFL | AVCRGKASEG | LDFSDTNGRG | VIVTGLPYPP | RMDPRVVLKM | 660  |
|    | QFLDEMKGQG | GAGGQFLSGQ | EWYRQQASRA | VNQAIGRVIR | HRQDYGAVFL | CDHRFAFADA | 720  |
| 70 | RAQLPSWVRP | HVRVYDNFGH | VIRDVAQFFR | VAERTMPAPA | PRATAPSVRG | EDAVSEAKSP | 780  |
|    | GPFFSTRKAK | SLDLHVPSLK | QRSSGSPAAG | DPESSLCVEY | EQEPVPARQR | PRGLLAALAH | 840  |
|    | SEQRAGSPGE | EQAHSCSTLS | LLSEKRPAEE | PRGGRKKIRL | VSHPEEPVAG | AQTDRAKLFM | 900  |
|    | VAVKQELSDA | NFATFTQALQ | DYKGSDDFAA | LAACLGPLFA | EDPKKHNLQ  | GFYQFVRPHH | 960  |
|    | KQGFEEVCIQ | LTGRGCGYRP | EHSIPRRQRA | QPVLDPTGRT | APDPKLTVST | AAAQQLDPQE | 1020 |
| 75 | HLNQGRPHLS | PRPPPTGDPG | SQPQWGSQVP | RAGKQGOHAV | SAYLADARRA | LGSAGCSQLL | 1080 |
|    | AALTAYKQDD | DLDKVLAVLA | ALTAKPEDF  | PLLHRFSMFV | RPHHKQRFSS | TCTDLTGRPY | 1140 |
|    | PGMEPPGPQE | ERLAVPPVLT | HRAPQPGPSR | SEKTGKTQSK | ISSFLRQRP  | GTVGAGGEDA | 1200 |
|    | GPSQSSGPPH | GPAASEWGL  |            |            |            |            | 1219 |

Seq ID NO: 229 Protein Sequence  
Protein Accession #: NP\_056462.1

|    | 1          | 11         | 21         | 31         | 41         | 51          |     |
|----|------------|------------|------------|------------|------------|-------------|-----|
| 80 |            |            |            |            |            |             |     |
|    | MPAPAPRATA | PSVRGEDAVS | EAKSPGPFES | TRKAKSLDLH | VPSLKQRSSG | SPAAGDPRESS | 60  |
|    | LCVEYEQEPF | PARQRPRGLL | AALEHSEQRA | GSPGEEQAHS | CSTLSLLSEK | RPAEEPRGGR  | 120 |

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5  
 KKIRLVSHPE EPVAGAQTDR AKLFMVAVKQ ELSQANFATF TQALQDYKGS DDFAAALACL 180  
 GPLFAEDPKK HNLQGFYQF VRPHHKQQFE EVCIQLTGRG CGYRPEHSIP RRQRAQPVLD 240  
 PTGRTAPDPK LTVSTAAQOQ LDPQEHNLQG RPHLSRPPPP TGDPGSQPQW GSGVPRAGKQ 300  
 GQHAYSAYLA DARRALGSAG CSQLLAALTA YKQDDDLDKV LAVLAALTTA KPEDFPLLR 360  
 FSMFVRPHHK QRFSTICTDL TGRPYPGMBP PGPQEEERLAV PPVLTHRAPQ PGPSRSEKGT 420  
 KTQSKISSLF RQRPAQTVGA GGEDAGPSQS SGPPHGPAAS EWGEPHGRDI AGQQATGAPG 480  
 GPLSAGCVCQ CGCAEDVVFV QCPACDFQRC QACWQRHLQA SRMCPACHTA SRKQSVMQVF 540  
 WPEPQ 545

10 Seq ID NO: 230 Protein Sequence  
 Protein Accession #: NP\_003814.1  
 1 11 21 31 41 51  
 | | | | |  
 15 MRALEGPGLS LLCLVLALPA LLPVPAVRGV AETPTYPRWD AETGERLVCA QCPPPGTFVQR 60  
 PCRRDSPTTC GPCPPRHYTQ FWNYLERCY CNVLCGEREE EARACHATHN RACRCRTGFF 120  
 AHAGFCLSHA SCPPGAGVIA PGTPSQNTQC QPCPPGTFFSA SSSSSEQCQP HRNCTALGLA 180  
 LNVPGSSSHD TLCTSTCTGF LSTRVPGAE CERAVIDFVA FQDISIKRLQ RLLQALEAPE 240  
 GWGPTPRAGR AALQLKLRRR LTELLGAQDG ALLVRLQLAL RVARMPGLER SVRERFLPVH 300

20 Seq ID NO: 231 Protein Sequence  
 Protein Accession #: NP\_116563.1  
 1 11 21 31 41 51  
 | | | | |  
 25 MRALEGPGLS LLCLVLALPA LLPVPAVRGV AETPTYPRWD AETGERLVCA QCPPPGTFVQR 60  
 PCRRDSPTTC GPCPPRHYTQ FWNYLERCY CNVLCGEREE EARACHATHN RACRCRTGFF 120  
 AHAGFCLSHA SCPPGAGVIA PGTPSQNTQC QPCPPGTFFSA SSSSSEQCQP HRNCTALGLA 180  
 LNVPGSSSHD TLCTSTCTGF LSTRVPGAE CERAVIDFVA FQDISIKRLQ RLLQALEAPE 240  
 GWGPTPRAGR AALQLKLRRR LTELLGAQDG ALLVRLQLAL RVARMPGLER SVRERFLPVH 300

30 Seq ID NO: 232 Protein Sequence  
 Protein Accession #: NP\_000584.2  
 1 11 21 31 41 51  
 | | | | |  
 35 MAELLASAGS ACSWDFPRAP PSFPPPAASR GGLGGRSFR PHRGAESPR GRDRDGVVRV 60  
 MASSRCAPPR GCRCPLPGASL AMLGTVLLLL ADWVLLRTAL PRIFSLLVPT ALPLLVRVAV 120  
 GLSRWAVLWL GACGVLRATV GSKSENAGAQ GWLAALKPLA AALGLALPGL ALFRELISWG 180  
 APGSADSTRL LHWGSHPTAF VVSYAALPA AALWHKLGLS WVPGGQGGSG NPVRRLLGCL 240  
 GSETRRLSLF LVLVVLSSLG EMAIPFFTGR LTDWILQDGS ADTFTNRNLT MSILTIASAV 300  
 40 LEFVGDIYN NTMGVHSHL QGEVFGAVLR QETEFFQONQ TGNIMSRVTE DSTSLSDSLS 360  
 ENLSLFLWL VRLCLLGLIM LWGSVSLTMV TLITLPLLLF LPKKVKGWYQ LLEVQVRESL 420  
 AKSSQVAIEA LSAMPTVRSF ANEEGEAQKF REKLQEIKTL NQKEAVAYAV NSWTTISGM 480  
 LLKVGLIYIG GQLVTSQAVS SGNLVTFLVY QMQFTQAVEV LLSIYPRVQK AVGSSEKIFE 540  
 YLDRTRPCPP SGLLTPLHLE GLVQFQDVSF AYPNRPDVLV LQGLTFTLRP GEVTLVGPVN 600  
 45 GSGKSTVAAL LQNLQPTCG QLLLDGKPLP QYEHRYLHRQ VAVGQEPQV FGRSLQENIA 660  
 YGLTQKPTME EITAAAVKSG AHSFISGLPQ GYDTEVDEAG SQLSGGQQA VALARALIRK 720  
 PCVLILDDAT SALDANSQIQ VEQLLYESPE RYSRSVLLIT QHLSLVEQAD HILFLEGGAI 780  
 REGTHQQLM EKKGCYWMAM QAPADAPE 808

50 Seq ID NO: 233 Protein Sequence  
 Protein Accession #: NP\_002414.1  
 1 11 21 31 41 51  
 | | | | |  
 55 MRLTVLCAVC LLPGSLALPL PQEAGGMSEL QWEQAQDYLK RFYLYDSETK NANSLEAKLK 60  
 EMQKFGLPI TGMNLSRVIE IMQKPRCGVP DVAEYSLFPN SPKWTSKVVT YRIVSYTRDL 120  
 PHITVDRLV KALNMWKEI FLHFRKVWVG TADIMIGFAR GAHGDSYFPD GPGNTLAHAF 180  
 APGTGLGDA HFDEDERWDT GSSSLGINFLY AATHELGHSL GMGHSSDPNA VMYPTYNGND 240  
 PQNFKLSQDD IKGIQKLYGK RSNSRKK 267

60 Seq ID NO: 234 Protein Sequence  
 Protein Accession #: NP\_061144  
 1 11 21 31 41 51  
 | | | | |  
 65 MPDIEVCKIK PAEEDAKPKE KEAGDEQSLL GAVAPGAAPR DLATFASTST LHGLGRACGP 60  
 GPHGLRRTIW ALALLTSLAA FLYQAAGLAR GYLTRPHLVA MDPAAPAPVA GFPAVTLNLI 120  
 NRFRHSALSD ADIFHLANLT GLPPKDRDGH RAAGLRYPEP DMVDILNRTG HQLADMLKSC 180  
 NFSGHHCSAS NFSVVYTRYG KCYTFNADPR SSLPSRAGGM GSGLEIMLDI QQEYLPPIWR 240  
 ETNETSFEAG IRVQIHSQEE PPYIHLQFGF VSPGFQTFVS CQEQLTYLP QPWGNCRAS 300  
 ELREPELQGY SAYSVSACRL RCEKEAVLQR CHCRMVHMPG NETICPPNIY IECADHTLDS 360  
 LGGPEGEPCF CPTPCNLTRY GKEISMVRIP NRGSARYLAR KYNRNETYIR ENFLVLDVFF 420  
 70 EALTSEAMEQ RAAYGLSALL GDLGGQMGFL IGASILTLE ILDYIIEVSW DRLKRVWRRP 480  
 KTLPLRTSTGG ISTLGLQELK EQSPCPSLGR AEGGGVSSLL PNHHHPHGPP GGLFEDFAC 539

75 Seq ID NO: 235 Protein Sequence  
 Protein Accession #: BAC03567  
 1 11 21 31 41 51  
 | | | | |  
 80 MEVSSPSPAQ RLRRKKRPMV QGPAGCQVFQ PSPSGGTAGD PGGLSDPFYP PRSGSLALGD 60  
 PSSDPACSQS GMEAEEDSL PEQPEDSAQL QKEKPSLYIG VRGTTVRSMQ EVLWTRLREL 120  
 PDPVLSEEVV EGIAAEIEAA LNDLTQGTNG RYKTKYRSL FNLDRPNRLD LFLKVHVGDR 180  
 TPYDLVRMSS MOLAPQELAR WRDQEEKRGL NIIEQQQKEP CRLPASKMTH KGEVEIQORD 240  
 DQTLTLEDLV GPQFMFDCSP QALPIASEDT TGQDHMHFLD PNCHICKDWE PSNELLGSFE 300  
 AAKSCGDNI F QKALSQTPM APMPKTREL SPTEPQDRVP PSGLHVPAAP TKALPCLPPW 360  
 EGVLDMSFIK RFRARAQLVS GHSCRLVQAL PTVIRSAGCI PSNIVWDLA SICPAKAKDV 420  
 CVVRLCPHGA RDTQNCRLLY SYLNDQRHGH LASVEHMGMV LLPLPAFQPL PTRLRPLGGP 480

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5  
GLEVTHSSLL LAVLLPKKEGL PDTAGSSPWL GKVKQMVSN SKVEKRYYPQ DRRPNVPLK 540  
GTPPPGAWQ QQQGSGSIAP RGISAWQRP RGRGRLWPEP ENWQHPGRGQ WPPEPGLRQS 600  
QHPYSVAPAG HGFGRGQHFH RDSCPHQALL RHLESLATMS HQLQALLCPQ TKSSIPRPLQ 660  
RLSSALAAPE PPGPARSSSL GPTDEAGSEC PFPRKA 696

Seq ID NO: 236 Protein Sequence

Protein Accession #: NP\_005282

10  
1 11 21 31 41 51  
| | | | |  
MSKRSWAGS RKPPREMLKL SGSDSSQSMN GLEVAPPGLI TNFSLATAEQ CGQETPLENM 60  
LFASFYLLDF ILALVGNLTA LWFIRDHKS GTPANVFLMH LAVADLSCVL VLPTRLVYHF 120  
SGNHWPFGEI ACRLTGFLFY LNMYSIYFL TCISADRFLA IVHPVKSLLK RPLYAHLAC 180  
AFLWVVVAVA MAPLLVSPOT VQTNHTVVCL QLYREKASHH ALVSLAVAFI PFFITTVTCY 240  
LLIIRSLRQG LRVEKRLKTK AVRMIIVLA IFLVCFVPYH VNRSVYVLYH RSHGASCATQ 300  
15 RILALANRIT SCLTSLNGAL DPIMYFFVAE KFRHALCNLL CGKRLKGGPP SFEGKTNES 360  
LSAKSEL 367

Seq ID NO: 237 Protein Sequence

Protein Accession #: NP\_061113

20  
1 11 21 31 41 51  
| | | | |  
MRKTRLWGLL WMLFVSELRA ATKLTEEKYE LKEGQTLQVK CDYTLKLFAS SQKAWQIIRD 60  
GEMPKTLACT ERPSKNSHPV QVGRILEEDY HDHGLLRVRM VNLQVEDSGL YQCVIYQPPK 120  
EPMMLFDRIR LVVTGKFSGT PGSNENSTQN VYKIPPTTK ALCLPLYTSR TVTQAPPKST 180  
25 ADVSTPDESI NLTNVTDIIR VPFVNIIVILL AGGFSLKSLV FSVLFAVTLR SFVP 234

Seq ID NO: 238 Protein Sequence

Protein Accession #: NP\_003458

30  
1 11 21 31 41 51  
| | | | |  
MBGISIYTSN NYTEEMGSGD YDSMKEPCFR EENANFNKIP LPTIYSIIFL TGIVGNGLVI 60  
LVMGYQKKLR SMTDKYRLHL SVADLLFVIT LPFWAVDAVA NWYFGNLFCK AVHVIYTVNL 120  
YSSVLILAFI SLDRYLAIVH ATNSQRPRKL LAEKVVYVGV WIPALLLTIP DFIFANVSEA 180  
35 DDRYICDRFY PNDLWVVFQ FQHIMVGLIL PGIVILSCYC IISKLSHSK GHQKRKALKT 240  
TVILILAFFA CWLPYYIGIS IDSFILLEII KQGCFFENTV HKWISITEAL AFFHCCLNPI 300  
LYAFLGAKFK TSAQHALTSV SRGSSLKILS KKGKGGHSSV STESESSSFH SS 352

Seq ID NO: 239 Protein Sequence

Protein Accession #: NP\_036338.1

40  
1 11 21 31 41 51  
| | | | |  
MHPQVIVLSL ILHLADSVAG SVKVGGEGAF SVTLPCHYSG AVTSMCWNRG SCSLFTCQNG 60  
IWNTHGTHT YRKDTRYKLL GDLSRRDVS L TIENTAVSDS GYVCCRVEHR GWFNDMKITV 120  
SLEIVPPKVT TPIVITVPT VTTVRTSTTV PTTTTPPTT VPTTMSIPTT TTVPTMTIVS 180  
45 TTTSVPTTTS IPTTTSVPVT TTVSTFVPPM PLPRQNHPEV ATSPSSQPQA ETHPTTLQGA 240  
IRREPTSSPL YSTTTDNDT VTESSDGLWN NNQTLFLEH SLLTANTTKG IYAGVCISVL 300  
VLLALLGVII AKKYFFKKEV QQLSVSFSSL QIKALQNAVE KEVQAEDNIY IENSLYATD 359

Seq ID NO: 240 Protein Sequence

Protein Accession #: NP\_004923.1

50  
1 11 21 31 41 51  
| | | | |  
MRTYRYFLLL FWVGQPYPTL STPLSKRTSG FPAKKRALEL SGNSKNELNR SKRSWMWNQF 60  
FLEEYTGSD QYVVGKLHSD QDRGDGSLKY ILSGDGAGDL FIINENTGDI QATKRLDREE 120  
55 KPVIYLRQA INRRTGRPE PESEFIKIH DINDNEPIFT KEVYTATVPE MSDVGTFFVQ 180  
VTATDADDP YGNSAKVYS ILQGQPYFSV ESETGIKTA LLNMDRENRE QYQVVIQAKD 240  
MGQMGGLSG TTTVNTITLD VNDNPPRFEP STYQFKTPES SPPGTPIGRI KASDADVGEN 300  
AEIEYSITDG EGLDMDFVIT DQETQEGIIIT VKKLLDFEKK KVVTLKVEAS NPVVEPRFLY 360  
60 LGPFKDSATV RIVVEDVDEF PVFSKLAYIL QIREDAQINT TIGSVTAQDP DAARNPVKYS 420  
VDRHTDMRI ENDSNGNSI FTSKLLDRET LLWHNITVIA TEINNPKQSS RVPLYIKVLD 480  
VNDNAPEFAE FYETVFCEKA KADQLIQLH AVDKDDPYSG HQFSFSLAPE AASGNSFTIQ 540  
DNKDNATGIL TRKNGYNRHE MSTYLLPVVI SDNDYPVQSS TGTVTVRVCA CDHNGNMQSC 600  
HAEALIHPTG LSTGALVAIL LCIVILLVTV VLPALRRQR KKEPLIISKE DIRDNIVSYN 660  
DEGGGEEDTQ AFDIGTLRNP EAIEDNKLRR DIVPEALFLP RRTPTARDNT DVRDFINQRL 720  
65 KENDTDPTAP PYDSLATYAY EGTGSVADSL SSLESVTIDA DQDYDYLSDW GPRFKKLADM 780  
YGVDSGDKDS 790

Seq ID NO: 241 Protein Sequence

Protein Accession #: BAB14227.1

70  
1 11 21 31 41 51  
| | | | |  
MRRLTRRLVL PVFGVLWITV LFFWVTKRK LEVPTGPEVQ TPKVWSLFFK VAGMSPWAPQ 60  
VPVSPTPPYQ RGHLP TGGLH AVCHFPCLLQ EAOFHLQTV FLQVRCTLLV YCTDLFPPTSI 120  
75 IITFHNEARS TLLRTIRSVL NRTPTHLIRE ILLVDDFSND PDDCKQLIKL PKVKCLRNNE 180  
RQGLVRSRIR GADIAQGTTL TFLDSHCEVN RDWLQPLLHR VKEDYTRVVC PVIDIINLDT 240  
FTYIESASEL RGGFDWSLHF QWEQLSPEQK ARRLDPTPEI RTPIIAGGLF VIDKAWFDYL 300  
GKYDMMDMDI WGENFEISFR WVMCGSLEI VPCSRVGHVF RKKHPIYVFPD GNANTYIKNT 360  
KRTAEVWMD EYQYYYAARF FALERPFQNV ESRLDLRKNL RCQSFKWYLE NIYPELSIPK 420  
80 ESSIQKGNIR QROKCLSQR QNNQETPNLK LSPCAKVKE DAKSQVWLE YTQQILQEEL 480  
CLSVITLFPQ APVVLVLCKN GDDRQQWTKT GSHIEHIAH LCLDTDMFGD GTENGKEIVV 540  
NPCESSLMSQ HWDVMS 557

Seq ID NO: 242 Protein Sequence

Protein Accession #: AAH10659

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PCT/US02/29560

1 11 21 31 41 51  
| | | | |  
MRRLTRRLVL PVFGVLWITV LLFFWVTKRK LEVPTGPEVQ TPKPSDADWD DLWDQFDERR 60  
YLNAKKWRVG DDPYKLYAFN QRESERISSN RAIPDTRHLR CTLVYCTDL PPTSIITTFH 120  
NEARSTLLRT IRSVLNRTPT HLIREIILVD DFSNDPDDCK QLIKLPKVKC LRNNRQGLV 180  
RSRIRGADIA QGTTLTFLDS HCEVNRDLQ PLLHRVKEDY TRVVCVIDI INLDTFTYIE 240  
SASELRGGFD WSLHFQWEQL SPEQKARRLD PTEPIRTPII AGGLFVIDKA WFDYLGKYDM 300  
DMDIWGGENF EISFRVWMC GLEIVPCSR VGHVFRKKHP YVFPDGNANT YIKNTRKTA 360  
VWMDEYKQY YAAFPFALER PFGNVESRLD LRKNLRCQS F KWYLENIYPE LSIPKESSIQ 420  
KGNIRORQKC LESORQNNQE TPNLKLSPCA KVGEDAKSQ WVAFTYTTQI LQEELCLSVI 480  
TLFPGAPVVL VLCKNGDDRQ QWTKTGSHE HIASHLCLDT DMFGDGTENG KEIVVNPCE 540  
SLMSQHWDMV SS 552

15 Seq ID NO: 243 Protein Sequence  
Protein Accession #: AAH10659.1

1 11 21 31 41 51  
| | | | |  
MRRLTRRLVL PVFGVLWITV LLFFWVTKRK LEVPTGPEVQ TPKPSDADWD DLWDQFDERR 60  
YLNAKKWRVG DDPYKLYAFN QRESERISSN RAIPDTRHLR VLNRTPTHL REILLVDDFS 120  
NDPDDCKQLI KLPKVKCLRN NERQGLVRSR IRGADIAQGT TLTFLDSHCE VNRDNLQPLL 180  
HRVKEDYTRV VCPVIDIINL DTFTYIESAS ELRGGFDWSL HFQWEQLSPE QKARRLDPT 240  
PIRTPIIAGG LVIDKAWFD YLGKYDMDMD IWGNGFEIS FRVWMC GSL EIVPCSRVGH 300  
VFRKKHPYVF PDGNANTYIK NTKRTAEVWM DEYKRYYYAA RPFALERPFPG NVESRLDLRK 360  
NLRCQSPKWF LENIYPELSI PKESSIQKGN IRQOKCLES QRQNNQETPN LKLSPCAKVK 420  
GEDAKSQWA FTYTQQLQE ELCLSVITLF PGAPVVLVLC KNGDDRQWT KTGSHIEHIA 480  
SHLCLDTDMF GDGTENGKEI VVNPCESSLM SQHWDMVSS 519

30 Seq ID NO: 244 Protein Sequence  
Protein Accession #: NP\_078848.1

1 11 21 31 41 51  
| | | | |  
MNGKVWSPG FGALTSAPRAH SDFLDHCEV NRDNLQPLLH RVKEDYTRV CPVIDIINLD 60  
TTYIESASE LRGGFPWSLH FQWEQLSPEQ KARRLDPTPE IRTPIIAGGL FVIDKAWFDY 120  
LGKYDMDMDI WNGENFEIS RVWMC GSGLE IVPCSRVGHV FRKKHPYVFP DGNANTYIKN 180  
TKRTAEVWMD EYKQYYAAR PFALERPFGN VESRLDLRKN LRCQSPKWL ENIYPELSIP 240  
KESSIQKGN IRQOKCLESQ RQNNQETPNL KLSPCAKVG EDAKSQVWAF TYTQQLQEE 300  
LCLSVITLFP GAPVVLVLC NGDDRQWTK TGSHIEHIAS HLCLDTDMFG DGTENGKEIV 360  
VNPCSSLMS QHWDMVSS 378

40 Seq ID NO: 245 Protein Sequence  
Protein Accession #: NP\_001209.1

1 11 21 31 41 51  
| | | | |  
MPRRSLHAAA VLLLVILKEQ PSSPAPVNGS KWTYFGPDGE NSWSKKYPSC GGLLQSPIDL 60  
HSDILOYDAS LTPLEFGQYN LSANKQFLLT NNGHSVKLNL PSDMHIQGLQ SRYSATQLHL 120  
HWGNPNDPHG SEHTVSGQHF AAELHIVHYN SDLYPDASTA SNKSEGLAVL AVLIEMGSFN 180  
PSYDKIFSHL QHVYKQGEA FVPGFNIEEL LPERTAEEYR YRGLSTTPPC NPTVLWTVFR 240  
NPVQISQEQ LLALETALYCT HMDDPSPREM INNFRQVKQF DERLVYTSFS QVQVCTAAGL 300  
SLGILSLAL AGILGICIVV VVSIWLFRRK SIKKGDNKGVI IYKPAKMET EAHA 354

50 Seq ID NO: 246 Protein Sequence  
Protein Accession #: BC000278

1 11 21 31 41 51  
| | | | |  
MPRRSLHAAA VLLLVILKEQ PSSPAPVNGS KWTYFGPDGE NSWSKKYPSC GGLLQSPIDL 60  
HSDILOYDAS LTPLEFGQYN LSANKQFLLT NNGHSVKLNL PSDMHIQGLQ SRYSATQLHL 120  
HWGNPNDPHG SEHTVSGQHF AAELHIVHYN SDLYPDASTA SNKSEGLAVL AVLIEMGSFN 180  
PSYDKIFSHL QHVYKQGEA FVPGFNIEEL LPERTAEEYR YRGLSTTPPC NPTVLWTVFR 240  
NPVQISQEQ LLALETALYCT HMDDPSPREM INNFRQVKQF DERLVYTSFS QGILSLALA 300  
GILGICIVV VSIWLFRRK IKKGDNKGVI YKPAKMETE AHA 343

65 Seq ID NO: 247 Protein Sequence  
Protein Accession #: NP\_006623.1

1 11 21 31 41 51  
| | | | |  
MQVDETLPK KGPSLCSARY GIALVLHFCN FTIAQNVM NITMVMVNS TSPQSQNLDS 60  
SEVLPVDSFG GLSKAPKSLP AKSSILGGQF AIWEKWGPPQ ERSRLCSIAL SGMLLGCFCTA 120  
ILIGGFISET LGWPFVFIYF GGVGCVCLL WFWVIYDDPF SYPWISTSEK EYIISLKKQ 180  
VGSSKQPLPI KAMLRSLPIW SICLGCFSHQ WLVSTMVVIY PTYISSVYHV NIRDNGLLSA 240  
LPFVAVWIG MVGYLADFL LTKKFRLLTV RKIATILGSL PSSALIVSLP YLNSGYITAT 300  
ALLTLSCGLS TLCQSGIYIN VLDIAPRYSS FLMGASRGFS SIAPVIVPTV SGFLLSQDPE 360  
FGWNVFFLL FAVNLLGLLF YLIFGEADVQ EWAKERKLTR L 401

75 Seq ID NO: 248 Protein Sequence  
Protein Accession #: NP\_003049.1

1 11 21 31 41 51  
| | | | |  
MPTTVDDVLE HGGEFHFQK QMFLLALLS ATFAPYVGI VFLGFTPDHR CRSPGVAELS 60  
LRCGWSPAEE LNYTVPGGP AGEASFRQCR RYEVWNQST FDCVDPLASL DTNRSRLPLG 120  
PCRDGWVYET PGSSIVTEFN LVCANSWMLD LFQSSVNVGF FIGSMSIGYI ADRFGRKLCL 180  
LTTVLINAA GVLMAISPTY TWMLIFRLIQ GLVSKAGWLI GYLITEFVG RRYRRTVGIF 240  
YQVAYTVGLL VLAGVAYALP HWRWLQFTVA LPNFFLLYY WCIPESPRWL ISQNKNAEAM 300  
RIIKHIAKKN GKSLPASLOR LRLEEETGKK LNPSFLDLVR TPOIRKHTMI LMVNWATSSV 360  
LYQGLIMHMG LAGDNIYLD FYSALVEFPA AFMIILTIDR IGRRYPWAAS NMVAGAACL 420

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SVFIPGDLQW LKIIISCLGR MGITMAYEIV CLVNAELYPT FIRNLGVHIC SSMCDIGGII 480  
 TPFLVYRLTN IWLEPLMVF GVLGLVAGGL VLLLPETKKG ALPETIEEAE NMQRPRKNKE 540  
 KMIYLQVQKL DIPLN 555

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Seq ID NO: 249 Protein Sequence

Protein Accession #: Eos sequence

|             |             |            |             |            |             |     |
|-------------|-------------|------------|-------------|------------|-------------|-----|
| 1           | 11          | 21         | 31          | 41         | 51          |     |
|             |             |            |             |            |             |     |
| MQPAIQVWFG  | EDLPLSPRSP  | LTPRHGPGLA | NVCQYDEWIA  | VRHEATLLPM | QEDLSIWLSG  | 60  |
| LLGIKVKA EK | LLEEDLNGVL  | LCQLIDVLQN | MVKTCSSEES  | GNFPMRKVPC | KKDAASGSFF  | 120 |
| ARDNTANFLH  | WCRDIGVDET  | YLFESGLVL  | HKDPRQVYLC  | LLEIGRIVSR | YGVPPVLVK   | 180 |
| LEKEIELEET  | LLNTSGPEDS  | ISIPKSCCRH | EELHEAVKHI  | AEDPPCCSCH | RFSIEYLSEG  | 240 |
| RYRLGDKILF  | IRMLHGKHVM  | VRVGGGWDTL | QGFLLLKYDPC | RILQFATLEQ | KILAFQKGV S | 300 |
| NESVPDSPAR  | TPQPPPMNPL  | SAVNMFOKQN | SKPSVPV SIP | KSKEKQGRPP | GALVPASSLK  | 360 |
| GGNLGSM SVR | SKLPNSPAAS  | SHPKLKSSKG | ITKKPQAPSN  | NASSSLASLN | PVGKNTSSPA  | 420 |
| LRRTAPCISE  | SPRKCISSFN  | TPKAKVIPAQ | NSADLPESTL  | LPNKCSGKTQ | PKYLRKHNHIS | 480 |
| SRDNAVSHLA  | AHSNSSSKCP  | KLPKANIPVR | PKPSFQSSAK  | MTKTSSTKIA | TGLGTQSQPS  | 540 |
| DGAPQAKPVP  | AQKLKSA LNL | NQPVSVSSVS | PVKATQKSKD  | KNIVSATKKQ | PONKSAFQKT  | 600 |
| GPSSSLKSPGR | TPLSIVSLFQ  | SSTKTQTAPK | SAQTVAKSQH  | STKGPPRSKG | TPASIRKPPS  | 660 |
| SVKDADSGDK  | KPTAKKKEDD  | DHYFVMTGSK | KPRK        |            |             | 694 |

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Seq ID NO: 250 Protein Sequence

Protein Accession #: NP\_001035.1

|             |            |            |             |             |             |     |
|-------------|------------|------------|-------------|-------------|-------------|-----|
| 1           | 11         | 21         | 31          | 41          | 51          |     |
|             |            |            |             |             |             |     |
| MSKSKCSVGL  | MSSVVAPAKE | PNAVGPKEVE | LILVKEQNGV  | QLTSSTLTNP  | ROSPVEA QDR | 60  |
| ETWGGKIDFL  | LSVIGFAVDL | ANVWRFPYLC | YKNGGGAF LV | PYLLFMVIAG  | MPLFYMELAL  | 120 |
| GQFNREGAAG  | VWKICPILKG | VGFTVILISL | YVGGFYFNVI  | AWALHYLFSS  | FTTELPMIHC  | 180 |
| NNSWNSPNCS  | DAHFGDSSGD | SSGLNDTFGT | TPAAEYFERG  | VLHLHQSHGI  | DDLGPFRWQL  | 240 |
| TACLVLIVVL  | LYFSLNKGVK | TSGLVVMWTA | TPYVVLITAL  | LIRGVTLPGA  | IDGIRAYLSV  | 300 |
| DFYRLCEASV  | WIDAATQVCF | SLGVGFGVLI | AFSSYNKFTN  | NCYRDAIVTT  | SINSILTSFSS | 360 |
| GFVVF SFLGY | MAQKHSVPIG | DVAKDGPGLI | PIIYPEAIAT  | LPLSSAWAVV  | PFIMLLTLGI  | 420 |
| DSAMGMESV   | ITGLIDEFQL | LHRHRELFTL | FIVLATFLLS  | LFCVTNGGIY  | VFTLLDHFAA  | 480 |
| GTSILFGVLI  | EATGVAVFYG | VGQFSDDIQQ | MTGQRPSLYW  | RLCWKLVS PC | FLLFVVV VSI | 540 |
| VTFRPPHYGA  | YIFPDWANAL | GWVIATSSMA | MVPIYAA YKF | CSLPGSFREK  | LAYAIAP EKD | 600 |
| RELVDREGVR  | QFTLRHWLKV |            |             |             |             | 620 |

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Seq ID NO: 251 Protein Sequence

Protein Accession #: NP\_071356.1

|            |            |            |             |            |             |     |
|------------|------------|------------|-------------|------------|-------------|-----|
| 1          | 11         | 21         | 31          | 41         | 51          |     |
|            |            |            |             |            |             |     |
| MPLGHIMRLD | LEKIALEYIV | PCLHEVGFCY | LDNFLGEVVG  | DCVLERVKQL | HCTGALRDGQ  | 60  |
| LAGPRAGVSK | RHLRGDQITW | IGGNEEGCEA | ISFLLSLIDR  | LVLYCGSRLG | KYVVKERSKA  | 120 |
| MVACYPGNGT | GYVRHVDNPN | GDGRCTIC Y | YLNKNWD AKL | HGGILRIFPE | GKSFIA DVEP | 180 |
| IFDRLLFFWS | DRRNPHVEQP | SYATRYAMTV | WYFDAEERAE  | AKKKFRNLTR | KTESALTED   | 239 |

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Seq ID NO: 252 Protein Sequence

Protein Accession #: NP\_647475.1

|            |            |            |            |            |             |     |
|------------|------------|------------|------------|------------|-------------|-----|
| 1          | 11         | 21         | 31         | 41         | 51          |     |
|            |            |            |            |            |             |     |
| MSGAPTAGAA | LMCAATAV L | LSAQGGPVQS | KSPRFASWDE | MNVLAHGLLQ | LGQGLREHAE  | 60  |
| RTRSQLSALE | RRLSACGSAC | QGTGSTDLP  | LAPESRVDPE | VLHSLQTQLK | AQNSRIQQLF  | 120 |
| HKVAQQORHL | EKQHLRIQHL | QSQFGLLDHK | HLDEHAVKPA | RRKRLPEMAQ | PVDPAHNVS R | 180 |
| LHRLPRDCQE | LFQVGERQSG | LFEIQPGQSP | PFLVNCKMTS | DGGWTVIQRR | HGGSVD FNRP | 240 |
| WEAYKAGFGD | PHGEFWLGLE | KVHSITGDRN | SRLAVQLRDW | DGNAELLQFS | VHLGGEDTAY  | 300 |
| SLQLTAPVAG | QLGATTVPVS | GLSVPFSTWD | QDHDLRDRKN | CAKSLSGGWV | FGTCSHSNLN  | 360 |
| GQYFRSIPQQ | RQKLKKGIFW | KTWGRYYPL  | QATTMLIQFM | AAEAAS     |             | 406 |

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Seq ID NO: 253 Protein Sequence

Protein Accession #: NP\_001207.1

|             |             |            |             |             |            |     |
|-------------|-------------|------------|-------------|-------------|------------|-----|
| 1           | 11          | 21         | 31          | 41          | 51         |     |
|             |             |            |             |             |            |     |
| MAPLCPSPWL  | PLLIPAPAPG  | LTVQLLSLL  | LLMPVHPQRL  | PRMQEDSP LG | GGSSGEDDPL | 60  |
| GEEDLPSEED  | SPREEDPFGE  | EDLPGEEDLP | GEEDLP EVKP | KSEEEGSLKL  | EDLPTVEAPG | 120 |
| DPQEPQNNAH  | RDEKGDQOSH  | WRYGGDPPWP | RVSPACAGRF  | QSPVDIRPOL  | AAFCA LRPL | 180 |
| ELLGFGQLPPL | PELRLRNNGH  | SVQLTLPPGL | EMALGP GREY | RALQLHLHWG  | AAGRPGSEHT | 240 |
| VEGHRFP AEI | HVVHLSTAF A | RVDEALGRPG | GLAVLA AFLE | EGPEENSAYE  | QLLSRLEEIA | 300 |
| EGSETQVPG   | LDISALLPSD  | FSRYFOYEGS | LTTPPCAQGV  | IWTVFNQTVM  | LSAKQLHTLS | 360 |
| DTLWCPGDSR  | LQLNFRATQP  | LNGRVIEASF | PAGVDSSPRA  | AEPVOLNSCL  | AAGDILALVF | 420 |
| GLLFAVTSVA  | FLVQMRRQHR  | RGTKGGSYSR | PAEVAETGA   |             |            | 459 |

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Seq ID NO: 254 Protein Sequence

Protein Accession #: NP\_003030.1

|             |             |             |             |             |             |     |
|-------------|-------------|-------------|-------------|-------------|-------------|-----|
| 1           | 11          | 21          | 31          | 41          | 51          |     |
|             |             |             |             |             |             |     |
| MEQQDQSMKE  | GRLTLVLALA  | TLIAAFGSSF  | QYGYNVA AVN | SPALLMQQFY  | NETYYGR TGE | 60  |
| FMEDFPLTLL  | WSVTVSMFPF  | GGFIGSLLVG  | PLVNKFG RKG | ALLFN NIFSI | VPAILMGCSR  | 120 |
| VATSFELIII  | SRLLVGICAG  | VSSNVVPMYL  | GELAPKNLRG  | ALGVVPQLFI  | TVGILVAQIF  | 180 |
| GLRNL LANVD | GWPIILLGLTG | VPAALQLLLL  | PPFPESPRYL  | LIQKKDEAAA  | KKALQTLRGW  | 240 |
| DSVDREVAEI  | RQDEAEAKAA  | GFISVLK LFR | MRSRLRWQLLS | IIVLMGGQQAL | SGVNAIYYA   | 300 |
| DQIYLSAGVP  | EEHVQYVTAG  | TGAVNVVMTF  | CAVFVVELLG  | RRLLLLLGFS  | ICLIACCVLT  | 360 |
| AALAIQDTVS  | WMFYISIVCV  | ISYVIGHALG  | PSPIALLIT   | EIFLQSSRPS  | AFMVGGSVHW  | 420 |
| LSNFTVGLIF  | PFIQEGLG PY | SFIVFAVICL  | LTIIYIFLIV  | PETKAKTFIE  | INQIFTKNWK  | 480 |
| VSEVYPEKEE  | LKELPPVTSE  | Q           |             |             |             | 501 |

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Seq ID NO: 255 Protein Sequence  
Protein Accession #: NP\_001243.1

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| 1          | 11         | 21         | 31         | 41         | 51         |     |
|            |            |            |            |            |            |     |
| MPEEGSGCSV | RRRPYGCVL  | AALVPLVAGL | VICLVVCIQR | FAQAQQQLPL | ESLGWDVAEL | 60  |
| QLNHTGPOQD | PRLYWQGGPA | LGRSFLHGPE | LDKGQLRIHR | DGIYMVHIOV | TLAICSSTTA | 120 |
| SRHHPTTLAV | GICSPASRSI | SLRLSFHQG  | CTIASQRLTP | LARGDTLCTN | LTGTLLPSRN | 180 |
| TDETFFGVQW | VRP        |            |            |            |            | 193 |

Seq ID NO: 256 Protein Sequence  
Protein Accession #: NP\_060562.2

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| 1          | 11         | 21         | 31         | 41         | 51         |     |
|            |            |            |            |            |            |     |
| MLFTSFVEQK | KKAGVFEQIT | KTHGTIIGIT | SGIVLVLLII | SILVQVKQPR | KKVMACKTAF | 60  |
| NKTGFQEVFD | PPHYELFSLR | DKEISADLAD | LSEELDNYQR | MRRSSTASRC | IHDHCGSGQA | 120 |
| SSVKQSRTNL | SSMELPLRND | FAQPQPMKTF | NSTFKKSSYT | FKQGHECFEQ | ALEDRVMEEI | 180 |
| PCEIYVRGRE | DSAQASISID | F          |            |            |            | 201 |

Seq ID NO: 257 Protein Sequence  
Protein Accession #: Eos sequence

|            |            |            |            |            |             |     |
|------------|------------|------------|------------|------------|-------------|-----|
| 1          | 11         | 21         | 31         | 41         | 51          |     |
|            |            |            |            |            |             |     |
| IIAATINNAS | MTSPIDNAGL | AADDFKMNAS | LQTQISTDAE | AVSSAKSEIM | ELKQVLQSLQ  | 60  |
| HELQSVLAMQ | SSPEGTLADT | EAGYVAQLSE | IKMYISILEE | QICQIRGETE | YQNTHEYAQLQ | 120 |
| DIKTRLEVEI | ETYHRLLGGE | GGSEAREAES | KG         |            |             | 152 |

Seq ID NO: 258 Protein Sequence  
Protein Accession #: NP\_003256.1

|             |             |               |             |            |               |     |
|-------------|-------------|---------------|-------------|------------|---------------|-----|
| 1           | 11          | 21            | 31          | 41         | 51            |     |
|             |             |               |             |            |               |     |
| MRQTLPCIYF  | WGGLLPFGML  | CASSTTKCTV    | SHEVADCSHL  | KLTQVPDDL  | TNITVLNLTH    | 60  |
| NQLRLRLPAAN | FTRYSLQTSL  | DVGFTNTISK    | EPELCQKLP   | LKVLNLQHNE | LSQLSDKTFA    | 120 |
| FCINLTLEHL  | MSNSIQKIKN  | NPFVKQKNLI    | TLDLSHNGLS  | STKLGTQVOL | ENLQELLN      | 180 |
| NKIQALKSEE  | LDIFANSSLK  | KLELSSNQIK    | EFSPGCFHAI  | GRLFGFLN   | VQLGPSLTEK    | 240 |
| LCLELANTSI  | RNLSLSNSQL  | STTSNTTFLC    | LKWTNLTMLD  | LSYNNLN    | VVGNDSFAWLPQL | 300 |
| EYFFLEYNNI  | QHLFSHSLHG  | LFNVRYLNLK    | RSFTKQSISL  | ASLPKIDDFS | FQWLKCLEHL    | 360 |
| NMEDNDIPIG  | KSNMFTGLIN  | LKYLSSLNSF    | TSLRTLNET   | FVSLAHSPLH | ILNLTKNKIS    | 420 |
| KIESDAFSLW  | GHLEVLDLGL  | NEIGQELTGQ    | EWRGLENIFE  | IYLSYNKYLO | LTRNSFALVP    | 480 |
| SLQRLMLRRV  | ALKNVDS     | SPFPQPLRNLTI  | LDLSNNNIAN  | INDDMLEGLE | KLEILDLOHN    | 540 |
| NLARLWKHAN  | PGGPIYFLKG  | LSHLHILNLE    | SNGFDEIPVE  | VFKDLFELKI | IDLGLNNLNT    | 600 |
| LPASVFNNQV  | SLKSLNLQKN  | LITSVEKKVF    | GPAFRNLTTEL | DMRFNPFDC  | TCEIAWVFNW    | 660 |
| INETHNTIPE  | LSSHLYLCNTP | PHYHGFVRL     | FDTSSCKDSA  | PFELFFMINT | SILLIFIFIV    | 720 |
| LLIHFGWRI   | SFYWNVS     | VHRLVGFKEIDRQ | TEQFEYAAYI  | IHAYKDKDWV | WEHFSMEKE     | 780 |
| DQSLKPCLEE  | RDFEAGVFEL  | EAIVNSIKRS    | RKIIFVITHH  | LLKDPCKRFP | KVHHAVQQAI    | 840 |
| EQNLDSIILV  | FLEIIPDYKL  | NHALCLRRGM    | FKSHCILNWP  | VQKERIGAFR | HKLQVALGSK    | 900 |
| NSVH        |             |               |             |            |               | 904 |

Seq ID NO: 259 Protein Sequence  
Protein Accession #: NP\_000570.1

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| 1          | 11         | 21         | 31         | 41         | 51         |     |
|            |            |            |            |            |            |     |
| MDYQVSSPIY | DINYTSEPC  | QKINVQIAA  | RLLPPLYSLV | FIFGFVGNML | VILILINCKR | 60  |
| LKSMTDIYLL | NLAISDLFFL | LTVPFWAHYA | AAQWDFGNTM | CQLLTGLYFI | GFPFGIFFTI | 120 |
| LLTIDRYLAV | VHAVFALKAR | TVTFGVVTSV | ITWVVAVFAS | LPGIIFTRSQ | KEGLHYTCSS | 180 |
| HFPYSQYQFW | KNFQTLKIVI | LGLVPLLVLM | VICYSGLKKT | LLRCRNEKKR | HRAVRLIFTI | 240 |
| MIVVFLFWAP | YNIYLLNTF  | QEFFGLNACS | SSNRLDQAMQ | VTETLGMTHC | CINPIIYAFV | 300 |
| GEKFRNYLLV | PFQKHIAKRF | CKCCSIFQQE | APERASSVYT | RSTGEQEISV | GL         | 352 |

Seq ID NO: 260 Protein Sequence  
Protein Accession #: Eos sequence

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| 1          | 11         | 21         | 31         | 41         | 51         |     |
|            |            |            |            |            |            |     |
| PQGPFGPGGI | PGAKGELGLP | GAPGIDGEGK | PKGQKGDPE  | PGPAGLKGEA | GEMGLSGLPG | 60  |
| ADGLKGEKGE | SASDSLQESL | AQLIVEPGPP | GPPGPPGPMG | LQGIQGPQGL | DGAKGEKGAS | 120 |
| GERGPSGLPG | PVGPPGLIGL | PGTKGEKGRP | GEPLDGFPG  | PRGEKGRDSE | RGEKGERGVP | 180 |
| GRKGVKQKQK | EPGPPGLDQP | CPVGPDLPLV | PGCWHK     |            |            | 216 |

Seq ID NO: 261 Protein Sequence  
Protein Accession #: NP\_004852.1

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| 1          | 11         | 21         | 31         | 41         | 51         |     |
|            |            |            |            |            |            |     |
| MLPPQKKPWE | SMAGKLVLGA | LFTSFLLLVY | SYAVPPLHAG | LASTTPEAAA | SCSPPALEPE | 60  |
| AVIRANGSAG | ECQPRRNIVF | LKTHKTASST | LLNILFRFGQ | KHRLKFAFPN | GRNDFDYPTF | 120 |
| FARSLVDYR  | PGACFNIICN | HMRPHYDEV  | GLVPTNAIFI | TVLRDPARLF | ESSFHYFGPV | 180 |
| VPLTWKLSAG | DKLTEFLQDP | DRYYDPNGFN | AHYLRNLLFF | DLGYDNSLDP | SSPQVQEHIL | 240 |
| EVERRFHLVL | LQEYFDESLV | LLKDLCCWEL | EDVLYFKLNA | RRDSPVPRLS | GELYGRATAW | 300 |
| NMLDSHLYRH | FNASFWRKVE | AFGRERMARE | VAALRHANER | MRTICIDCGH | AVDAAAIQDE | 360 |
| AMQWPQLGT  | KSILGYNLKK | SIGQRHAQLC | RRMLTPEIQY | LMDLGANLWV | TKLWKFIRDF | 420 |
| LRW        |            |            |            |            |            | 423 |

Seq ID NO: 262 Protein Sequence  
Protein Accession #: NP\_061130.1

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|---|----|----|----|----|----|--|
| 1 | 11 | 21 | 31 | 41 | 51 |  |
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|------------|------------|------------|-------------|------------|-------------|-----|
| MASVLSRLRG | KRSLLGARVL | GPSASEGPSA | APPSEPLLEG  | AAPQPFTTSD | DTPCQEQPKE  | 60  |
| VLKAPSTSGL | QOVAFQPGQK | VYVWYGGQEC | TGLVEQHSWM  | EGQVTVWLLE | QKLQVCCRVE  | 120 |
| EVWLAEIQGP | CPQAPPLEPG | AQALAYRPVS | RNIDVPKRKS  | DAVEMDEMMA | AMVLTSLSCS  | 180 |
| PVVQSPPGTE | ANFSASRAAC | DPWKESGDIS | DSGSSSTTSGH | WSGSSGVSTP | SPPHQASPK   | 240 |
| VLGDAGGSPQ | TDHGFETDPD | PFLLDPEAPR | KRKNSVKVMY  | KCLWPNCQKV | LRSIVGIKRH  | 300 |
| VKALHLGDTV | DSQFKREED  | FYYTEVQLKE | ESAAAAA     | AGTPVPGTPT | SEPAPTSMPT  | 360 |
| GLPLSALPPP | LHKAQSSGPE | HPGPESLPS  | GALSKSAPGS  | FWHIQADHAY | QALPSFQIPV  | 420 |
| SPHIYTSVSW | AAAPSAACSL | SPVRSRSLSF | SEPQQPAPAM  | KSHLIVTSPP | RAQS GARKAR | 480 |
| GEAKKCRKVY | GIEHRDQWCT | ACRWKKACOR | FLD         |            |             | 513 |

Seq ID NO: 263 Protein Sequence  
Protein Accession #: AB058765.2

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TLEASASEIW PPRQLTNSES KASDGGLIIP DKVWAVPDSL KADAVVPELA PSEIAALAHS 660  
PEDAESALAD SRESHKGEET TISVHWRSL SGRFSPQRL ESSVDPVDEK ELSTVDSL 720  
ASETTGGKENV NNVSDQDEEK QLKMDHTAFF KFLTCPKIL ESSVDPIDEI SVIEYTRAGK 780  
PEPSETTPQG AREGQSDNG NMGHEAEIQS AILQVPCIQG TILSENRI SRQEGSMKOE 840  
EQIQPEEAKT AIWQLQPS EGERIPSGCS IGQIQESSDG SLGAEQSKK DKAELISPTS 900  
PLSSCLPMT HSSLGVDTHN STGQIHDVPE NDIVEPRKRQ YVFPVSQKRG TIENERGKPL 960  
PSSPDLTRFP CTSSPEGNVT DFLISHKMEE PKIEVLQIGE TKPPSSSSSS AKTLAFISGE 1020  
RELEKAPKLL QDPCQKGTLG CAKKSREK SLEARAGKSP GTLTAVTGSE EVKRKPEAPG 1080  
SGHLAEGVKK KILSRVAALR LKLEENIR KNSAFLKMP KLETSLSHTE EKQDPKKPSC 1140  
KREGRAVLL KKIOAEMFPE HSGNVKLSCQ PAEIHEDSTI CWTKDSKSI QVRSAGDNS 1200  
TVSFAIVQAS PKDQGLYCC IKNSYGVTA EFNLTAEVLK QLSSRQDTKG CEEIEFSQLI 1260  
FKEDFLHDSY FGRLRGQIA TEELHFGEGV HRKAFRSTVM HGLMPVFKPG HACVLKVHNA 1320  
IAYGTRNDE LIQRNYKLA QECYVQNTAR YYAKIYAAEA QPLEGFGEVP EIIPIFLIHR 1380  
PENNIPYATV EEELIGEFVK YSIRDGKEIN FLRRESEAG KCCTFQHWVY QKTSGLLV 1440  
DMQGVGMKLT DVGIATLAKG YKGFKGNCMS TFIDQFKALH QCNKYCKMLG LKSLQNNNQK 1500  
QKQPSIGKSK VQTNMTVKK AGPETPGEKK T 1531

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25

Seq ID NO: 268 Protein Sequence  
Protein Accession #: NP\_602293.1

1 11 21 31 41 51  
| | | | |  
MGKQNSKLRP EVLQDLRENT EFTDHELQEW YKGLKDCPT GHLTVDEFKK IYANFFPYGD 60  
ASKFAEHVFR TFDTNGDGTI DFREFIIALS VTSRGKLEQK LKWAFSMYDL DNGYISRSE 120  
MLEIVQAIYK MVSSVMKME DESTPEKRTD KIFRQMDTNN DGKLSLEEFI RGAKSDPSIV 180  
RLQCDPSSA SQF 193

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35

Seq ID NO: 269 Protein Sequence  
Protein Accession #: NP\_002140.2

1 11 21 31 41 51  
| | | | |  
MGKQNSKLRP EVLQDLRENT EFTDHELQEW YKGLKDCPT GHLTVDEFKK IYANFFPYGD 60  
ASKFAEHVFR TFDTNGDGTI DFREFIIALS VTSRGKLEQK LKWAFSMYDL DNGYISRSE 120  
MLEIVQAIYK MVSSVMKME DESTPEKRTD KIFRQMDTNN DGKLSLEEFI RGAKSDPSIV 180  
RLQCDPSSA SQF 193

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45

Seq ID NO: 270 Protein Sequence  
Protein Accession #: NP\_003937.1

1 11 21 31 41 51  
| | | | |  
MGNAQERPSE TIDRERKRLV ETLQADSGLL LDALLARGVL TGPEYEALDA LPDAERRVRR 60  
LLLLVQKGGE AACQELLRCA QRTAGAPDPA WDWQHVGPY RDRSYDPPCP GHWTPPEAPGS 120  
GTTCPGLPRA SDPEAGGPE GSEAVQSGTP EEPPEPELEAE ASKEAPEPE PEPELEPEAE 180  
AEPEPELEPE PDPEPEPDFE ERDESEDS 208

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55

Seq ID NO: 271 Protein Sequence  
Protein Accession #: NP\_004198.1

1 11 21 31 41 51  
| | | | |  
MCGAVVDEGP TGVKAPDGGW GWAFLPGCFV ITGFSYAFPK AVSVFFKELI QEFGIGYSdT 60  
AWISSILLAM LYGTGPLCSV CVNRFGCRPV MLVGLFASL GMVAASFCSR IIQVYLTGTG 120  
ITGLGLALNF QPSLIMLNRY FSKRRPMANG LAAAGSPVFL CALSPLGQLL QDRYGWRRGF 180  
LILGGLLLNC CVCAALMRPL VVTAQPGSGP PRPSRRLDL SVFRDRGFVL YAVAASVMVL 240  
GLFVPPVFFV SYAKDLGVDP TKAAFLLTIL GFIDIFARPA AGFVAGLGKV RPYSVYLFSF 300  
SMFFNGLADL AGSTAGDYGG LVVFCIFFGI SYGMVGLAQF EVLMAIVGTH KFSIAIGLVL 360  
LMEAVAVIVG PPSGGKLLDA THVYMYVFIL AGAEVLTSSL ILLLGNNFCI RKKPKPEQPE 420  
VAAAEELKH KPPADSGVDL REVERFLKAE PEKNGEVVHT PETSV 465

60  
65  
70

Seq ID NO: 272 Protein Sequence  
Protein Accession #: NP\_060705.1

1 11 21 31 41 51  
| | | | |  
MAALTTLFKY IDENQDRYIK KLAQWVAIQS VSAWPEKRGE IRRMEVAAA DVKQLGGSVE 60  
LVDIGKQKLP DGSEIPLPPI LLGRLGSDPQ KKTVCIIYGH L DVQPAALDGD WDEPPTLVE 120  
RDGKLYGRGS TDDKGPVAGW INALEAYQKT GQEI PVNVRP CLEGMEESGS EGLDELIFAR 180  
KDTFFKDVYD VCISDNVWLG KKKPCITYGL RGICYFFIEV ECSNKLHSG VYGGSVHEAM 240  
TDLILLMGSL VDKRGNILIP GINEAFAVT EEEHKLVDI DFDIEEFKAD VQAQILLHSH 300  
KKDILMHRWR YPSLSLHGIE GAFSGSGAKT VIPRKVVGKF SIRLVNMTPT EVVGEQVTSY 360  
LTKKFAELRS PNEFKVVMGH GSKPVVSDFS HPHYLAGRRA MKTVFGVEPD LTREGGSIPV 420  
TLTFQEATGK NVMLLPVQSA DDGAHSQNEK LNRYNYIEGT KMLAAYLYEV SQLKD 475

75  
80

Seq ID NO: 273 Protein Sequence  
Protein Accession #: AF258592\_1

1 11 21 31 41 51  
| | | | |  
MAALTTLFKY IDENQDRYIK KLAQWVAIQS VSAWPEKRGE IRRMEVAAA DVKQLGGSVE 60  
LVDIGKQKEI PVNVRFCLEG MEESGSEGLD ELIFARKDTF FKDVYVCIS DNYWLGKKKP 120  
CITYGLRGIC YFFIEVCSN KDLHSGVYGG SVHEAMTDLI LLMGSLVDKR GNILIPGINE 180  
AVAAVTEEH KLYDDIDFDI EEFKDVGAQ ILLHSHKKDI LMHRWRYP SLHGIEGAFS 240  
GSGAKTVIPR KUVGKFSIRL VPNMTPEVVG EOVSYLTKK FAELRSPNEF KVMYMGHGGK 300  
WVSDFSHPHY LAGRRAMKT VFGVEPDLTRE GGSIPVTLTF QEATGKNVML LPVGSADDGA 360  
HSQNEKLNRY NYIEGTMLA AYLIEVSQK D 391

Seq ID NO: 274 Protein Sequence  
Protein Accession #: NP\_060871.1

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|    |                                  |             |            |            |             |             |      |
|----|----------------------------------|-------------|------------|------------|-------------|-------------|------|
|    | 1                                | 11          | 21         | 31         | 41          | 51          |      |
|    |                                  |             |            |            |             |             |      |
|    | MGGNHSHKPP                       | VFDENEENVF  | DHFQILRAIG | KGSFGKVCIV | QKRDTKKMYA  | MKYMNKQKCI  | 60   |
|    | ERDEVNVRFR                       | ELQIMQGLEH  | PFLVNLWYSF | QDEEDMFVVV | DLLLGGDLRY  | HLQQNVHFTF  | 120  |
| 5  | GTVKLYICEL                       | ALALEYLQRY  | HIHRDIKPD  | NILLDEGHV  | HITDFNIATV  | VKGAEERASSM | 180  |
|    | AGTKPYMAPE                       | VFOVYMDRGP  | GYSYPVDWWS | LGITAYELLR | GWRPYEIHVS  | TPIDEILNMF  | 240  |
|    | KVERVHYSST                       | WCKGMVALLR  | KLLTKDPESR | VSSLHDIQSV | PYLADMNWDA  | VFKKALMPGF  | 300  |
|    | VPNKGRLLNCD                      | PTFELEEMIL  | ESKPLHKKKK | RLAKNRSRDG | TKDSCPLNGH  | LQHCLETVRE  | 360  |
| 10 | EFIIIFNREKL                      | RRQQGGGSQL  | LDTDSRGGGQ | AQSKLQDGCN | NNLLTHTCTR  | GCSS        | 414  |
|    | Seq ID NO: 275 Protein Sequence  |             |            |            |             |             |      |
|    | Protein Accession #: NP_004198.1 |             |            |            |             |             |      |
|    | 1                                | 11          | 21         | 31         | 41          | 51          |      |
|    |                                  |             |            |            |             |             |      |
| 15 | MGGAVVDEGP                       | TGVKAPDGGW  | GWAVLFGCFV | ITGFSYAPFK | AVSVFFKELI  | QEFGIGYSDT  | 60   |
|    | AWISSILLAM                       | LYGTGPLCSV  | CVNRFGCRPV | MLVGGLFASL | GMVAASFCRS  | IIQVYLTTGV  | 120  |
|    | ITGLGLANFR                       | QPSLIMLNRY  | FSKRRPMANG | LAAAGSPVFL | CALSPLGQLL  | QDRYQWRRGF  | 180  |
|    | LILGGLLLNC                       | CVCAALMRPL  | VVTAQPGSGP | PRPSRRLDL  | SVFRDRGFVL  | YAVAASVMVL  | 240  |
|    | GLFVFPVFW                        | SYAKDLGVDP  | TKAAFILTL  | GFIDIFARPA | AGFVAGLGRV  | RFYSVYLFSF  | 300  |
| 20 | SMFFNGLADL                       | AGSTAGDYGG  | LVVFCIFFGI | SYGMVGALQF | EVLMAIVGTH  | KFSSAIGLVL  | 360  |
|    | LMEAAVAVLVG                      | PPSGGKLDDA  | THVYMYVFIL | AGAEVLTSSL | ILLGNFFCCI  | RKKPKPEQPPE | 420  |
|    | VAAABEEKLH                       | KPPADSGVDL  | REVEHFLKAE | PEKNGEVVHT | PETSV       |             | 465  |
|    | Seq ID NO: 276 Protein Sequence  |             |            |            |             |             |      |
|    | Protein Accession #: NP_006589.1 |             |            |            |             |             |      |
|    | 1                                | 11          | 21         | 31         | 41          | 51          |      |
|    |                                  |             |            |            |             |             |      |
|    | MPTNFTVVPV                       | EAHADGGGDE  | TAERTEAPGT | PEGPEPERPS | PGDGNPRENS  | PFLNNVEVEQ  | 60   |
|    | ESFFEGKNMA                       | LFEEMDSNP   | MVSSLLNKLA | NYTNLSQGVV | EHEEDEESRR  | REKAPRMGT   | 120  |
| 30 | FIGNVPLCLQ                       | NILGVILFLR  | LTWIVGVAGV | LESFLIVAMC | CTCTMLTAIS  | MSAIATNGVV  | 180  |
|    | PAGGSYYMIS                       | RSLGPEFGGA  | VGLCFYLGTT | FAGAMYILGT | IEIFLTYISP  | GAAIFQAEAA  | 240  |
|    | GGEAAAMLHN                       | MRVYGTCTLV  | LMALVVVFGV | KYVNKLALVF | LACVVLSILA  | IYAGVIKSAF  | 300  |
|    | DPPDIPVCLL                       | GNRTLSRRSF  | DACVKAYGIH | NNSATSALWG | LFCNGSQPSA  | ACDEYFIQNN  | 360  |
|    | VTEIQGIPGA                       | ASGVFLENLW  | STYAHAGAFV | EKKGVPSVPV | AEESRASTLP  | YVLTDIAASF  | 420  |
| 35 | TLLVGIYFPS                       | VGTGMAGSNR  | SGDLKDAQKS | IPTGTILAIV | TTSFIYLSCI  | VLFGACIEGV  | 480  |
|    | VLRDKFGEAL                       | QGNLVIGMLA  | WPSPWVIVIG | SFFSTCGAGL | QTLTGAPRL   | QAIARDGIVP  | 540  |
|    | FLQVFGHGKA                       | NGEPTWALL   | TVLICETGIL | IASLDSVAPI | LSMFFLMCYL  | FVNACAVQT   | 600  |
|    | LLRTPNWRPR                       | FKFYHWTLSF  | LGMSLCLALM | FICSWYYALS | AMLIAGCIYK  | YIEYRGAEKE  | 660  |
|    | WGDGIRGLSL                       | NAARYALLRV  | EHGPPHTKNW | RPQVLVMLNL | DAEQAVKHPR  | LLSFTSQLKA  | 720  |
| 40 | GKGLTIVGSV                       | LEGTYLDKHM  | EAQRAEENIR | SLMSTKTKG  | FCQLVSSSSL  | RDGMSHLIQS  | 780  |
|    | AGLGGGLKHT                       | VLMAWPASWK  | QEDNPFWSKN | FVDTVRDTTA | AHQALLVAKN  | VDSFPQNRER  | 840  |
|    | FGGGHIDVWV                       | IVHDGGMMLL  | LPFLLRQHKV | WRKCRMRIFT | VAQVDDNSIQ  | MKKDLQMFY   | 900  |
|    | HLRISAEVEV                       | VEMVENDISA  | FTYERTLMME | QRSQMLKQMQ | LSKNEQEREA  | QLIHDRNTAS  | 960  |
|    | HTAAAARTQA                       | PPTPDKVQMT  | WTRKELIAEK | YRSRDTLSLG | FKDLFSMKPD  | QSNVRRMHTA  | 1020 |
| 45 | VKLNGVVLNK                       | SQDAQVLVLLN | MPGPPKNRQG | DENYMEFLEV | LTEGLNRVLL  | VRGGGREVIT  | 1080 |
|    | IYS                              |             |            |            |             |             | 1083 |
|    | Seq ID NO: 277 Protein Sequence  |             |            |            |             |             |      |
|    | Protein Accession #: NP_004576.1 |             |            |            |             |             |      |
|    | 1                                | 11          | 21         | 31         | 41          | 51          |      |
|    |                                  |             |            |            |             |             |      |
|    | MASPHQEPKP                       | GDLIEIFRLG  | YEHWALYIGD | GYVIHLAPPS | EYPGAGSSSV  | FSVLSNSAEV  | 60   |
|    | KRGRLEDDVG                       | GCCYRVNNSL  | DHEYQPRPVE | VIISSAKEMV | GQMKYSIVS   | RNCEHFVAQL  | 120  |
| 50 | RYGKSRCKQV                       | EKAKVEVGVA  | TALGILVVAG | CSFAIRRYQK | KATA        |             | 164  |
|    | Seq ID NO: 278 Protein Sequence  |             |            |            |             |             |      |
|    | Protein Accession #: NP_004687.1 |             |            |            |             |             |      |
|    | 1                                | 11          | 21         | 31         | 41          | 51          |      |
|    |                                  |             |            |            |             |             |      |
|    | MLKREGKVQP                       | YTKTLDDGGW  | WMIVIHFFLV | NVEVMGMTKT | FAIFFVVFQE  | EFEGTSEQIG  | 60   |
|    | WIGSIMSSLR                       | FCAGPLVAII  | CDILGEKTTS | ILGAFVVTGG | YLISSWATSI  | PFLCVTMGLL  | 120  |
|    | PGLGSFAFLYQ                      | VAAVTTTKYF  | KKRLALSTAI | ARSGMGLTFL | LAPFTKFLID  | LYDWTGALIL  | 180  |
|    | FGAIALNLVP                       | SMMLLRPIHI  | KSENNSGIKD | KGSSLSAHGP | EAHATETHCH  | ETEESTIKDS  | 240  |
|    | TTQKAGLPSK                       | NLTVSQNQSE  | EFYNGPNRNR | LLLSDEESD  | KVISWSCKQL  | FDISLFRNPF  | 300  |
| 65 | FYIFTWSFLL                       | SQLAYFIPTF  | HLVARAKTLG | IDIMDASYLV | SVAGILETVS  | QIISGWVADQ  | 360  |
|    | NWIKKYHYHK                       | LYLILCGITN  | LLAPLATTFF | LLMTYTICFA | IFAGGYLALI  | LPVLVDLCRN  | 420  |
|    | STVNRFLGLA                       | SFFAGMAVLS  | GPPIAGWLVD | YTQTYNGSFY | FSGICYLLSS  | VSFFVPLAE   | 480  |
|    | RWKNSLT                          |             |            |            |             |             | 487  |
|    | Seq ID NO: 279 Protein Sequence  |             |            |            |             |             |      |
|    | Protein Accession #: NP_000349.1 |             |            |            |             |             |      |
|    | 1                                | 11          | 21         | 31         | 41          | 51          |      |
|    |                                  |             |            |            |             |             |      |
|    | MALFVRLAL                        | ALALALGPAA  | TLAGPAKSPY | QLVLQHSRLR | GRQHGPNVCA  | VQKVIGTNRK  | 60   |
| 75 | YFTNCKQWYQ                       | RKICGKSTVI  | SYECCPGYEK | VFGEKGCPAA | LPLNLVYETL  | GVVGSTTTQL  | 120  |
|    | YTDRTKLRP                        | EMEGPGSFTI  | FAPSNEAWAS | LPAEVLDSL  | SNVNIELNNA  | LRVHMVGRRV  | 180  |
|    | LTDELKHM                         | LTSMQNSNI   | QIHYPNGIV  | TVNCRLLKA  | DHATNGVVH   | LIDKVISTIT  | 240  |
|    | NNIQQIIEIE                       | DTFETLRAAV  | AASGLNTMLE | CNGQYTLAP  | TNEAFEKIPS  | ETLNRILGDP  | 300  |
|    | EALRDLNHNH                       | ILKSANCAEA  | IVAGLSVETL | EGTTLVEGCS | GDMLTINGKA  | IISNKDILAT  | 360  |
| 80 | NGVIHYIDEL                       | LIPDSAKTLF  | ELAAESDVST | AIDLFRQAGL | GNHLSGSERL  | TLLAPLNSVF  | 420  |
|    | KDGTTPPIDAH                      | TRNLLRNHII  | KDQLASKYLY | HGQTLLETIG | KKLRVVFYRN  | SLCIENSCIA  | 480  |
|    | AHDKRGYGT                        | LFTMDRVLTP  | PMGTVMVLK  | CDNRFMSLVA | AIQSGAGLTET | LNREGVYTVF  | 540  |
|    | APTNEAFRAL                       | PPRERSRLLG  | DAKELANILK | YHIGDEILVS | GGIGALVRLK  | SLQGDKLEVS  | 600  |
|    | LKNNVVSUNK                       | EPVAEPDIMA  | TNGVVHVITN | VLQPPANRPQ | ERGDELADSA  | LEIFKQASAF  | 660  |

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SRASQSRVRL APVYQKLLER MKH

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Seq ID NO: 280 Protein Sequence  
Protein Accession #: NP\_663623

5  
1 11 21 31 41 51  
| | | | |  
MEGSGGGAGE RAPLLGARRA AAAAAAAGAF AGRRACGAV LLETLLERAA FYGITSNLVL 60  
FLNGAPFCWE GAQASEALLL FMGLTYLGSP FGGWLADARL GRARAILLSL ALYLLGMLAF 120  
10 PLLAAPATRA ALCGSARLLN CTAPGPDAAA RCCSPATFAG LVLVGLGVAT VKANITPFGA 180  
DQVKDRGPEA TRRFNWFYW SINLGAILSL GGIAIYQQNV SFVTGYAIP T VCVGLAFVVF 240  
LCQGSVFITK PPDGSAFTDM FKILTYSCCS QKRSGERQSN GEGIGVFPQS SKQSLFDSCK 300  
MSHGGPFTEE KVEDVKALVK IVPVFLALIP YWTVYFQMOT TYVLQSLHLR IPEISNITTT 360  
PHTLPAANLT MFDVALLILL IPLKDKLVDP ILRRHGLLPS SLKRIAVGMF FVMCSAFAAG 420  
15 ILESKRLNLV KEKTINGTIG NVVYHAADLS LWWQVPQYLL IGISEIFASI AGLEFAYSAA 480  
PKSMQSAIMG LFFFSGVGS FVGSGLLALV SIKAIQWMSS HTDFGNINGC YLNYYFFLLA 540  
AIQGATLLLF LIISVKYDHH RDHQRSRANG VPTERRA 577

Seq ID NO: 281 Protein Sequence  
Protein Accession #: NP\_001241.1

20  
1 11 21 31 41 51  
| | | | |  
MVRLPLQCVL WGCLLTAVHP EPPTACREKQ YLINSQCCSL CQPGQKLVSD CTEFTETECL 60  
PCGESEFLDT WNRETHCHQH KYCDPNLGLR VQKGTSETD TICTCEEGWH CTSEACESCVC 120  
25 LHRSCSPGFG VKQIATGVSD TICEPCPVGF FSNVSSAFEK CHPWTSCTEK DLVVQAGTGN 180  
KTDVVCQPQD RLRLALVVIPI IFGILFAILL VLVFIKKVAK KPTNKAPHPK QEPQEIFNPD 240  
DLPGNSNTAAP VQETLHGCQF VTQEDGKESR ISVQERQ 277

Seq ID NO: 282 Protein Sequence  
Protein Accession #: NP\_003833.3

30  
1 11 21 31 41 51  
| | | | |  
MEQRGNQAPA ASGARKRHGP GPREARGARP GLRVPKTLVL VVAAVLLLVLS AESALITQQD 60  
LAPQQRAPQ QKRSSPSEGL CPPGHHISED GRDCISCKYG QDYSTHWNDL LFCLRCTRCD 120  
35 SGEVELSPCT TTRNTVCQCE EGTFREEDSP EMCRCRGTGC PRGMVKVGD C TPWSDIECVH 180  
KESGTHKSGE APAVEETVTS SPCTPASPCS LSGIIGVTV AAVVLIVAVF VCKSLWKKV 240  
LPYLKIGCSG GGGDPERVDR SSQRPGAEDN VLNEIVSILQ PTQVPEQEME VQEPAEPTGV 300  
NMLSPGESHS LLEPAEAERS QRRRLVPAN EGDPTETLRQ CFDDFADLVF FDSWEPLMRK 360  
40 LGLMDNEIKV AKAEAAGHRD TLYTMLIKWV NKTGRDASVH TLLDALETLG ERLAKQKIED 420  
HLLSSGKFMY LEGNADSAMS 440

Seq ID NO: 283 Protein Sequence  
Protein Accession #: NP\_671716.1

45  
1 11 21 31 41 51  
| | | | |  
MEQRGNQAPA ASGARKRHGP GPREARGARP GLRVPKTLVL VVAAVLLLVLS AESALITQQD 60  
LAPQQRAPQ QKRSSPSEGL CPPGHHISED GRDCISCKYG QDYSTHWNDL LFCLRCTRCD 120  
SGEVELSPCT TTRNTVCQCE EGTFREEDSP EMCRCRGTGC PRGMVKVGD C TPWSDIECVH 180  
35 KESGIIIGVT VAAVVLIVAV FVCKSLWKK VLPYLKIGCS GGGDPERVD RSSQRPGAED 240  
NVLNEIVSIL QPTQVPEQEM EVQEPAEPTG VNMLSPGESE HLEPAEAER SQRRRLVPA 300  
50 NEGDPTETLR QCFDDFADLV PFDWEPLMR KLGLMDNEIK VAKAEAAGHR DTLYTMLIKW 360  
VNKTGRDASV HTLLDALET LGERLAKQIE DHLLSSGKFM YLEGNADSAM S 411

Seq ID NO: 284 Protein Sequence  
Protein Accession #: NP\_002002.2

55  
1 11 21 31 41 51  
| | | | |  
MRLLLALLGV LLSVPGPPVL SLEASEEVEL EPCLAPSLEQ QEQLTVALG QPVRLCCGRA 60  
ERGGHWYKEG SRLAPAGRVR GWRGRLEIAS FLPEDAGRYL CLARGSMIVL QNLTLITGDS 120  
60 LTSSNDEEDP KSHRDLNHRH SYPQQAPYWT HPQRMKKLH AVPAAGNTVKF RCPAAGNPTP 180  
TIRWLKDGQA FHGENRIGGI RLRHQHWSLV MESVVPDSRG TYTCLVENAV GSIRYNYLLD 240  
VLERSPHRPI LQAGLPANTT AVVGSDEVLL CKVYSDAQPH IQWLKHIVIN GSSFAGDGFP 300  
YVQVLKTADI NSSEVEVLYL RNVSADAGE YTCLAGNSIG LSYSQSAWLT V LPEEDPTWTA 360  
AAPEARYTDI ILYASGSLAL AVLLLLAGLY RGQALHGRHP RPPATVQKLS RFLARQFSL 420  
ESGSSGKSSS SLVRGVRLSS SGPALLAGLV SLDLPLDPLW EFPRDRLVLG KPLGEGCFGQ 480  
65 VVRAEAFGMD PARPDQASTV AVKMLKDNAS DKDLADLVSE MEVMKLIGRH KNIINLLGVC 540  
TQEGPLYVIV ECAAKGNLRE FLRARRPPGP DLSPDGPRSS EGPLSFVPLV SCAYQVARGM 600  
QYLESRKCIH RDLAARNVLV TEDNVMKIAD FGLARGVHHI DYYKTSNGR LPVKWMAPEA 660  
LFDREVYTHQS DVWSFGILLW EIFTLGGSPY PGIPVEELFS LLREGHRMDR PPHCPPELYG 720  
70 LMRECHHAAP SQRPTEFKQLV EALDKVLLAV SEEYLDLRLT FGYPSPSGGD ASSTCSSSDS 780  
VFSDHPLPLG SSSFPFGSGV QT 802

Seq ID NO: 285 Protein Sequence  
Protein Accession #: NP\_075252.1

75  
1 11 21 31 41 51  
| | | | |  
MRLLLALLGV LLSVPGPPVL SLEASEEVEL EPCLAPSLEQ QEQLTVALG QPVRLCCGRA 60  
ERGGHWYKEG SRLAPAGRVR GWRGRLEIAS FLPEDAGRYL CLARGSMIVL QNLTLITGDS 120  
80 LTSSNDEEDP KSHRDLNHRH SYPQQAPYWT HPQRMKKLH AVPAAGNTVKF RCPAAGNPTP 180  
TIRWLKDGQA FHGENRIGGI RLRHQHWSLV MESVVPDSRG TYTCLVENAV GSIRYNYLLD 240  
VLERSPHRPI LQAGLPANTT AVVGSDEVLL CKVYSDAQPH IQWLKHIVIN GSSFAGDGFP 300  
YVQVLKTADI NSSEVEVLYL RNVSADAGE YTCLAGNSIG LSYSQSAWLT V LFGTGRIPHL 360  
TCDSLTPAGR TKSPTLQFSL ESGSSGKSSS SLVRGVRLSS SGPALLAGLV SLDLPLDPLW 420  
EFPRDRLVLG KPLGEGCFGQ VVRAEAFGMD PARPDQASTV AVKMLKDNAS DKDLADLVSE 480  
MEVMKLIGRH KNIINLLGVC TQEGPLYVIV ECAAKGNLRE FLRARRPPGP DLSPDGPRSS 540

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EGPLSPFPVLV SCAYQVARGM QYLESRKCIH RDLAARNVLV TEDNMVKIAD FGLARGVHHI 600  
 DYYKKTSGNR LPVKWMAPEA LFDRVYTHQS DVNSFGILLW EIFTLGGSFY FGIPVEELFS 660  
 LLREGHRMDR PPHCPPELYG LMRECWAAP SQRPTEKQLV EALDKVLLAV SEEYLDLRLT 720  
 FGPYSPSGGD ASSTCSSSDS VFSHDPPLG SSFPFGSGV QT 762

Seq ID NO: 286 Protein Sequence  
 Protein Accession #: NP\_002836.2

1 11 21 31 41 51  
 | | | | |  
 10 MRGLGTCLAT LAGLLLTAAAG ETFSGGCLFD EPYSTCGYSQ SEGDDFNWEQ VNTLTKPTSD 60  
 PWMPSGGLML VNASGRPEQG RAHLLLPQLK ENDTHCIDFH YFVSSKSNP PGLLNYYVKV 120  
 NNGPLGNPIW NISGDPTRTW NRAELAISTF WPNFYQVIFE VITSGHCYGL AIDEVKVLGH 180  
 PCTRTPHFLR IQNVEVNAGQ FATFQCSAIG RTVAGDRLWL QGIDVRDAPL KEIKVTSSRR 240  
 15 FIASFNVVNT TKRDAGKYRC MIRTEGGVGI SNYAEVLVKE PPVPIAPPQL ASVGATYLIW 300  
 QLNANSINGD GPVAREVEY CTASGSWNR QPVDSTSYKI GHLPDPTEYE ISVLLTRPGE 360  
 GGTGSPGPAI RTRTKCADPM RGPRKLEVVE VKSRQITIRW EPFGYNVTRC HSYNLTVHYC 420  
 YQVGQGEQVR EEVSWDTENS HPQHTITNLS PYTNVSVKLI LMNPEGRKES QELIVQTDDE 480  
 LPGAVPTESI QGSTFEKIF LQWREPTQTY GVITLYEITY KAVSSFDPEI DLSNQSGRVS 540  
 20 KLGNETHFLF FGLYPGTTYS FTIRASTAG FGPPATNQFT TKISAPSMPIA YELETPLNQY 600  
 DNTVTVMLEK AHSRGAPVSV YQIVVEEERF RRTKKTTEIL KCPVPPIHFQ NASLLNSQYY 660  
 FAAEFPADSL QAAQPTTIGD NKTYNGYWNT PLLPYKSYRI YFOAASRANG ETKIDCVQVA 720  
 TKGAATPKPV PEPEKQTDHT VKIAGVIAGI LLEVIIFLGV VLVMMKKRKL KKRKETSMTS 780  
 RQEMTVMVNS MOKSYAEQGT NCDEAFSPMD THNLNGRSVS SPSSFTMKIN TLSTSVPNYS 840  
 25 YPDETHTMAS DTSSLVQSHY YKKREPADVP YQTGQLHPAI RVADLLQHIT QMKCAEYGYF 900  
 KEEYESFFEG QSAFMDSAKK DENRMKNRYG NIIAYDHSRV RLQTIIEGDTN SDYINGNYID 960  
 GYHRPNHYIA TQGMQETIY DFWRMWHEN TASIMVTNL VEVGRVKCKC YWPDTRIYK 1020  
 DIKVTLIETE LLAEVVIRTF AVEKRGVHEI REIRQHFHTG WPDHGVPIYA TGLLGFVRVQ 1080  
 KSKSPPSAGP LVVHCSAGAG RTGCFIVIDI MLDMAEREGV VDIYNCVREL RSRVNMVQT 1140  
 30 EEQYVFIIDA ILBACLCDGT SVPASQVRSI YDMMKLDPO TNSQIKKEEF RTLMNMTPTL 1200  
 RVEDCSIALI PRNHEKNRCM DILPPDRCLP FLITIDGESS NYINAAALMS YKQPSAFIVT 1260  
 QHPLPNTVKD FWRVLVDYHC TSVVMLENDV PAQLCPQYWP ENGVRHGPPI QVEFVSADLE 1320  
 EDIISIRFRI YNAARPDQGY RMVQFQFLG WPMYRDTVPS KRSFLKLIRQ VDKWQEEYNG 1380  
 GEGPTVVHCL NGGGRSGTFC AISIVCEMLR HQRTVDVFHA VKTLRNNKPN MVDLLDQYKF 1440  
 35 CYEVALEYLN SG 1452

Seq ID NO: 287 Protein Sequence  
 Protein Accession #: NP\_057635.1

1 11 21 31 41 51  
 | | | | |  
 40 MGFLQLLVVA VLASEHRVAG AAEVFGNSSE GLIEFSVGKF RYFELNRPFP EEAILHDISS 60  
 NVTFLLFIQH SQYQNTTVSF SPTLLSNSSE TGTASGLVFI LRPEQSTCTW YLGTSGIQPV 120  
 QNMAILLSYS ERDPVPGGCN LEFDLDIDPN IYLEYNFFET TIKFAPANLG YARGVDPPEC 180  
 DAGTDQDSRW RLQYDVYQYF LPENDLTEEM LKHLQRMVS VPQVKASALK VVTLTANDKT 240  
 45 SVSFSSLPQV GVIYNVIVWD PFLNTSAAYI PAHTYACSEF AGEKSCASLG RVSSKVFFTL 300  
 FALLGFFICF FGHFPWKTEL FFIGFIIMGF FFYILITRLT PIKYDVNLIL TAVTGSVGGM 360  
 FLVAVVWRFG ILSICMLCVG LVLGFLISSV TFFTPLGNLK IFHDDGVFWV TFSICAILIP 420  
 VVPMGCLRLI NLTCCGVIGS XSVVLAIDSY WSTLSYITL NVLKRALNKD PHRAFTNVFP 480  
 QTNDFIILAV WGLMAVSGIT LQIRRRERGR FFFPHPYKLW KQERERRVTN ILDPYSIHPP 540  
 50 LRRLYGRIT QIKGLFQKEQ PAGERTPLLL 570

Seq ID NO: 288 Protein Sequence  
 Protein Accession #: NP\_003811.1

1 11 21 31 41 51  
 | | | | |  
 55 MEPPGDWGP PWRSTERTDV LRLVLYLTFL GAPCYAPALP SCKEYEPVG SECCPKCSFG 60  
 YRVKEACCEL TGTVCEPCRP GTYIAHLNGL SKCLQCQCD PAMGLRASRN CSRTENAVCG 120  
 CSPGHFCIVQ DGDHCAACRA YATSSPGQRV QKGGTESQDT LCQNCPPGTF SPNGTLEECQ 180  
 HQTKCSWLVT KAGAGTSSSH WWWFLSGSL VIVIVCSTVG LIICVKRRKP RGDVVVKVIVS 240  
 60 VQRKRQEAEG EATVIEALQA PPDVTTVAE ETIPSFTGRS PNH 283

Seq ID NO: 289 Protein Sequence  
 Protein Accession #: NP\_000943.1

1 11 21 31 41 51  
 | | | | |  
 65 MEPHDSHMD SEFRYTLFPI VYSIIFVLGV IANGYVLWVF ARLYPCKKFN EIKIFMVNLT 60  
 MADMLFLITL PLWIVYYQNG GNWILPKFLC NVAGCLFFIN TYCSAVFLGV ITYNRFQAVT 120  
 RPIKTAQANT RKRGISLSLV INVAIVGAAS YFLILDSTNT VPDASAGSGNV TRCFEYKEG 180  
 SVPVLIIHIF IVFSFLLVFL IILFCNLVII RTLLMQPVQO QRNAEVKRRR LWMVCTVLAV 240  
 70 FIICFVPHHV VQLPWTLAEL GFQDSKFHQA INDAHQVTLK LLSTNCVLDP VIYCFLLTKKF 300  
 RKHLTEKFYS MRSSRKCSRA TDTVTVEVVV PFNQIPGNSL KN 342

Seq ID NO: 290 Protein Sequence  
 Protein Accession #: NP\_003262.1

1 11 21 31 41 51  
 | | | | |  
 75 GCLGAIKENK CLLLTFFLLL LLVFLLEATI AILFFAYTDK IDRYAQDCLK KGLHLYGTQG 60  
 NVGLTNAWSI IQTDFRCQGV SNYTDWFEVY NATRVDPDSC LEFSESCGLH APGTWWKAPC 120  
 YETVKVWLQE NLLAVGIFGL CTALVQILGL TFAMTYMCQV VKADTYCA 168

Seq ID NO: 291 Protein Sequence  
 Protein Accession #: NP\_005620.1

1 11 21 31 41 51  
 | | | | |  
 80 MAKKSANGI YSVSGDEKKG PLIAPGPDGA PAKGDGPVGL GTPGGRLAVP PRETWTRQMD 60

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FIMSCVGFV GLGNVWRFY LCYKNGGGVF LIPYVLIALV GGIPIFFLEI SLQQFMKAGS 120  
INVWNICPLF KGLGYASMTI VFYCNYYIM VLAWGFFYLK KSFTTTLEWA TCGHTWNTPD 180  
CVEIFRHEDC ANASLANLTC DQLADRRSPV IEFWENKVLR LSGGLEVPGA LNWEVTLCLL 240  
ACWLVVYFCV WKGVKSTCKI VYFTATFPYV VLVVLLVRGV LLPGALDGII YYLKPWWSKL 300  
GSPQVWIDAG TQIFFSYAIG LGALTALGSY NFFNNNCYKD AIIALALNSG TSFFAGFVVF 360  
SILGFMAAEQ GVHISKVAES GPGLAFIAYP RAVTLMPVAP LWAALFFFML LLLGLDSQFV 420  
GVEGFIITGLL DLLPASYYFR FQREISVALC CALCFVIDLS MVTDDGMYVF QLFDDYSASG 480  
TTLLWQAFWE CVVVAWVYGA DRFMDDIACM IGYRCPWMMK WCWSFFTPLV CMGIFIFNVV 540  
YYEPLVYNNT YVYPWGEAM GWAFALSSML CVPLHLGLCL LRAKGTMAER WQHLTQPIWG 600  
LHLLEYRAQD ADVRLTLTL PVSESSKVVV VESVM 635

Seq ID NO: 292 Protein Sequence  
Protein Accession #: NP\_037464.1

1 11 21 31 41 51  
MKHVLNLYLL GVVLTLLSIF VRVMSLEGL LESPSPGTSW TTRSQLANTE PTKGLPDHPS 60  
RSM 63

Seq ID NO: 293 Protein Sequence  
Protein Accession #: NP\_064527.1

1 11 21 31 41 51  
MAGASLGARF YRQIKRHPIG IPMIGLICLG MCSAALYLLR LALRSPDVCW DRKNNPEPWN 60  
RLSPNDQYKF LAVSTDYKKL KKDRPDF 87

Seq ID NO: 294 Protein Sequence  
Protein Accession #: NP\_002195.1

1 11 21 31 41 51  
MGPGPSRAPR APRMLCALA LMVAAGGCVV SAFNLDTRFL VVKEAGNPGS LFGYSVALHR 60  
QTERQORYLL LAGAPRELAV PDGYTNRTGA VYLCPLTAHK DDCEMNITV KNDPGHHIIE 120  
DMWLGVTVAS QGPAGRVLCV AHRYTQVLWS GSEDQRRMVG KCYVRGNDLE LDSSDDWQTY 180  
HNEMCNSNTD YLETGMCQLG TSGGFTQNTV YFGAPGAYNW KGNYSYMIQRK EWDLSEYSYK 240  
DPEDQGNLYI GYTMQVGSFI LHPKNITIVT GAPRHRHMGA VFLLSQEAGG DLRRRQVLEG 300  
SQVGAYFGSA IALADLNNDG WQDLLVGAPY YFERKEEVGG AIYVFMNQAG TSFPAHPSLL 360  
LHGPGSGAFG LSVASIGDIN QDGFQDIAVG APFEGLGKVV IYHSSSKGLL RQPQQVIHGE 420  
KLGLPGLATF GYSLSGQMDV DENFYPDLLV GSLSDHIVLL RARPVINIVH KTLVPRPAVL 480  
DPALCTATSC VQVELCFAYN QSAGNPNYRR NITLAYTLEA DRDRPPRLR FAGSESAVFH 540  
GFFSMPEMRC QKLELLLMND LRDKLRPIII SMNYSPLPRM PDRPRLGLRS LDAYPILNQA 600  
QALENHTEVQ FQKECGPDNK CESNLQMRAA FVSEQQKLS RLQYSRDVRK LLLSINVNTN 660  
RTSERSGEDA HEALLTLVVP PALLSSVRP PGACQANETI FCELGNPFFKR NQRMELLIAF 720  
EVIGVTLHTR DLQVQLQST SSHQDNLWPM ILTLLVDYTL QTSLSMVNHR LQSFPGGTVM 780  
GESGMKTVED VGSPLKYEFQ VGPMGEGLVG LGTLVLGLEW PYEVSNGKWL LYPTETVHG 840  
NGSWPCRPPG DLINPLNLTL SDPGDRPSSP QRRRRQLDPG GGQGPFPVTL AAKKAKSET 900  
VLTCATGRAH CVWLECPID APVVTNVTVK ARVWNSTFIE DYRDFDRVRV NGWATLFLRT 960  
SIPTINMENK TTWFSVDIDS ELVEELPAEI ELWLVLVAVG AGLLLLGLII LLLWKCGFFK 1020  
RARTRALYEA KRQKAEMKQS PSETERLTDD Y 1051

Seq ID NO: 295 Protein Sequence  
Protein Accession #: NP\_005492.1

1 11 21 31 41 51  
MGPGPSRAPR APRMLCALA LMVAAGGCVV SAFNLDTRFL VVKEAGNPGS LFGYSVALHR 60  
QTERQORYLL LAGAPRELAV PDGYTNRTGA VYLCPLTAHK DDCEMNITV KNDPGHHIIE 120  
DMWLGVTVAS QGPAGRVLCV AHRYTQVLWS GSEDQRRMVG KCYVRGNDLE LDSSDDWQTY 180  
HNEMCNSNTD YLETGMCQLG TSGGFTQNTV YFGAPGAYNW KGNYSYMIQRK EWDLSEYSYK 240  
DPEDQGNLYI GYTMQVGSFI LHPKNITIVT GAPRHRHMGA VFLLSQEAGG DLRRRQVLEG 300  
SQVGAYFGSA IALADLNNDG WQDLLVGAPY YFERKEEVGG AIYVFMNQAG TSFPAHPSLL 360  
LHGPGSGAFG LSVASIGDIN QDGFQDIAVG APFEGLGKVV IYHSSSKGLL RQPQQVIHGE 420  
KLGLPGLATF GYSLSGQMDV DENFYPDLLV GSLSDHIVLL RARPVINIVH KTLVPRPAVL 480  
DPALCTATSC VQVELCFAYN QSAGNPNYRR NITLAYTLEA DRDRPPRLR FAGSESAVFH 540  
GFFSMPEMRC QKLELLLMND LRDKLRPIII SMNYSPLPRM PDRPRLGLRS LDAYPILNQA 600  
QALENHTEVQ FQKECGPDNK CESNLQMRAA FVSEQQKLS RLQYSRDVRK LLLSINVNTN 660  
RTSERSGEDA HEALLTLVVP PALLSSVRP PGACQANETI FCELGNPFFKR NQRMELLIAF 720  
EVIGVTLHTR DLQVQLQST SSHQDNLWPM ILTLLVDYTL QTSLSMVNHR LQSFPGGTVM 780  
GESGMKTVED VGSPLKYEFQ VGPMGEGLVG LGTLVLGLEW PYEVSNGKWL LYPTETVHG 840  
NGSWPCRPPG DLINPLNLTL SDPGDRPSSP QRRRRQLDPG GGQGPFPVTL AAKKAKSET 900  
VLTCATGRAH CVWLECPID APVVTNVTVK ARVWNSTFIE DYRDFDRVRV NGWATLFLRT 960  
SIPTINMENK TTWFSVDIDS ELVEELPAEI ELWLVLVAVG AGLLLLGLII LLLWKCGFFK 1020  
RTRYQIMPK YHAVRIREEE RYPPPGSTLP TKKHWTWSQ TRDQYY 1066

Seq ID NO: 296 Protein Sequence  
Protein Accession #: NP\_003777

1 11 21 31 41 51  
MDALCGSGEL GSKFWDNSLS VHTENPDLTG CFQNSLLAWV PCIYLMVALP CYLLYLRRHC 60  
RGYIILSHLS KLMVLGVLL WCVSWADLFY SFHGLVHGRA PAPVFFVTPL VVGVTMLLAT 120  
LLIQYERLQG VQSSGVLIIF WFLCVVCAIV PFRSKILLAK AEGEISDPFR FTTFYIHFAL 180  
VLSALILACF REKPPPFSAK NVDPNYPET SAGFLSRLFF WWFTKMAIYG YRHPLKEDL 240  
WSLKEEDRSQ MVVQQLLEAW RKQEKQATARH KASAAPGKNA SGEDEVLLGA RPRPRKPSFL 300  
KALLATFGSS FLISACFKLI QDLLSFINPQ LLSILIRFIS NPMAFSGWGF LVAGLMFLCS 360  
MMQSLILQHY YHYIFVTGVK FRTGIMGVYI RKALVITNSV KRASTVGEIV NLMGSVDAQRF 420  
MDLAPFLNLL WSAPLQIILA IYFLWQNLGP SVLAGVAFMV LLIPNLGAVA VKMRAFAQVKQ 480  
MKLKDSRIKL MSEILNGIKV LKLYAWEPSP LKQVEGIRQG ELQLLRTAAY LHTTTTFTWM 540

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5 CSPFLVTLTIT LWVYVYVDPN NVLDAEKAHV SVSLFNILRL PLNMLPQLIS NLTQASVSLK 600  
RIQQFLSQEE LDPQSVERTK ISPGYAITIH SGTFTWAQDL PPTLHSLDIQ VPKGALVAVV 660  
GPVQCGKSSL VSALLGEMEK LEGKVHMKGS VAYVPOQAWI QNCTLQENVL FGKALNPKRY 720  
QQTLEACALL ADLEMLPGGD QTEIGEKGIN LSGGQQRQVS LARAVYSDAD IFLLDDPLSA 780  
VDSHVAKHIF DHVIGPEGVL AGKTRVLVTH GISFLPQTDI IIVLADGQVS EMGPYPALLQ 840  
RNGSFANFLC NYAPDEDQGH LEDSWTALEG AEDKEALLIE DTLSNHTDLT DNDPVTYVVQ 900  
KQFMRQLSAL SSDGEGQGRP VPRRHLPSE KVQVTEAKAD GALTQEEKAA IGTVELSVFW 960  
DYAKAVGLCT TLAICLLVVG QSAAGGANV WLSAWTNDAM ADSRQNTSL RLGVYAALGI 1020  
10 LQGFVLMLAA MAMAAGGIQA ARVLHQALLH NKIRSPQSFF DTTSPGRILN CFSKDIYVVD 1080  
EVLAPVILML LNSFFNAIST LVVIMASTPL FTVVILPLAV LYTLLVQRFYA ATSRQLKRLE 1140  
SVSRSPYISH FSETVTGASV IRAYNRSRDF EIIISDTKVDA NQRSCYPYII SNRWLSIGVE 1200  
FVGNQCVLFA ALFAVIGRSS LNPGLVLGSLV SYSLQVTFAL NWMIRMSDL ESNIVAVERV 1260  
KEYSKTETEA PMVVEGSRPP EGWPPRGEVE FRNYSVRYRP GLDLVLRLDLS LHVHGGKEVG 1320  
15 IVGRITGAGKS SMTLCFLFRIL EAAKGEIRID GLNVADIGLH DLRSQLTIIIP QDPILFSGTL 1380  
RMNLDPPGGS SEEDIWALE LSHLHTFVSS QPAGLDFQCS EGGENLSVGG RQLVCLARAL 1440  
LRKSRILVLD EATAIDLET DNLIQATIRT QFDTCTVLTII AHRNTIMDY TRVLVLDDKGV 1500  
VAEFDSPANL IAARGIFYGM ARDAGLA 1527

20 Seq ID NO: 297 Protein Sequence  
Protein Accession #: NP\_002692.1  
1 11 21 31 41 51  
| | | | |  
MHFYRLFLGA TRRFLNPEWK GEIDNWCYVY LTSLLPFIQI SQDIKALQKE LEQFAKLLKQ 60  
25 KRITLGYTQA DVGLTLGLVF GKVFSTTTIC RFBALQLSFK NMCKLRPLLQ KWVEEADNNE 120  
NLQEIACKAT LVQARKRKRT SIENRVGRNL ENLFLQCPKP TLQQISHIAQ QLGLEKDVVR 180  
VWFNRRQKG KRSSDYAQR EDEAAAGSPF SGGPVSFPLA PGPHFGAPGY GSPHFTALYS 240  
SVFPPEGEAF PPVSVTTLGS PLHSN 265

30 Seq ID NO: 298 Protein Sequence  
Protein Accession #: NP\_005449.1  
1 11 21 31 41 51  
| | | | |  
MASPRRSQGP GRPPPPPPPP ARLLLLLLLP LLLPLAPGAW GWARGAPRPP PGSPPLSIMG 60  
35 LMPLTKEVAK GSGIRGVLPA VELAIEQIRN ESLLRPYFLD LRLYDTECDN AKGLKAFYDA 120  
IKYGNPHLMV FGQVCPSTVS IIAESLQGNW LVQLSFAATT PVLADKKKYP YFRTVPSDN 180  
AVNPAILKLL KHQWKRVTG LTQDVQRFS E VRNDLTGVLY GEDIEISDTE SFSNDPCTSV 240  
KKLKGNVRI ILQGFQDNMA AKVFCCAYEE NMYGSKYQWI IPGWYEPSWV EQVHTEANSS 300  
RCLRKNLLAA MESYIGVDFE PLSSKQIKTI SGKTPQYER EYNNKRSQVG PSKFHGYAYD 360  
40 GIWVIAKTLQ RAMETLHASS RHQRIQDFNY TDHTLGRIL NAMNETNFFG VTGQVVFRRNG 420  
ERMGTIKFTQ PQDSREVKVG EYNAVADTLE IINDTIRFQG SEPPKDKTII LEQLRKISLP 480  
LYSILSALT LGMIMASAFI FPNKRNQK LKMSPPYMN NLIIILGGMLS YASIFLFGLD 540  
GSFVSEKTFE TLCTVTRTIL TVGYTAFGA MFAKTWRVHA IFKNVKMKKK IIKDQKLLVI 600  
VGGMLLIDL ILICQWAVDP LRTVEKYSM EPDPAGRDIS IRPLLEHCEN THMTIWLIV 660  
45 YAYKGLMLLF GCFLANETRN VSIPALNSDK YIGMSVYVNG IMCIIGAAVS FLTRDQPNVQ 720  
FCIVALVIF CSTITLCLVF VPKLITLRTN PDAATQNRFF QFTQNKQKED SKTSTSVTSV 780  
NQASTRLEG LQESALHRLM KITELDKLE EVTMQLQDTP EKTYYIKQNH YQELNDIILN 840  
GNFTSTDDG KAILKNHLDQ NPQLQWNTTE PSRTCKDPIE DINSPEHIQR RLSLQLPILH 900  
HAYLPSIGGV DASCVSFCVS PTASPRHRHV PPSFRVMVSG L 941

50 Seq ID NO: 299 Protein Sequence  
Protein Accession #: NP\_055632  
1 11 21 31 41 51  
| | | | |  
55 MEAARALRL LUVCGCLALP PLAEPVCPER CDCQHPQHLL CTNRGLRVVP KTSSLPSPHD 60  
VLTYSLGGNF ITNITAFDFH RLGLRLRLDL QYNQIRSLHP KTFEKLRL ELYLGNLLQ 120  
ALAPGTAPL RKLRLIYANG NEISRLSRGS FEGLESVLKL RLDGNALGAL PDAVFAPGN 180  
LLYLHLESNR IRFLGKNAFA QLGKLRFLNL SANELQPSLR HAATFAPLRS LSSLILSANS 240  
LQHLGRIFQ HLPRLGLLSL RGNQLTHLAP EAFWGLEALR ELRLGNRLS QLPTALLEPL 300  
60 HSLEALDLSG NELSALHPAT FGHGRRLREL SLRNNALSAL SGDIFAAASP LYRLDLGNG 360  
WTCDCRLRLG KRWMCWHSQ GRLLTVFVQC RHPPALRGKY LDYLDQQLQ NGSCADPSPS 420  
ASLTADRRLP PLPTAAGEEM TPPAGLAEEL PPQPQLQQQG RFLAGVANDG AARELVGNRS 480  
ALRLSRRGPG LQQSPSPVAA AAGPAPQSLD LHKKPQRGRP TRADPALAEP TPTASPGSAP 540  
SPAGDPWQRA TKHRLGTEHQ ERAAQSDGGA GLPPLVSDPC DFNKFLCNL TVEAVGADSA 600  
SVRWAVREHR SPRPLGGARF RLLFDRFGQQ PKFHRFVYLP ESSDSATLRE LRGDTPYLV 660  
65 VEGVLGGRVC PVAPRDHCAG LVTLEAGSR GGVDYQLLTL ALLTVNALLV LLALAAWASR 720  
WLRKRLRARR KGGAPVHVR MYSTRRLRS MGTGVSADFS GFQSHRPRTT VCALSEADLI 780  
EFPDRFMDS AGGAGGSLR REDRLQRFA D 811

70 Seq ID NO: 300 Protein Sequence  
Protein Accession #: NP\_001783.2  
1 11 21 31 41 51  
| | | | |  
MCRIAGALRT LLPLLAALLQ ASVEASGEIA LCKTGFPEDV YSAVLSKDVH EGQPLLNVKF 60  
75 SNCNGKRVQ YSESEPADFK VDEGDMVYAV RSFPLSSEHA KFLIYAQDKE TQEKQVAVK 120  
LSLKPTLTEE SVKESAEEVE IVFPRQFSKH SGHLRQQRD WVIPPINLPE NSRGPFQEL 180  
VRIRSRDKN LSLRYSTGTP GADQPPTGIF IINPISGQLS VTKPLDREQI ARPHLRAHAV 240  
DINGNQVENP IDIVINVIDM NDNRPFLHQ VWNQTVPEGS KPGTYVMVT AIDADDPNAL 300  
NGMLRYRIVS QAPSTPSFNM FTINNETGDI ITVAAGLDRE KVQYTLIIQ ATDMEGNPTY 360  
80 GLSNTATAVI TVTDVNDNPN EFTAMTFYGE VPENRVDIIV ANLTVTDKQD EHTPAWNAVY 420  
RISGDDPTGR FAIQTDPNNS DGLVTVVKPI DFETNRMFVL TVAAENQVPL AKGIQHPPQS 480  
TATVSVTVID VNNENPYFAPN PKIIRQEEGL HAGTMLTFT AQDPDRYMQ NIRYTKLSDP 540  
ANWLKIDPVN GQITITIAVL RESPNVKNNI YNATFLASDN GIPPMSTGT LQIYLLDIND 600  
NAPQVLPOEA ETCETPDENS INITALDYDI DPNAGPFAFD LPLSPVTIKR NWTITRLNGD 660  
PAQLNLKIKF LEAGIYEVPI IITDSGNPPK SNISILRVKV CQCDSDGDCD DVDRIVAGL 720

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GTGAIIAILL CIIILLILVL MFVVMKRRD KERQAKQLLI DPEDDVDRNI LKYDEEGGGE 780  
EDQDYDLSQL QQPDVTVEPDA IKPVGIRRM ERPIHAEPQY PVRSAAPHPG DIGDFINEGL 840  
KAADNDPTAP PYDSLLVFDY EGGSGTAGSL SSLNSSSSGG EQDYDYLDNDW GPRFKKLADM 900  
YGGGDD 906

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Seq ID NO: 301 Protein Sequence  
Protein Accession #: NP\_058637.1

1 11 21 31 41 51  
| | | | |  
10 MVSPRMSGLL SQTVILALIF LPQTRPAGVF ELQIHSFGPG PGFGAPRSPC SARLPCRLFF 60  
RVCLKPLGSE EAAESPCALG AALSARGPVY TEQPGAPAPD LPLPDGLLQV PFRDAWPGTF 120  
SPIIETWREE LGDQIGGPAP SLLARVAGRR RLAAGGPWAR DIQRAGAWEL RFSYRARCEP 180  
PAVGTACTRL CRPRSAPSRC GPGLRPCAPL EDECEAPLVC RAGCSPHGF CEQPGECRCL 240  
EGWTGPLCTV PVSTSSCLSP RGPSSATTGC LVPGPGPCDG NPCANGGSCS ETPRSPECTC 300  
15 PRGFYGLRCE VSGVTCADGP CFNGGLCVGG ADPDSAYICH CPPGFQGSNC EKRVDRCSLQ 360  
PCRNGLCLD LGHALRCRCR AGFAGPRCEH DLDDCAGRAC ANGTCVEGG GAHRCSCALG 420  
FGGRDCRERA DPCARFCAH GGRCYAHFSG LVCACARGYM GARCEFFVHP DGASALPAAP 480  
PGLRPGDPQR YLLPPALGLL VAAGVAGAAL LLVHVRRRGH SODAGSRLLA GTPEPSVHAL 540  
PDALNNLRTP EGSGDGPSS VDWNRPEVD PQGIYVISAP SIYAREVATP LFPPLHTGRA 600  
20 GQRQHLLFPY PSSILSVK 618

Seq ID NO: 302 Protein Sequence  
Protein Accession #: fgenes prediction

1 11 21 31 41 51  
| | | | |  
25 MCQAFILWVLG TLWLLKNARC LQYPPEHAQ SCLISEAKQG QAQLPLGWVK WPLHLRSSLS 60  
KRLEKRYPSL LNGEIEAQIC KTSSELPSC DLVTADGST EVTISENLPAV GFHICQQQDS 120  
HVEGMVNISK ASSGQM 136

Seq ID NO: 303 Protein Sequence  
Protein Accession #: NP\_079088.1

1 11 21 31 41 51  
| | | | |  
30 MGCGGSRADA IEPRIYESWT RETESTWLTY TDS DAPPSAA APDSGPEAGG LHSGLMEDGL 60  
35 PSNGVPRSTA PGGINPEKK TNCETQCPNP QSLSSGPLTQ KQNGLQTTEA KRDAKRMPAK 120  
EVTINVTDSI QQMDRSRRIT KNCVN 145

Seq ID NO: 304 Protein Sequence  
Protein Accession #: XP\_040550.1

1 11 21 31 41 51  
| | | | |  
40 MGADGETVVL KNMLIGINLI LLGSMIKPSE CQLEVTTERV QRQSVEEEGG IANYNTSSKE 60  
QPVVFNHVN INVPLDNLCS SGLEASAEQE VSAEDELAE YMGQTS DHES QVTFTHRINF 120  
45 PKKACPCASS AQVLQELLSR IEMLEREVS LRDQCANACC QESAATGQLD YIPHC SGHN 180  
FSFESCGCIC NEGWFGKNC EPYCPLGCS RGVCVDGQCI CDSEYSGDDC SELRCPIDCS 240  
SRGLCVDGEC VCEEPYTGED CRELRCPGDC SKKGRCANGT CLCEBGVYGE DCGQRQCLNA 300  
CSGRGQCEEG LCVCEEGYQG PDCSAVAPPE DLRVAGISDR SIELEWDGEM AVTEYVISYQ 360  
PTALGGLQLQ QRVPGDWSGV TITELPGLT YNISVYAVIS NILSLPITAK VATHLSTPOG 420  
50 LQFKTITETT VEVQWEPFSF SFDGWEISFI PKNNEGIVIA QVPSDVTFSN QTGLKPGEEY 480  
IVNVVALKEQ ARSPPTSASV STVIDGPTQI LVRDVSDTVA FVEWIPPRAK VDFILKYGL 540  
VGGEGGRTTF RLQPLSQYS VQALRPGSRY EVSVSAVRGT NESDSATTQF TTEIDAPKNL 600  
RVGSRATATSL DLEWNSSEAE VQEKVYVYST LAGEQYHEVL VPRGIGPTTR ATLTDLVRGT 660  
EYGVGISAVM NSQSQVPATM NARTELDSPR DLMVTASSET SISLIWTKAS PGIDHYRITF 720  
55 TPSSGIASEV TVPKDRTSYT LTDLEPGA EY IISVTAERGR QQSLESTVDA FTGFRPISHL 780  
HFSHVTSSSV NITWSDPSPP ADRLILNYS RDEEEEMMEV SLDATKRHAV LMGLQPATEY 840  
IVNLVAVHGT VTSEPIVSGI TTGIDPPKDI TISNVTKDSV MVSWSPPVAS FDYIRVSYRP 900  
TQVGRLDSSV VPNTVTEFTI TRLNPAEY E ISLNSVGRGE ESERICTLVH TAMDNVPDLI 960  
ATNITPTEAL LQWKAPVEG ENYVIVLTHF AVAGETILVD GVSEEFRLVD LLPSTHYTAT 1020  
60 MYATNGPLTS GTISTNFTSL LOPPANLTAS EVTRQSALIS WQPRAEIN YVLTYKSTDG 1080  
SRKELIVDAE DTWIRLEGLL ENTDTYVLLQ AAQDTTWSSI TSTAFTTCGR VFPHPQDCAQ 1140  
HLMNGDLSG VYPIFLNGL SOKLQVYCDM TTDGGGWIVF QRRNQGTDF FRKWADYRVG 1200  
FGNVEDEFWL GLDNIHRITS QGRYELRVDM RDGQEAAPAS YDRFSVEDSR NLYKLIGSY 1260  
NGTAGDSLSY HQGRPFSTED RDNDVAVTNC AMSYKGAWWY KNCHRTNLNG KYGESRHSQG 1320  
65 INWYHWKGHE FSIPFVEMKM RPYNHRLMAG RKRQSLQF 1358

Seq ID NO: 305 Protein Sequence  
Protein Accession #: NP\_005874.1

1 11 21 31 41 51  
| | | | |  
70 MASSVAPYEQ LVRQVEALKA ENSHLRQELR DNSSHLSKLE TETSGMKEVL KHLQCKLEQE 60  
ARVLVSSGQT EVLEQLKALQ MDITSLYNLK FQPPTLGPEP AARTPEGSPV HSGSPSKDSF 120  
GELSRATIRL LEELDRERC LLEIEKEEK EKLWYYSQLO GLSKRLDEL P HVETQFSMQM 180  
DLIRQQLFEY AQHIRSLEME RFGTSDENVQ RAQIRASRL QIDKELLEAQ DRVQQTPEQA 240  
75 LLAVKSVFPV EDPTEVPVTH PEDGTPQPGN SKVEVVPWLL SMLATRDQED TARTLLAMSS 300  
SPESCVAMRR SGCLPLLLQI LHGTEAAAGG RAGAPGAPGA KDARMRANAA LHNIVFSQPD 360  
QGLARKEMRV LHVLEQIRAY CETCWDWLQA RDGGPEGGGA GSAPIPIEPQ ICQATCAVMK 420  
LSFDEEYRRA MNELGGLQAV AELLQVDYEM HKMTRDPLNL ALRRYAGMTL TNLTFGDVAN 480  
KATLCARRGC MEAIVQLAS DSEELHQVVS SILRNLWRA DINSKKVLRE AGSVTALVQC 540  
80 VLRATKESTL KSVLSALWNL SAHSTENKAA ICQVDGALGF LVSTLTLYKQ SNSLAIIESG 600  
GGILRNVSLL VATREDYRQV LRDHNCQLTL LQHLTSHSLT IVSNACGT LW NLSARSARDQ 660  
ELLWDLGAVG MLRNLVHSHK KMIAMGSAAL LRLNLAHRPA KHQAATAVS PGSCVPSLYV 720  
RKORALEAL DARHLQQALE HLEKQGPAA EATKKPLPP LRHLDGLAQD YASDSGCFDD 780  
DDAPSSLAAL AATGEPASPA ALSFLGSPF LQQAALARTP PTRRGKEAE KDTSGEAAVA 840  
AKAKAKLALA VARIDQLVED ISALHTSSDD SFLSSGDPG QEAPREGRAE SCSPCRGPEG 900



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|-------------|------------|-------------|------------|-------------|-------------|------|
| GRREAGSRAH  | PLRLKAAHA  | SLSNDSLNSG  | SASDGYCPRE | HMLPCPLAAL  | ASRREDPRCG  | 960  |
| QRPSPRLDLD  | LPCCQAEPPA | REATSADARV  | RTIKLSPTYQ | HVPLLEGASR  | AGAEPLAGPG  | 1020 |
| ISPGARKQAW  | LPADHLKVP  | EKLAAAPLSV  | ASKALQKLA  | QEGPLSLSRC  | SSLSSLSSAG  | 1080 |
| RPGPSEGGDL  | DDSDSSLEGL | EEAGPSEAL   | DSTWRAPGAT | SLPVAIPAPR  | RNRGRGLGVE  | 1140 |
| DATPSSSSEN  | YVQETPLVL  | RCSSVSSLGS  | FESPSIASSI | PSEPCSGQGS  | GTISPSELDP  | 1200 |
| SPGQTMPPSR  | SKTTPPLAP  | QGPEATQFS   | LQWESYVKRF | LDIADCRERC  | RLPSELDA    | 1260 |
| VRFTVEKPE   | NFSCASSLSA | LALHEHYVQ   | DVELRLPLSA | CPERGGGAGG  | AGLHFAGHRR  | 1320 |
| REEGPAPTGS  | RPRGAADQEL | ELLRECLGAA  | VPARLRKVAS | ALVPGRRALP  | VPVYMLVPAP  | 1380 |
| APAQEDDSCT  | DSAECTPVNF | SSAASLSDET  | LQGPFRDQPG | GPAGRQRFTG  | RPTSARQAMG  | 1440 |
| HRHKAGGAGR  | SAEQSRGAGK | NRAGLELPLG  | RPPSAPADKD | GSKPGRTRGD  | GALQSLCLTT  | 1500 |
| PTEEAIVCFY  | GNDSDDEPPA | AAPTPTHRRT  | SAIPRAFTRE | RPQGRKEAPA  | PSKAAAPAAP  | 1560 |
| PARTQPSLIA  | DETPPCYSL  | SSASSLSEPE  | PSEPPAVHPR | GREPAVTKDP  | GPGGGRDSSP  | 1620 |
| SPRAAEELLQ  | RCISSALPRR | RPPVSGLRRL  | KPRATRLDER | PAEGSRERGE  | EAAGSDRASD  | 1680 |
| LDSVEWRAIQ  | EGANSIVTWL | HQAAAAATREA | SSESLSILSF | VSGLSVGSTL  | QPPKHKRGRQ  | 1740 |
| AEGEMGSAAR  | PEKRGAAVSK | TSGSPRSPAG  | PEKPRGTQKT | TPGVPVAVLRG | RTVIYVPSPA  | 1800 |
| PRAQPKGTFG  | PRATPRKVAP | PCLAQPAAPA  | KVPSPGQQRS | RSLHRPAKTS  | ELATLSQPPR  | 1860 |
| SATPPARLAK  | TPSSSSSQTS | PASQPLPRKR  | PPVTQAAGAL | PGPGASVPVK  | TPARTLLAKQ  | 1920 |
| HKTQSRSPVRI | PFMQRPARRG | PPFLARAVPE  | PGPRGRAGTE | AGPGARGGRL  | GLVVRVASALS | 1980 |
| SGSESSDRSG  | FRRLTFIKR  | SPGLRRRRSE  | LSSAESASA  | PGASPRRGR   | PALPAVFLCS  | 2040 |
| SRCEELRAP   | RQCPAPARQ  | PPAARPSGGE  | RPARRTTSES | PSRLPVRAPA  | ARPETVKRYA  | 2100 |
| SLPHISVARR  | PDGAVPAAPA | PADAARRSSD  | GEPRPLPRVA | APGTTWRRIR  | DEDVPHILRS  | 2160 |
| TLPATALLPR  | GSTPEDAPAG | PPPRKTSDAV  | VQTEEVAAPK | TNSSTSPSLE  | TREPPGAPAG  | 2220 |
| GQLSLGSDV   | DGPSLAKAPI | SAPFVHEGLG  | VAVGGFPASR | HGSPSR SARV | PPFNYVPSPM  | 2280 |
| VVAATTDSAA  | EKAPATASAT | LLE         |            |             |             | 2303 |

Seq ID NO: 306 Protein Sequence  
Protein Accession #: NP\_006356.1

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|             |            |            |             |            |            |     |
|-------------|------------|------------|-------------|------------|------------|-----|
| 1           | 11         | 21         | 31          | 41         | 51         |     |
|             |            |            |             |            |            |     |
| MFILTEDLITF | NLRNLLFLQ  | WESSFSPGAG | GFCTTLFPSPF | LRVDDRATSS | TTDSSRAPSS | 60  |
| PRPPGSTSHC  | GISTRCTERC | LCVLPLRTSQ | VPDVMAPQHD  | QEKFHDLAYS | CLGKSFMSMN | 120 |
| QDLGYSTSS   | LALGLAWLSW | ETKKKNVLHL | VGLDSL      |            |            | 156 |

Seq ID NO: 307 Protein Sequence  
Protein Accession #: AAH32726.1

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|-------------|------------|------------|------------|------------|------------|-----|
| 1           | 11         | 21         | 31         | 41         | 51         |     |
|             |            |            |            |            |            |     |
| MASTRSIELE  | HFEERDKRPR | PGSRRGAPSS | SGGSSSSGPK | GNGLIPSPAH | SAHCSFYRTR | 60  |
| TLQALSSEKK  | AKKARFYRNG | DRYFKGLVFA | ISSDRFRSFD | ALLIELTRSL | SDNVNLPQGV | 120 |
| RTIYITIDGSR | KVTSLDELLE | GESYVCASNE | PFRKVDYTKN | INPNWSVNIK | GGTSRALAAA | 180 |
| SSVKSEVKES  | KDFIKPKLVT | VIRSGVKPRK | AVRILLNKKT | AHSFEQVLTD | ITEAIKLDG  | 240 |
| VVKRLCTLGD  | KQVTCLOQDF | GDDDVFIACG | PEKFRYAQDD | FVLHDSECRV | LKSSYSRSSA | 300 |
| VKYSGSKSPG  | PSRRSKSPAS | VNGTPSSQLS | TPKSTKSSSS | SPTSPGSFRG | LKISAHGRSS | 360 |
| SNVNGGPELD  | RCISPEGVNG | NRCSESSTLL | EKYKIGKVIG | DGNFAVVKEC | IDRSTGKEFA | 420 |
| LKIIDKAKCC  | GKEHLIENEV | SILRRVKHPN | IIMLVEEMET | ATELFLVMEL | VKGGDLFDAI | 480 |
| TSSTKYTERD  | GSAMVYNLAN | ALRYLHGLSI | VHRDIKPNEL | LVCEYPDGTK | SLKLGDFGLA | 540 |
| TVVREGPLYTV | CGTPTYVAPE | IIAETGYGLK | VDIWAAGVIT | YILLCGFFPF | RSENNLQEDL | 600 |
| FDQILAGKLE  | FPAPYWNIT  | DSAKELISOM | LQVNVEARCT | AGQILSHPWV | SDDASQENNM | 660 |
| QAEVTGKLLQ  | HFNNALPKQN | STTTGVSVIM | FDLTV      |            |            | 695 |

Seq ID NO: 308 Protein Sequence  
Protein Accession #: NP\_055978.2

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|-------------|------------|------------|------------|------------|------------|-----|
| 1           | 11         | 21         | 31         | 41         | 51         |     |
|             |            |            |            |            |            |     |
| MEEMEEELKC  | PVCGSFYREP | IILPCSHNLC | QACARNILVQ | TPESESPQSH | RAAGSGVSDY | 60  |
| DYLDLDKMSL  | YSEADSGYGS | YGGFASAPTT | PCQKSPNGVR | VFPAMPPPA  | THLSPALAPV | 120 |
| PRNSCITCPO  | CHRSLILDDR | GLRGFFKNRV | LEGVIDRYQQ | SKAAALKCQL | CEKAPKEATV | 180 |
| MCEQCQVFC   | DPCLRLCHPP | RGPLAKHRLV | PPAQGRVSR  | LSPRKVSTCT | DHELENHSMY | 240 |
| CVQCKMPVYC  | QCLEEGKHSS | HEVKALGAMW | KLHKSQLSQA | LNGLSORAKE | AKFELVQLRN | 300 |
| MQQQIQENSV  | EFEACLVAQC | DALIDALNRR | KAQLLARVNK | EHEHKLKVVR | DQISHCTVKL | 360 |
| ROTTGLMEYC  | LEVIKENDPS | GFLQISDALI | RRVHLTEDQW | GKGTLTFRMT | TDFDLSLDNL | 420 |
| PLLQSIHQLD  | FVQVKASSPV | PATPILQLEE | CCTHNNSATL | SWKQPLSTV  | PADGYILELD | 480 |
| DGNGCGQFREV | YVGKETMCTV | DGLHFNSTYN | ARVKAFNKTG | VSPYSKTLVL | QTSEVAWFAP | 540 |
| DPGSAHSDII  | LSDNLDLTVT | SSYDDRVLG  | KTGFSKGIHY | WELTVDRYDN | HPDPAFGVAR | 600 |
| MDVMKDVMLG  | KDDKAWAMYV | DNNRSWFMHN | NSHTNRTEGG | ITKGATIGVL | LDLNRKNLTF | 660 |
| FINDEQQGPI  | AFDNEVEGLF | PAVSLNRNVQ | VTLHGLTLPV | DFYSSRASIA |            | 710 |

Seq ID NO: 309 Protein Sequence  
Protein Accession #: NP\_116025.1

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|------------|------------|------------|------------|------------|------------|-----|
| 1          | 11         | 21         | 31         | 41         | 51         |     |
|            |            |            |            |            |            |     |
| MEDLEEDVRF | IVDETLDFFG | LSPSDSREEE | DITVLVTPEK | PLRRGLSHRS | DPNAVAPAPQ | 60  |
| GVRLSLGPLS | PEKLEEILDE | ANRLAAQLEQ | CALQDRESAG | EGLGPRRVKP | SPRRETFVLK | 120 |
| DSPVRDLLPT | VNSLTRSTPS | PSSLTPRLRS | NDRKGSVRAL | RATSGKRPSN | MKRESPTCNL | 180 |
| FPASKSPASS | PLTRSTPPVR | GRAGPSGRAA | ASPTPTIRSV | LAPQFSTSNS | QRLPRPQCAA | 240 |
| AKSSSQLPIP | SAIPRPAARM | PLTSRSVPPG | RGALPFDLSL | TRKGLPRPST | AGHRVRESGH | 300 |
| KVPVQRLLNL | PVMGATRSNL | QPPRKVAVPG | PTR        |            |            | 333 |

Seq ID NO: 310 Protein Sequence  
Protein Accession #: ref|XP\_166946.2

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|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| 1          | 11         | 21         | 31         | 41         | 51         |     |
|            |            |            |            |            |            |     |
| MGSDSRLPEM | EEKSGGDKAG | WSGALLAEVK | NQGLKLCEWM | LVLKAELEWH | YTSVIVGQQG | 60  |
| HLRKMDLLKE | RHRKYLQKP  | IKRCSGLMGL | NWSLRPAISS | SPLARSQEVH | HGAKNGEVK  | 120 |

WO 03/025138

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ALSFRKLRLK KRPPTPPSQA KSWRGRTGSA ADSPGAAAMA VQAALLSTHP FVPFPGGGSP 180
DGLGGAFGAL DKGCCFEDDE TGAPAGALLS GAEGGDVREA TRDLLSFIDS ASSNIKLAID 240
KPGKSKRKVN HRNAPTVAAP AHGKAAPRRE ASQAAAAASL QSRSLAALFD SLRHVPGGAE 300
PAGGEVAAPA AGLGGAGTGG AGGDVAGPAG ATAIPGARKV PLRARNLPSS FFTEPSRAGG 360
GGCGSPSPDV SLGDLKGAEE AVEFFELLGP DYAGAGTEAAV LLAAEPLDVF PAGASVLRGP 420
PELEPGLFEP PPAVVGNLLY PEPWSPVPCS PTKKSPLTAP RGGLTLNEPL SPLYPAADSD 480
PGGEDGRGHL ASFAPFFPDC ALPPPPPPHQ VSYDSAGYS RTAYSSLWRS DGWVEGAPGE 540
EGAHRD 546
    
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Seq ID NO: 311 Protein Sequence
Protein Accession #: NP_071406.1
1      11      21      31      41      51
|      |      |      |      |      |
MAPTKPSFQQ DPSRRERLQA LRKEKSRDAA RSRRGKENFE FYELAKLLPL PAAITSQLDK 60
ASIIRLTISY LKMRDFANQG DPPWNLRMEG PPNNTSVKGA QRRRSPSALA IEVFEAHLGS 120
HILQSLDGFV FALNDEGKFL YSETVSIYL GLSQVELTGS SVFDYVHPGD HVEMAEQLGM 180
KLPPGRGLLS QGTAEAGASS ASSSSQSETP EPVESTSPSL LTTDNTLERS FFIRMKSTLT 240
KRGVHIKSSG KYVIHITGRL RLRVSLSHGR TVPSQIMGLV VVAHALFPPT INEVRIDCHM 300
FVTRVNNDLN IYICENRISD YMDLTPVDIV GKRCYHFIHA EDVEGIRHSH LDLLNKGCVCV 360
TKYYRWQKQN GGYIWIQSSA TIAINAKNAN EKNIHWNYL LSNPEYKDTF MDIAQLPHLP 420
EKTSESSETS DSESDDKSDS GITEDNENSK SDEKGNQSEN SEDPEPDRKK SGNACDNMDN 480
CNDDGHSSSN PDSRSDSDSF EHSDFENPKA GEDGFGALGA MQIKVERYVE SESDLRLQNC 540
ESLTSDSAOK SDSAGEAGA ASSKHQKRRK RKRQKGGSA SRRRLSSASS PGGLDAGLVE 600
PRLLSSESS ASVLKIKTEI SEPINFNDS SIWNYPPNRE ISRNESFYSM TKPPSEHFEP 660
SPQGGGGGGG GGGGLHVAIP DSVLTPPGAD GAAARKTQFG ASATAALAPV ASDPLSPPLS 720
ASPRDKHFGN GGGGGGGGGG AGGGGPSASN SLLYTGDLEA LQRLQAGNVV LPLVHRVTGT 780
LAATSTAAQR VYTTGTIRYA PAEVTAMQS NLLPNAHAVN FVDVNSPGFG LDPKTPMEML 840
YHHVHRLNMS GPFGGAVSAA SLTQMPAGNV FTTAEGLFST LPFPVYSNGI HAAQTLERKE 900
D 901
    
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Seq ID NO: 312 Protein Sequence
Protein Accession #: NP_005797.1
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|      |      |      |      |      |
MDSDASLVSS RPSSPEPDDL FLPARSKGSS GSFTTGGTVS SSTPSDCPPE LSALRCAMG 60
SAGAHGDKL GSGGPKSSSS STSSSTSSAA ASSTKKDKKO MTEPELQQLR LKINSRERKR 120
MHDNLNIMDG LREVMFYAHG PSVRKLSKIA TLLALARNYL MLTNSLEEMK RLVSFIYGGH 180
HAGFHPSACG GLAHASPLPA ATAHAPAAAAH AAHPAVHHP ILPPAAAAAA AAAAAAVSS 240
ASLPGSGPLS VGSIRPPHGL LKSPSAAAAA PLGGGGGGGG ASGGGQIHWG MPCPCSMCQV 300
PPPHHVSAM GAGSLPRLTS DAK 323
    
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Seq ID NO: 313 Protein Sequence
Protein Accession #: XP_045127.3
1      11      21      31      41      51
|      |      |      |      |      |
MTVLEESSIS LMSSVVADF SFEEDPOVFN TLFPSPRPIV LSSRSMEISE TSVGISAEVD 60
MSSVTTTQVP PAHGRSLVFA SLDPATGSL SVAETQVTPSS VTTAFFSVIT SILDSSFSV 120
IANKNTPSLA VRDPVSFTPY SLVPSVLESS FSDQERSFSS EHKPRGALDF ASSFPSTPPL 180
ELSGSISSPS EAPASLMLP SDSLSPFTSQS FSPLVETFTL FDSSDLQSSQ LSLPSSTNLE 240
FSQLQPSSEL PLNTIMLLPS RSEVPWSSF PSDSLEFVEA STVSLTDSEA HFTSAFIETT 300
SVLESSLISH ESAVTLVFP GSESFDILTA GIQATSPILT VHTTPILTES SLFSTLTPPD 360
DQISALDGHV SVLASFSKAI PTGTVLITDA YLPSGSSFVS EATPFPLPTE LTVVGPSLTP 420
TEVPLNTSTE VSTTSTGAAT GGPLDSTLMG DAASQSPSES SAAPPLPSLR PVTAFTLEAT 480
VDTPTLATAK PPYVCDITVP DAYLITTVLA RRAVQEYIIT AIKEVLRIHF NRAVELKVYE 540
LFTDFTFLVT SGPFVYTAIS VINVLINSKL VRDQTLILS VKPSFLVPES RFQVQTVLQF 600
VPPSVDTGFC NPTQRIEKL MTALFEVRKH HQGTYNLTQV ILNITISSR VTPRRGPVNI 660
IFAVKSTQGF LMGSEVSELL RNLSVVEFSF YLGYPVLQIA EPFQYQNLN SOLLKSSWVR 720
TVLLGVMEQG LQNEVQAEM ERKLAQLLSE VSTRRMWRR ATVAAGNSVQ QVVNVSRLEG 780
DDNPVQLIYF VEDQDGERLS AVKSSDLINK MDLQRAAIL GYRIQGVIAQ PVDRVKRPS 840
ESQSNLWVI VGVVIVLVV MVIVVILYWK LCRTDKLDFQ PDTVANIQQR QKLQIPSVKG 900
FDFAKQHLQG HNKDDILIH EPAPLPGPLK DHTTPSENGD VSPSKSIPS KNVRHGRVS 960
PSDADSTVSE ESSERDAGDK TPGAVNDGRS HRAPQSGPPL PSSGNEQHSS ASIFEHVDRI 1020
SRPPEASRRV PSKIQLIAMQ FIPAPPVQRP SPADRVAESN KINKEIQTAL RHKSEIEHHR 1080
NKIRLRAKRR GHYEFPPVDD LSSGDTKERH RVYRAQMOI DKILDPTASV PSVFIEPRKS 1140
SRIKRSKPKR RKHVQVGCAP DAEKDRILT DSDGTYRRPP GVHNSAYIGC PSDPDLPADV 1200
QTPSSVELGR YPALPPFASQ YIPQPSIEE ARQTMHSLD DAFALVAPSS QPASTAGVP 1260
GVPPGLPANS PQSQEERRAT QWGSFYSPAQ TANNPCSYE DYGMTPTTGP LPRPGFGPGL 1320
LQSTELVPPD PQSQASAEA PFAAGIYSE EMPVARPRP VGGTTGSIQI HLTQVGIASR 1380
IGAPVEIPP SRGSQYGGPG WPSYGEDEAG RREAVPTSG REPSAPSGNL PHRGLQGPGL 1440
GYPTSSTEDL QPHGSSASLI KAIREELLRL SQKQSTVQNF HS 1482
    
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Seq ID NO: 314 Protein Sequence
Protein Accession #: BAC04820.1
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|      |      |      |      |      |
MAPRPLGPLV LALGGAAVL GSVLFILWKT YFGRGRERRR DRGEAWWGAE AARLPEWDEW 60
DPEDEEDDEP ALEELEQREV LVLGLDGAGK STFLRVLSGK PPLEGHIPTW GFNSVRLPTK 120
DFEVDLLEIG GSONLRFYWK EFSVEVDVLV FVVDASDRLR LPWAOELHK LLDKDPDLPV 180
VVVANQDLS EAMSMGELQR ELGLQAIDNQ REVFLAASI APAGPTFEFP GTVHIWKLLL 240
ELLS 244
    
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Seq ID NO: 315 Protein Sequence
Protein Accession #: NP_066563.1
1      11      21      31      41      51
    
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|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| MARRAGGARM | FGSLLLFALL | AAGVAPLSWD | LPEPRSRASK | IRVHSRGNLW | ATGHFMGKKS | 60  |
| LEPSSPSHWG | QLTTPPLRDQ | RLQLSHDLLG | ILLKKALGV  | SLSRPAPQIQ | YRRLLVQILQ | 120 |
| K          |            |            |            |            |            | 121 |

Seq ID NO: 316 Protein Sequence  
Protein Accession #: NP\_002046.1

1 11 21 31 41 51

|            |            |             |            |            |             |     |
|------------|------------|-------------|------------|------------|-------------|-----|
| MERRRITSAA | RRSYVSSGEM | MVGGGLAPGR  | LPGGTRLSLA | RMPPPLPTRV | DFSLAGALNA  | 60  |
| GPKETRASER | AENMELNDRF | ASYIEKVRFL  | EQQNKALAAE | LNQLRAKEPT | KLADVYQAEI  | 120 |
| RELRLRLDQL | TANSARLEVE | RDNLAQDLAT  | VRQKLQDET  | LRLEAENNLA | AYRQEADEAT  | 180 |
| LARLDLERKI | ESLEEEIRFL | RKIHEEEVRE  | LQEQLARQV  | HVELDVAKPD | LTAALKERT   | 240 |
| QYEAMASSNM | HEAEWYRSK  | FADLTDAAR   | NAELLRQAKH | EANDYRRQLQ | SLTCDLESIR  | 300 |
| GTNESLERQM | REQEERHVRE | AASYQEALAR  | LEEEGQSLKD | EMARHLQEQY | DLINVKLALD  | 360 |
| IEIATYRKLL | EGEENRITIP | VQTFPSNLQIR | ETSLDTKSVS | EGHLKRNIIV | KTVMEMRDGEV | 420 |
| IKESKQEHKD | VM         |             |            |            |             | 432 |

Seq ID NO: 317 Protein Sequence  
Protein Accession #: AAA19191.1

1 11 21 31 41 51

|            |             |            |             |            |            |     |
|------------|-------------|------------|-------------|------------|------------|-----|
| MRLSSLSGS  | SVSSDAEEYQ  | PPIWKSILYQ | LQQAEPKPKR  | IICPREVENR | PKYYGREPHG | 60  |
| IISREQADEL | LGGVEGAYIL  | RESQRQPCY  | TLALRFQNT   | LNRYLFHDGK | HFVGEKRFES | 120 |
| IHDLVTDGLI | TLYIETKAAE  | YISKMTTNP  | YEHIGYATLL  | REKVSRRLSR | SKNEPRKTNV | 180 |
| THEEHTAVK  | ISSLVRRRAAL | THNDNHNFE  | KTHNFKVHTF  | RGFHWCEYCA | NFMWGLIAQG | 240 |
| VRCSDOGLNV | HKQCSKHVP   | DCQPDLKRIK | KVYCCDLTTL  | VKAHNTQRP  | VVDICIREIE | 300 |
| ARGLKGEGY  | RVSQFTHEIE  | DVKMAFDRD  | EKADISANVY  | PDINIITGAL | KLYFRDLPIP | 360 |
| VITYDTYSKF | IDAAKISNAD  | ERLEAVHEVL | MLLPAPAHYET | LYRLMIHLKK | VTMNEKDNFM | 420 |
| NAENLGIVFG | PTLMRPEDS   | TLTTLHDMRY | QKLIVQILIE  | NEDVLF     |            | 466 |

Seq ID NO: 318 Protein Sequence  
Protein Accession #: XP\_113553.1

1 11 21 31 41 51

|            |            |             |            |            |             |     |
|------------|------------|-------------|------------|------------|-------------|-----|
| MKRAHPEYSS | SDSELDETIE | VEKESADENG  | NLSSALGMS  | PTTSSQILAR | KRRRGIIIEKR | 60  |
| RRDRINNSLS | ELRRLVPSAF | EKQGSAKLEK  | AEILQMTVDH | LKMLHTAGGK | GYFDAHALAM  | 120 |
| DYRSLGFREC | LAEVARYLSI | IEGLDASDPL  | RVRLVSHLNN | YASQREAAAG | AHAGLGHIPW  | 180 |
| GTUVFGHHPI | AHPLLLPQNG | HGNAGTTASP  | TEPHHQGRLG | SAHPEAPALR | APPSGSLGPV  | 240 |
| LPVVTSASKL | SPPLSSSVAS | LSAFFPSPFGS | FHLLSPNALS | PSAPTQAANL | GKPYRPWGT   | 300 |
| IGAF       |            |             |            |            |             | 304 |

Seq ID NO: 319 Protein Sequence  
Protein Accession #: NP\_001927.2

1 11 21 31 41 51

|             |            |            |            |            |            |     |
|-------------|------------|------------|------------|------------|------------|-----|
| MTTAKEPSAS  | GKSVOQQEQE | LVGSNPPQRN | WKGIAIALLV | ILVICSLIVT | SVILLTPAED | 60  |
| NSLSQKKKVT  | VEDLFSQDFK | IHDPEAKWIS | DTEFIYREQK | GTVRLNNVET | NTSTVLIEGK | 120 |
| KIESLRAIRY  | EISPDREYAL | FSYNVEPIYQ | HSYTGYYVLS | KIPHGDPQSL | DPPEVSNACK | 180 |
| QYAGWGPKGQ  | QLIFIFENNI | YYCAHVQKQA | IRVVGSTKEG | VIYNGLSDWL | YEEELIKTHI | 240 |
| AHWNSTPDGTR | LAYAAINDSR | VPIMELPTYT | GSYPTVKPY  | HYPKAGSENP | SISLHVIGLN | 300 |
| GPTHDLMEPM  | PDDPRMREY  | ITMVKWATST | KVAVTWLNRA | QNVSIILTCD | ATTGVCTKKH | 360 |
| EDESEAWLHR  | QNEEPVFSKD | GRKFFFIRAI | PQGGRGKFYH | ITVSSSQPNS | SMDNIQSITS | 420 |
| GDWDVTKILA  | YDEKGNKIYF | LSTEDLPRRR | QLYSANTVGN | FNRCCLSCDL | VENCTYFSA  | 480 |
| FSHSMDFLL   | KCEGPGVPMV | TVHNTTDKKK | MFPLETNEHV | KKAINDRQMP | KVEYRDIEID | 540 |
| DYNLRPMQILK | PATFTDTTHY | PLLLVVDGTP | GSQSVAEKFE | VSWETVMVSS | HGAVVVCKDG | 600 |
| RGSQFQGTCL  | LHEVRRRLGL | LEEKQMEAV  | RTMLKEQYID | RTRVAVFGKD | YGGVLSYIIL | 660 |
| PAKGENQGQT  | FTCGSALSPI | TDFKLYASAF | SERYLGLHGL | DNRAYEMTKV | AHRVSALEEQ | 720 |
| QFLIIHPTAD  | EKIHFQHTAE | LITQLIRGKA | NYSLQIYPDE | SHYFTSSSLK | QHLVRSIINF | 780 |
| FVECFRIQDK  | LPTVTAKED  | EED        |            |            |            | 803 |

Seq ID NO: 320 Protein Sequence  
Protein Accession #: XP\_087461.1

1 11 21 31 41 51

|            |             |            |            |            |            |     |
|------------|-------------|------------|------------|------------|------------|-----|
| MLPLLAALLA | AACPLPPVRG  | GAADAPGLLG | VPSNASVNAS | SAASPSPRGC | WPRRPFGPPS | 60  |
| ARARRRRRRR | RRLCNISVQR  | QMLSSLLVRW | GRPRGFQCDL | LLFSTNAHGR | AFFAAAFHRV | 120 |
| GPPLLIEHLG | LAAGGAQDDL  | RLCVGCGWVR | GRRTGRLRPA | AAPSAATAA  | CAPTALPAYP | 180 |
| AAEPPGPLWL | OGEPLHFCCCL | DFSLEELQGE | PGWRLNRKPI | ESTLVACFMT | LVIVVWSVAA | 240 |
| LIWVPPIIAG | FLPNMGMEQRR | TTASTTAATP | AAVPAGTTAA | AAAAAAAAA  | AVTSGVATK  | 299 |

Seq ID NO: 321 Protein Sequence  
Protein Accession #: NP\_036393.1

1 11 21 31 41 51

|            |            |            |            |            |             |     |
|------------|------------|------------|------------|------------|-------------|-----|
| MDLQGRGVPS | IDRLRLVLLM | FHTMAQIMAE | QEVENLSGLS | TNPEKDIFVV | RENGTTCMLA  | 60  |
| EFAAKFIVPY | DVWASNVDL  | ITEQADIALT | RGAEVKGRCG | HSQSELQVFW | VDRAYALKML  | 120 |
| FKKESIDMSK | GPEATWRLSK | VQFVYDSSEK | THFKDAVSAG | KHTANSHHLS | ALVTIPAGKSY | 180 |
| ECQAQQTISL | ASSDPQKTVT | MILSAVHIQF | FDIISDFVFS | EEHKCPVDER | EQLEETLPLI  | 240 |
| LGLILGLVIM | VTLAIYHVHH | KMTANVQVQP | RDRSQYKHM  |            |             | 280 |

Seq ID NO: 322 Protein Sequence  
Protein Accession #: NP\_653187

1 11 21 31 41 51

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|            |            |            |             |            |            |     |
|------------|------------|------------|-------------|------------|------------|-----|
| MWVLGIAATF | CGLFLLPGFA | LQIQCYQCEE | FQLNNDCCSP  | EFIVNCTNVV | QDMCQKEVME | 60  |
| QSAGIMYRKS | CASSAACLIA | SAGYQSFCSF | GKLNNSVCISC | CNTPLCNGPR | PKKRGSSASA | 120 |
| LRPGLRTTIL | FLKLALFSAH | C          |             |            |            | 141 |

Seq ID NO: 323 Protein Sequence

Protein Accession #: NP\_004685

|            |            |            |            |            |             |     |
|------------|------------|------------|------------|------------|-------------|-----|
| 1          | 11         | 21         | 31         | 41         | 51          |     |
| MTQNKLKCS  | KANVYTEVPD | GGWGWAVAVS | FFFVEVFTYG | IIKTFGVFFN | DLMDSFNESN  | 60  |
| SRISWISIC  | VFVLTFSAPL | ATVLSNRFGH | RLVVMLGGLL | VSTGMVAASF | SQEVSHMYVA  | 120 |
| IGIISGLGYC | FSFLPTVTIL | SQYFGKRRSI | VTAVASTGEC | FAVFAPAPAI | MALKERIGWR  | 180 |
| YSLLFVGLLO | LNIVIFGALL | RPIIIRGPAS | PKIVIQENRK | EAQYMLENEK | TRTSIDSIDS  | 240 |
| GVELTTSFKN | VPTHNTLELE | PKADMQQVLV | KTSRPPSEKK | APLLDFSILK | EKSFCICYALF | 300 |
| GLFATLGFFA | PSLYIIPGLI | SLGIDQDRAA | FLSTMAIAE  | VFGRIGAGFV | LNREPIRKIY  | 360 |
| IELICVILLT | VSLFAFTFAT | EFNCLMSCSI | FFGFMVGTIG | GLTFHCLLM  | MSWALQKMSS  | 420 |
| AAGVYIFIQS | IAGLAGPPLA | GLLVDQSKIY | SRAFYSKAAG | MALAAVCLAL | VRPCKMLQOQ  | 480 |
| RHSGGETKVV | SHRGKTLQDI | PEDFLEMDLA | KNEHRVHVOM | EPV        |             | 523 |

Seq ID NO: 324 Protein Sequence

Protein Accession #: NP\_004824.1

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| 1          | 11         | 21         | 31         | 41         | 51         |     |
| MESKYKEILL | LTGLDNITDE | ELDRFKFPLS | DEFNIATGKL | HTANRIQVAT | LMIQNAGAVS | 60  |
| AVMKTIRIFQ | KLNYMLLAKR | LQEEKEKVDK | QYKSVTKPKP | LSQAEMSPAA | SAAIRNDVAK | 120 |
| QRAAPKVSPH | VKPEQKQWVA | QQESIREGFO | KRCLPVMVLK | AKKPFTFETO | EGKQEMFHAT | 180 |
| VATEKEFFV  | KVFNTLLDK  | FIPKRIIIIA | RYRRHSGFLE | VNSASRVLDA | ESDQKVNVP  | 240 |
| NIRKAGETP  | KINTLQTOPL | GTIVNGLFVV | QKVTEKKKNI | LFDLSDNTGK | MEVLGVRNED | 300 |
| TMCKEGDKV  | RLTFFTLKSN | GEKLQLTSGV | HSTIKVIKAK | KKT        |            | 343 |

Seq ID NO: 325 Protein Sequence

Protein Accession #: NP\_005400.1

|            |            |            |            |            |            |    |
|------------|------------|------------|------------|------------|------------|----|
| 1          | 11         | 21         | 31         | 41         | 51         |    |
| MSVKGMAIAL | AVILCATVVQ | GFPMEKRGRC | LCIGPGVKAV | KVADIEKASI | MYPSNNCDKI | 60 |
| EVIITLKENK | QQRCLNPKSK | QARLIKKVE  | RKNF       |            |            | 94 |

Seq ID NO: 326 Protein Sequence

Protein Accession #: NP\_002553.1

|            |            |            |            |            |             |     |
|------------|------------|------------|------------|------------|-------------|-----|
| 1          | 11         | 21         | 31         | 41         | 51          |     |
| MPACCSCSDV | FQYETNKVTR | IQSMNYGTIK | WFFHVIIIFS | VCFALVSDKL | YQRKEPVISS  | 60  |
| VHTKVGIAE  | VKEEIVENG  | KKLVSFVFD  | ADYTFPLQCN | SFFVMTNFK  | TEGQEQRLCP  | 120 |
| EYPTRTLCS  | SDRGCKGWM  | DQSKGIQITG | RCVVHEGNQK | TCEVSAWCPI | EAVEEAPRPA  | 180 |
| LLNSAENFTV | LIKNNIDFP  | HNITTRNILP | GLNITCTFHK | TQNPQCPIFR | LGDI FRETGD | 240 |
| NFSDVAIQG  | IMGIEIYWD  | NLDRWFHHC  | PKYSFRRLDD | KTTNVSILY  | YNFRYAKYK   | 300 |
| ENNVEKRTLI | KVGFIRFDIL | VFGTGGKFDI | IQLVVIIGST | LSYFGLAAVF | IDFLIDTYSS  | 360 |
| NCCRSYHPW  | KCCQCPQVNV | EYYRKKCES  | IVEPKPTLKY | VSFVDESHIR | MVNQQLGRS   | 420 |
| LQDVKGQV   | RPAMDFTDLS | RLPLALHDT  | PIPGQPEEI  | LLRKEATPRS | RDSVWCQCG   | 480 |
| SCLPSQLPES | HRCLEELCCR | KKPGACITTS | ELFRKLVLRS | HVLQFLLLYQ | EPLLALDVDS  | 540 |
| TNSRLRHCA  | RCYATWRFGS | QDMADFAILP | SCCRWRIRKE | FPKSEGGYS  | FKSPY       | 595 |

Seq ID NO: 327 Protein Sequence

Protein Accession #: NP\_001784.2

|            |             |             |            |            |            |     |
|------------|-------------|-------------|------------|------------|------------|-----|
| 1          | 11          | 21          | 31         | 41         | 51         |     |
| MGLPRGFLAS | LLLLQVCWLQ  | CAASEPCRAV  | FREAETVLEA | GGAEQEPGQA | LGKVFMCPCG | 60  |
| QEPALFSTDN | DDFTVRNGET  | VQERRSLKER  | NPLKIPFSKR | ILRRHKRDWV | VAPISVPENG | 120 |
| KGPFPPQLNQ | LKSNKDRDRT  | IFYSITGPGA  | DSPPEGVFAV | EKETGWLLLN | KPLDREEIAK | 180 |
| YELFGHAVSE | NGASVEDPMN  | ISIIIVTDQND | HKPKFTQDTF | RGSVLEGVLP | GTSVMQVTAT | 240 |
| DEDDAIYTYN | GVVAYSIHSG  | EPKDPHDLMF  | TIHRSTGTIS | VISSGLDREK | VPEYTLTIQA | 300 |
| TDMDDGGSTT | TAVAVVEILD  | ANDNAPMFDP  | QKYEAVHPEN | AVGHEVQRLT | VTDLDAPNSP | 360 |
| AWRATYILMG | GDDGDHFTIT  | THPESNQGIL  | TTRKGLDFEA | KNQHTLYEV  | TNEAPFVLKL | 420 |
| PTSTATIVVH | VEDVNEAPVF  | VPPSKVVEVQ  | EGIPTGEPVC | VYTAEDPDKE | NQKISYRILR | 480 |
| DPAGWLAMDP | DSGQVAVGT   | LDREDEQFVR  | NNIYEVMLVA | MDNGSPPTTG | TGTLTLLTID | 540 |
| VNDHGPVPEP | RQITICNQSP  | VRQVLNITDK  | DLSPHTSPFQ | AQLTDDSDIY | WTAEVNEEGD | 600 |
| TVVLSLKKFL | KQDITYDVHLS | LSDHGNKEQL  | TVIRATVCD  | HGHVETCPGP | WKGGFILPVL | 660 |
| GAVLALLFLL | LVLALLVRKK  | RKIKEPLLLP  | EDDTRDNVPY | YGEEGGGEED | QDYDITQLHR | 720 |
| GLEARPEVLV | RNDVAPTIIIP | TPMYRPRPAN  | PDEIGNFIE  | NLKAANTDPT | APPYDTLLVF | 780 |
| DYEGSGSDAA | SLSSLTSSAS  | DQDQDYDYL   | EWGSRFKKLA | DMYGGGEDD  |            | 829 |

Seq ID NO: 328 Protein Sequence

Protein Accession #: NP\_002562.1

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| 1          | 11         | 21         | 31         | 41         | 51         |     |
| MDIPQTKQDL | ELPKLAGTWH | SMAMATNNIS | LMATLKAPLR | VHITSLLPTP | EDNLEIVLHR | 60  |
| WENNSCVEKK | VLGEKTGNPK | KFKINYTVAN | EATLLDTDYD | NFLFLCLQDT | TPPIQSMMCQ | 120 |
| YLARVLVEDD | ETMQGFIRAF | RPLPRHLWYL | LDLQKMEEP  | CF         |            | 162 |

Seq ID NO: 329 Protein Sequence LEK6

Protein Accession #: NP\_001318.1

|             |            |            |            |            |            |    |
|-------------|------------|------------|------------|------------|------------|----|
| 1           | 11         | 21         | 31         | 41         | 51         |    |
| MQAEGRCGTGG | STGDADGPGG | PGIPDGPGGN | AGGPGEAGAT | GGRGPRGAGA | ARASCPGGGA | 60 |

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PRGPHGGAAS GLNCCRCGA RGPESRLLEF YLAMPFATPM EAEARRSLA QDAPPLPVP 120  
VLLKEFTVSG NILTIRLTAA DHRQLQLSIS SCLQQLSLLM WITQCFLPVF LAQPPSGQRR 180

5 Seq ID NO: 330 Protein Sequence LEK6  
Protein Accession #: NP\_066274

1 11 21 31 41 51  
MQAEQCQGTGG STGDADGPGG PGIPDGPGGN AGGPGEAGAT GGRGPRGAGA ARASGPRGGA 60  
PRGPHGGAAS AQDGRCPGCA RRPDSRLQLF RLTAADHRQL QLSISSCLQQ LSLLMWITQC 120  
10 FLPVFLAQAP SQRR 135

15 Seq ID NO: 331 Protein Sequence  
Protein Accession #: NP\_008859.1

1 11 21 31 41 51  
MDLVLRCLL HLAIVIGALLA VGATKVPNRQ DWLGVSRLR TKAWNRQLYP EWTEAQRLLDC 60  
WRGGQVSLKV SNDGPTLIGA NASFSIALNF PGSQKVLDPG QVIWVNNTII NGSQVWGGQP 120  
VYPQETDDAC IFPDGPGPCS GSWSQKRSFV YVWKTWGQYW QVLGGPVSGL SIGTGRAMLG 180  
20 THTMETVYYH RRGSRSYVPL AHSSSAFTIT DQVPFSVSVS QLRALDGGNK HFLRNQPLTF 240  
ALQLHDPGSGY LAEADLSYTW DFGDSSGTLI SRALVVTHTY LEPGPVTAQV VLQAAIPLTS 300  
CGSSVPVGTG DGHRTAEAP NTTAGQVPTT EVVGTTPGQA TPAEFSGTTS VQTPTTEVIS 360  
TAPVQMPTAE STGMTPEKVP VSEVMGTTLA EMSTPEATGM TPAEVSIVVL SGVTAAQVTT 420  
TEWVETTARE LPIPEEGPD ASSIMSTESI TGSGLPLLDG TATLRLVKRQ VPLDCVLYRY 480  
GSFSVTLDIV QGIESAEILQ AVPSGEGDAF ELTVSCQGLL PKEACMEISS PGQPPAQLR 540  
25 QCPVLPSPAC QLVLIHQILKG GSGTYCLNVS LADTNSLAVV STQLIMPQGE AGLGQVPLIV 600  
GILLVLMVAV LASLIYRRRL MKQDFSVPQL PHSSSHWLRL PRIFCSCPIG ENSPLLSGQQ 660  
V 661

30 Seq ID NO: 332 Protein Sequence  
Protein Accession #: NP\_001913.2

1 11 21 31 41 51  
MSPLMWGFL SCLGCKILPG AQGQFPRVCM TVDSLVNKEC CPRLGAESAN VCGSQQGRGQ 60  
CTEVRAADTRP WSGFYILRNQ DDRELWPRKF FHRTCKCTGN FAGYNCGDCK FGWTGPNCER 120  
35 KKPPVIRQNI HSLSPQEREQ FLGALDLAKK RVHPDYVITT QHWLGLLGEN GTQPQFANCS 180  
VYDFFWMLHY YSVRDYLLGP GRPYRAIDFS HQGPAPFVTH RYHLLCLERD LQRLIGNESF 240  
ALPYWNFATG RNECDVCTDQ LFGAARPDPP TLISRNSRFS SWETVCDSLD DYNHLVTLN 300  
GTYEGLLRN QMGRRSMKLP TLKDIRDCLS LQKFDNPPFF QNSTFSFRNA LEGFDKADGT 360  
40 LDSQVMSLIN LVHSFNLNGTN ALPHSAANDP IFVVLHSFTD AIFDEWMKRF NPPADAWPQE 420  
LAPIGHNRMY NMVFFPPVPT NEELFLTSDQ LGYSYADLPL VSVEETPGWP TTLVVMGTL 480  
VALVGLFVLL AFLQYRLRK GYTPLMETHL SSKRYTEEA 519

45 Seq ID NO: 333 Protein Sequence  
Protein Accession #: XP\_059422.1

1 11 21 31 41 51  
MNWHLPLFL ASVTLPISICS HFNPLSLEEL GSNTGIQVEN QIVKSRPHDN IVISPHGIAS 60  
VLGMLQLGAD GRTKQQLAMV MRYGVNGVGK ILKINKAIV SKKNKDITV ANAVFVKNAS 120  
EIEVPFVTRN KDVFPQCEVRN VNFEDPASAC DSINAWVNE TRDMIDNLLS PDLIDGVLTR 180  
50 LVLVNAVYFK GLWKSFRPOE NTKKRTFVAA DGKSYQVPM AQLSVFRCGS TSAPNDLWYN 240  
FIELPYHGCS ISMLIALPTE SSTPLSAIIP HISTKTIDSW MSIMVPKRVQ VILPKFTAVA 300  
QTDLKEPLKV LGITDMFDSS KANFAKITRS ENLHVSHILQ KAKIEVSEGD TKASAATTAI 360  
LIARSSPPWF IVDRPFLLFI RHNPTGAVLF MQQINKP 397

55 Seq ID NO: 334 Protein Sequence  
Protein Accession #: XP\_040512.2

1 11 21 31 41 51  
MRQHDTRNGR IVLISGRRSF CSIFSVPYR DSTQVGDCLK DGGRQSTGAV SLKEIIGLEG 60  
60 VELGADGKTV SYTQFLLPN AFGARRNTID STSFSQFRN LSHRSLSIGR ASGTQGSOLD 120  
GSDLDGPFMDY DPNLLDDPQW PCGKHKRVLI FPSYMTTVID YVKPSDLKKD MNETFKEKFT 180  
HIKLTLSKIR SLKREMRKLA QEDCGLEPPT VAMAFVYFEK LALKGKLNQ NRKLCAGACV 240  
LLAAKICSDL KKHEVKHLID KLEEKFRLLNR RELIAFEPPV LVALEFALHL PEHEVMPHYR 300  
65 RLVSQS 306

70 Seq ID NO: 335 Protein Sequence  
Protein Accession #: AAH08826

1 11 21 31 41 51  
MTTLAGAVPR MMRPGCQNGY PRSGFPLEVS TPLGQGRVNO LGGVFINGRP LENHIRHKIV 60  
EMAHHGIRPC VISRQLRVSH GCVSKILCRY QETGSIRPGA IGGSKPKVTT PDVEKKIEEY 120  
KRENPGMFSW EIRDKLLKDA VCDRNTVPSV SSISRLRSK FGKGEEEAD LERKEAEESE 180  
KKAKHSIDGI LSEASAPQS DEGSDIDSEP DLPLKRRQR SRTTFTAQL EELERAFERT 240  
75 HYPDITREE LAQRAKLTEA RVQVWFSNRR ARWRKQAGAN QLMAFNHLIP GGFPTAMPT 300  
LPTYQLSETS YQPTSIPQAV SDPSSTVHRP QPLPPSTVHQ STIPSNPDSS SAYCLPSTRIH 360  
GFSSYTDSFV PPSGSPNPMN PTIGNGLSPQ NSIRHNLSLH SKFIRVQNEG TGKSSWMLN 420  
PEGGKSGKSP RRRRAASMDNN SKFAKSRRA AKKASLQSG QEGAGDSPGS QFSKWPASPG 480  
SHSNDDFDNW STFRPTSSN ASTISGRISP IMTEQDDLGE GDVHSMVYPP SAAKMASTLP 540  
80 SLSEISNPEN MENLLDNLNL LSSPTSITVS TQSSPGTMMQ QTPCYSEAPP NTSLSNPSPN 600  
YQKYTYGQSS MSPLPQMPIQ TLQDNKSSYG GMSQYNCAFG LLKELLTSDS PPHNDIMTPV 660  
DPGVAQPNR VLQQNVMPCP NSVMSTYGSQ ASHNKMMNPS SHTHPGHAQQ TSAVNGRPLP 720  
HTVSTMPHTS GMRRLTQVKT PVQVPLPHPM QMSALGGYSS VSSCNGYGRM LLHQEKLPS 780  
DLDGMEIERL DCDMESIIRN DLMQDGLDF NFDNVLPNQS FPHSVKTTTH SWVSG 835

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Seq ID NO: 336 Protein Sequence  
Protein Accession #: NP\_005752.1

|    | 1          | 11         | 21         | 31         | 41         | 51         |      |
|----|------------|------------|------------|------------|------------|------------|------|
| 5  | MEVSRRKAPP | RPPRPAAPLP | LLAYLLALAA | PGRGADEPVM | RSEQAIGAIA | ASQEDGVFVA | 60   |
|    | SGSCLDQLDY | SLEHSLSRLY | RDQAGNCTEP | VSLAPPARPR | PGSSFSKLLL | PYREGAAGLG | 120  |
|    | GLLLTGWTFD | RGACEVRPLG | NLSRNSLRNG | TEVVSCHPQG | STAGVVYRAG | RNNRWYLAVA | 180  |
|    | ATYVLPPEPT | ASRCNPAASD | HDTAIALKDT | EGRSLATQEL | GRLLKCEGAG | SLHFVDAFLW | 240  |
| 10 | NGSIYFPYYP | YNYTSGAATG | WPSMARIAQS | TEVLFQGOAS | LDCGHGHPDG | RRLLLSSSLV | 300  |
|    | EALDVWAGVF | SAAAGEGQER | RSPTTTALCL | FRMSEIQARA | KRVSWDFKTA | ESHCKEGDQP | 360  |
|    | ERVQPIASST | LHSDLTSVY  | GTVMNRTVL  | FLGTGDGQLL | KVILGENLTS | NCPEVIYEIK | 420  |
|    | EETPVFYKLV | PDVPKNIIYY | LTAGKEVRR  | RVANCNKHKS | CSECLTATDP | HCGWCHSLQR | 480  |
|    | CTFQDCVHS  | ENLENWLDIS | SGAKKCPKIQ | IIRSSKEKTT | VTMVGFSFPR | HSKCMVKXND | 540  |
| 15 | SSRELCQNK  | QPNRTCTCSI | PTRATYKDV  | VVNVMSFSG  | WNLSDRFNFT | NCSSLKECPA | 600  |
|    | CVETGCWCK  | SARRCIHPFT | ACDPSDYERN | QEQCPVAVEK | TSGGGRPKEN | KGNRTNQALQ | 660  |
|    | VFYIKSIEPQ | KVSTLGKSNV | IVTGANFTRA | SNITMILKGT | STCDKDVIOV | SHVLNDTHMK | 720  |
|    | FSLPSSRKEM | KDVCIQFDGG | NCSSVGSLSY | IALPHCSLIF | PATTWISGGQ | NITMMGRNFD | 780  |
|    | VIDNLIISHE | LKGNINVSEY | CVATYCGFLA | PSLKSSKVRT | NVTVKLRVQD | TYLDCGTLQY | 840  |
| 20 | REDPRFTGYR | VESEVDTELE | VKIQKENDNF | NISKKDIEIT | LPHGENGQLN | CSFENITRNG | 900  |
|    | DLTTILCKIK | GIKTASTIAN | SSKKVRVKLG | NLELYVEQES | VPSTWYFLIV | LPVLLVIVIF | 960  |
|    | AAVGVTRHKS | KELSRKQSQQ | LELLESELRK | EIRDGFAELQ | MDKLDVVDSF | GTVPFLDYKH | 1020 |
|    | FALRTFFPES | GGFTHTIFTD | MNDRDANDKN | ESLTALDALI | CNKSFVLTVI | HTLEKQKNFS | 1080 |
|    | VKDRCLFASF | LTIALQTKLV | YLTSLILEVT | RDLMEQCSNM | QPKMLMRTE  | SVVEKLLTNW | 1140 |
|    | MSVCLSGFLR | ETVGEFFYLL | VTTLNQKINK | GPVDVITCKA | LYTLNEDWLL | WQVPEFSTVA | 1200 |
| 25 | LNVVFEKPE  | NESADVCRNI | SVNVLDCTI  | GQAKEKIFQA | FLSKNGSPYG | LQLNEIGLEL | 1260 |
|    | QMGTRQKELL | DIDSSSVILE | DGITKLNTIG | HYEISNGSTI | KVFKKIANFT | SDVEYSDDHC | 1320 |
|    | HLILPDSEAF | QDVQGRHRG  | KHKFKVKEMY | LTKLLSTKVA | IHSVLEKLF  | SIWSLPNSRA | 1380 |
|    | PFAIKYFFDF | LDAQENKKI  | TDPDVVHIWK | TNSLPLRFVW | NILKNPQFV  | DIKKTPHIDG | 1440 |
| 30 | CLSIVIAQFM | DAPSLTEQQ  | L          | GKEAPTNNKL | YAKDIPTYKE | EVKSYKKAIR | 1500 |
|    | EEFLTQESKK | HENEFNEEVA | LTEIYKIVK  | YFDEILNKLE | RERGLEBAQK | QLLHVKVLFD | 1560 |
|    | EKKKCKWM   |            |            |            |            |            | 1568 |

Seq ID NO: 337 Protein Sequence  
Protein Accession #: XP\_063670.1

|    | 1          | 11         | 21         | 31         | 41         | 51         |     |
|----|------------|------------|------------|------------|------------|------------|-----|
| 35 | MQRILEEPAD | DCTWSTRILL | TLSEFIMSLQ | RTVYPHSEKW | RALSVPSSSY | FQELVGTSGE | 60  |
|    | LALTFWHLLS | MFGFFIVSYG | FLTAFGRTLF | HLDLLQPNLT | PSRFDKYTGL | FIYEIEGDGL | 120 |
| 40 | DPCFQSMVQG | ILEVLWMSKV | ESAYHTNDGD | TAGEGVNGT  | SQTRGGGGAA | RSRCREMEEP | 180 |
|    | TPEPVVDVD  | KGLTLACVF  | LCLFLVMII  | RCAKVIMDPY | SAIPTSTWEE | QHLD       | 235 |

Seq ID NO: 338 Protein Sequence  
Protein Accession #: FGENSEH predicted

|    | 1          | 11         | 21          | 31         | 41         | 51         |     |
|----|------------|------------|-------------|------------|------------|------------|-----|
| 45 | MEPSHSOPTM | DMKHMQERPA | ASPLKCQDGR  | GSAQSPLSAA | GPGSPAPLGA | LTPAEFGLGS | 60  |
|    | APRAPRARAP | VTGRRRSRRS | AVALGSAPAQ  | PGPRERTGRA | SPALENNSDL | LSKASAIATG | 120 |
|    | TPPCEDSTIA | RFYLPPLPTT | HPLELVGTSQE | LALTFWHLLS | MFGFFIVSYG | FLTAFGRTLF | 180 |
| 50 | HLDLLQPNLT | PSRFDKYTGL | LLELPVHSKY  | VLTIHWSQGL | CIWSSHPCEA | GVNGTSQTR  | 240 |
|    | GGGGAARSRC | REMEETPEP  | VVVDVDKGLT  | LACFVFLCLF | LVMVIRCAK  | VIMDPYSAIP | 300 |
|    | TSTWEEQHLD | D          |             |            |            |            | 311 |

Seq ID NO: 339 Protein Sequence  
Protein Accession #: FGENSEH predicted

|    | 1          | 11         | 21         | 31         | 41         | 51         |     |
|----|------------|------------|------------|------------|------------|------------|-----|
| 55 | MKDFMSKTP  | KAMATQAKID | KWDLIKLSKF | CTAKETTIRV | NRQPTWEKEI | FAIYSSDEGL | 60  |
|    | ISRIYNPKQ  | IYKKKTNNPI | NKWAKDMNRH | FSKEDIYAAN | RHMKKCSSSL | AIREMQIKTT | 120 |
|    | TRCHLTPEVM | AIKKSGNNR  | TABEQPKLRK | EAVGSIEIFR | FADGLDITLM | ILGILASLVN | 180 |
| 60 | GACLPMLPLV | LGEMSDNLIS | GCLVQTNTTN | YQNCQSQEK  | LNEDMTLLTL | YVVGIGVAAL | 240 |
|    | IFGYIQISLW | IITAARQTKR | IRKQFFHSVL | AQDIGWFDSC | DIGELNTRMT | DDIDKISDGI | 300 |
|    | GDKIALLFQN | MSTFSIGLAV | GLVKGWKLTL | VTLSSTPLIM | ASAAACSRMV | ISLTSKELSA | 360 |
|    | YSKAGAVAEQ | VLSSIRTVIA | FRAQEKELQR | YTQNLKDAKD | FGIKRTIASK | VSLGAVYFFM | 420 |
|    | NGTYGLAFWY | GTSLILNGEP | GYTIGTVLAV | FFSVIHSSYC | IGAAVPHFET | FAIARGAAFH | 480 |
| 65 | IFQVIDKKPS | IDNFSTAGYK | PESIEGTVEF | KNVSFNYPSR | PSIKILKGLN | LRIKSGETVA | 540 |
|    | LVGLNGSGKS | TVVQLLQRLY | DPDDGFIMVD | ENDIRALNVR | HYRDHIGVVS | QEPVLFGTTI | 600 |
|    | SNNIKYGRDD | VTDEEMERAA | REANAYDFIM | EFPNKFTLV  | GEKGAQMSGG | QKQRIATARA | 660 |
|    | LVRNPKILIL | DEATSALDSE | SKSAVQAAL  | KDTPRYSF   |            |            | 698 |

Seq ID NO: 340 Protein Sequence  
Protein Accession #: XP\_166496.1

|    | 1          | 11         | 21         | 31         | 41         | 51         |     |
|----|------------|------------|------------|------------|------------|------------|-----|
| 70 |            |            |            |            |            |            |     |
|    | MVDENDIRAL | NVRHYRDHIG | VVSQEPVLFG | TTISNNIKYG | RDDVTDEEME | RAAREANAYD | 60  |
| 75 | FIMEFPNKNF | TLVGEKGQAM | SGGQKQRIAI | ARALVRNPKI | LILDEATSAL | DSEKSAVQA  | 120 |
|    | ALEKDTPRYS | F          |            |            |            |            | 131 |

Seq ID NO: 341 Protein Sequence  
Protein Accession #: XP\_166305.1

|    | 1          | 11         | 21         | 31          | 41         | 51         |     |
|----|------------|------------|------------|-------------|------------|------------|-----|
| 80 |            |            |            |             |            |            |     |
|    | MEKFRAVLDL | HVKHHSALGY | GLVTLLTAGG | ERIFSAAVAFQ | CPCSAAWNLP | YGLVFLLVPA | 60  |
|    | LALFLGLGYL | SARTWRLLTG | CCSSARASCG | SALRGSLVCT  | QISAAAAALP | LTWVAVALLG | 120 |
|    | GAFYCAATG  | SAFAQRLCL  | GRNRSAAEL  | PLVFCNQAKA  | SDVQDLLKDL | KAQSQVLGWI | 180 |

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LIADVIIILL IFTSVTRCLS PVSFLQLKFW KIYLEQEQQI LKSKATEHAT ELAKENIKCF 240  
FEGSHPKKEYN TFSMKEWQOI SSLYTFNPKG QYYSMLHKYV NRKEKTHSIR STEGDTVIVP 300  
LGFVDSSGIN STPEL 315

5

Seq ID NO: 342 Protein Sequence  
Protein Accession #: NP\_115587.5

1 11 21 31 41 51  
| | | | |  
MARSPPATLF LFLLLLGQPP PSRPQSLGTT KLRLVGPESK PEEGRLEVLI QGQWGTVCDD 60  
NFAIQEATVA CQQLGFEEAL TWAHSACYGQ GEGPIWLDNV QCVGTESSLD QCGSNGWGV 120  
DCSHSEDEVGV ICHPRRHRYG LSETVSNALG PQGRRLEEVRL LKPILASAKQ HSPVTEGAVE 180  
VKYEGHWROV CDQGWTMNNS RVVCGMLGFP SEVPVDSHYI RKVWDLKMRD PKSRLLKSLTN 240  
KNSFWIHQVT CLGTEPHMAN CQVQVAPARG KLRPACPGGM HAVVSCVAGP HFRPPKTKPQ 300  
RKGSAWEPR VRLRSGAQVG EGRVEVLNMR QWGTVCDDR NLISASVVCRL QLGFGSAREA 360  
LFGARLQGL GPIHLSEVRC RGYERTLSDC PALEGSQNGC QHENAAVRC NVPMNGFQNG 420  
VRLAGRIPE EGGLEVQVEV NGVPRWGSVC SENWGLTEAM VACRQLGLGF AIHAYKETWF 480  
WSGTPRAQEV VMVGVRCSGT ELALQCCQRH GPVHCSHGGG RFLAGVSCMD SAPDLVMNAQ 540  
LVQETAYLED RPLSLQYCAH EENCLSKSAD HMDWPYGYRR LLRFSTQIYN LGRTDFRPKT 600  
GRDSWVWHQC HRHYHSIEVF THYDILLTNG SKVAEGHKAS FCLEDTNCPD GLQRRYACAN 660  
FGEQGVTVGC WDTYRHDIDC QWVDITDVGK GNYIFQVIVN PHYEVAESDF SNMMLQCRCK 720  
YDGHVRVWLHN CHTGNSYPAN AELSLEQEQR LRNNLI 756

25

Seq ID NO: 343 Protein Sequence  
Protein Accession #: NP\_001789.2

1 11 21 31 41 51  
| | | | |  
MENFQKVEKI GEGTYGVVYK ARNKLTGEVV ALKKIRLDTE TEGVPSTAIR EISLLKELNH 60  
PNIVKLLDVI HTNKKLYLVF EFLHQDLKKF MDASALTGIP LPLIKSYLFQ LLQGLAFCHS 120  
HRVLHRDLKP QNLLINTEGA IKLADFGLAR AFGVPVRYTY HEVVTWLYRA PEILLGCKYY 180  
STAVDIWSLG CIFAEMVTRR ALFPGDSEID QLFRIFRITLG TPDEVVWEGV TSPMDYKPSF 240  
PKWARQDFSK VVPPLEDEGR SLLSQMLHYD PNKRISAKAA LAHPFFQDVT KPVPHLRL 298

35

Seq ID NO: 344 Protein Sequence  
Protein Accession #: NP\_439892.1

1 11 21 31 41 51  
| | | | |  
MENFQKVEKI GEGTYGVVYK ARNKLTGEVV ALKKIRLDTE TEGVPSTAIR EISLLKELNH 60  
PNIVKLLDVI HTNKKLYLVF EFLHQDLKKF MDASALTGIP LPLIKSYLFQ LLQGLAFCHS 120  
HRVLHRDLKP QNLLINTEGA IKLADFGLAR AFGVPVRYTY HEVTRRALFP GDSEIDQLFR 180  
IFRTLTGTDE VVWPGVTSMF DYKPSFPKWA RQDFSQVVPV LDEDGRSLLS QMLHYDPYKR 240  
ISAKAALAHF FFQDVTKVPV HLRL 264

45

Seq ID NO: 345 Protein Sequence  
Protein Accession #: NP\_116127.1

1 11 21 31 41 51  
| | | | |  
MKLGCVLMAW ALYLSLQVLW VAQMLLAASF ETLQCEGPVC TEESCHTED DLTDAEAGF 60  
QVKAYTFSEP FHLIVSYDWL ILQGPAPKPVF EGDLLVLRQC AWQDWPLTQV TFYRDGSALG 120  
PPGPNREFSI TVVQKADSGH YHCSGIFQSP GPGIPETASV VAITVQELFP APILRAVPSA 180  
EPQAGSPMTL SCQTKLPLQR SAARLLFSFY KDGRIVQSRG LSSEFQIPTA SEDHSGSYWC 240  
EAATEDNQVW KSPQLLEIRV QGASSAAPP TLNPAPQKSA APGTAPEEAP GPLPPPTPS 300  
SEDPGFSSPL GMPDPHLYHQ MGLLLKHMMD VRVLLGHLLM ELRELSGHQK PGTTKATAE 359

55

Seq ID NO: 346 Protein Sequence  
Protein Accession #: NP\_002337.1

1 11 21 31 41 51  
| | | | |  
MKIFLPLVLA ALLGVERASS LMCFSCLNQG SNLYCLKPTI CSDQDNVCYT VSASAGIGNL 60  
VTFGHSLSKT CSPACPIPEG VNVGVASMG I SCCQSFLCNF SAADGGLRAS VTLLGAGLLL 120  
SLLPALLRFG P 131

65

Seq ID NO: 347 Protein Sequence  
Protein Accession #: XP\_113526.2

1 11 21 31 41 51  
| | | | |  
MEDLGENTMV LSTLRSLNMF ISQRVEGSG LDISTAPGS LQMYYQSMQ LEERAEQIRS 60  
KSHLIQVERE KMOMELSHKR ARVELERAAS TSARNYEREV DRNQELLTRI RQLQEREAGA 120  
EEKMQEQLE NRQCQONLDA ASKRLREKED SLAQAGETIN ALKGRISELQ WSVMDQEMRV 180  
KRLESEKQEL QEQLDLQHKK CQEANQKIQE LQASQEARAD HEQQIKDLEQ KLSLQEQDAA 240  
IVKNMKSELV RLPRLERELK QLRRESAHLR EMRETNGLLQ EEELEGQRKL GRQEKMQETL 300  
VGLELENERL LAKLQSWERL DQTMGLSIRT PEDLSRFVVE LQQRELALKD KNSAVTSSAR 360  
GLEKARQQL EELRQVSGQL LEERKKRETH EALARRLQKR VLLLTKERDG MRAILGSYDS 420  
ELTPAEYSPO LTRRMREAED MVQKVHSHA EMEAQLSQAL EELGGQKQRA DMLEMLKML 480  
KSQSSSAEQS FLFSREEADT LRLKVEELEG ERSRLREEKR MLEAQLERRA LQGDYDQSR 540  
KVLHMSLNT SVARQRLRED HSQLAECER LRGLLRAMER GGTVPADLEA AAASLPSSKE 600  
VAELKKQVES AELKNQRLKE VFQTKIQEFR KACYTLTGQY IDITTENQYR LTSLYAEHPG 660  
DCLIFKATSP SGSKMQLLET EFSHTVGELI EVHLRRQDSI PAFLSLTLLE LFSRQTVA 718

80

Seq ID NO: 348 Protein Sequence  
Protein Accession #: NP\_000264.1

1 11 21 31 41 51  
| | | | |  
MTQAGRRGPG TPEPRPRTQP MASPRLGTFC CPTRDAATQL VLSFQPRAFH ALCLGSGGLR 60  
LALGLQLQLP GRRPAGPGSP ATSPPASVRI LRAAAACDLL GCLGMVIRST VWLGFPNFVD 120

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5 SVSDMNHTEI WPAAFVCVGS MWIQLLYSAC FWLFCYAVD AYLVIRRSAG LSTILLYHIM 180  
AWGLATLLCV EGAAMLYYPS VSRRCERGLDH AIPHYVTMYL PLLLVLVANP ILFQKTVTAV 240  
ASLLKGRGQI YTNERRMGA VIKIRFFKIM LVLLICWLSN IINESLLFYL EMQTDINGGS 300  
LKPVRTAAKT TWFMGILNP AQGFLLSLAF YGWTGCSLGF QSPRKEIQWE SLTTSAAEGA 360  
HPSPLMPHEN PASGKVSQVG GQTSDEALSM LSEGSDASTI EIHTASESCN KNEGDPALPT 420  
HGDL 424

10 Seq ID NO: 349 Protein Sequence  
Protein Accession #: NP\_647478.1  
1 11 21 31 41 51  
| | | | |  
MGPKDSAKCL HRGPQPSHWA AGDGPTQERC GPRSLGSPVL GLDTCRAWDH VDGQILGQLR 60  
PLTEEEEEEG AGATLSRGPA FPGMGSEELR LASFYDWPLT AEVPPPELLAA AGFFHTGHQD 120  
15 KVRCCFFCYGG LQSWKRGDDP WTEHAKWFPS CQFLLRSKGR DVFHVSQETH SQLLGSWDPW 180  
EPEDAAPVA PSVPASGYPE LPTPRREVQS ESAQEPGGVS PAEAQRAWV LEPPGARDVE 240  
AQLRLQEBR TCKVCLDRAV SIVFVPCGHL VCAECAPGLQ LCPICRAPVR SRVRTFLS 298

20 Seq ID NO: 350 Protein Sequence  
Protein Accession #: NP\_071444.1  
1 11 21 31 41 51  
| | | | |  
MGPKDSAKCL HRGPQPSHWA AGDGPTQERC GPRSLGSPVL GLDTCRAWDH VDGQILGQLR 60  
PLTEEEEEEG AGATLSRGPA FPGMGSEELR LASFYDWPLT AEVPPPELLAA AGFFHTGHQD 120  
25 KVRCCFFCYGG LQSWKRGDDP WTEHAKWFPS CQFLLRSKGR DVFHVSQETH SQLLGSWDPW 180  
EPEDAAPVA PSVPASGYPE LPTPRREVQS ESAQEPGARD VEAQLRLRLQE ERTCKVCLDR 240  
AVSIVFVPCG HLVCAECAPG LQLCPICRAP VRSRVRTFLS 280

30 Seq ID NO: 351 Protein Sequence  
Protein Accession #: NP\_066300.1  
1 11 21 31 41 51  
| | | | |  
MGSVSSLSIG HSPFSKHCRA SQYKLRKSSH LKKNLRYSDG LLRFQFSQDS GHGKSSSKMG 60  
KSEDDFFYIKV SQKARGSHHP DYTALSSGDL GQAGVDFDP STPPKLMFVS NQLEMGSEKG 120  
35 AVRPTAFKPV LPRSGAILHS SPESASHQLH PAPPDKPKEQ ELKPGLCSCGA LSDSGRNSMS 180  
SLPTHSTSSS YQLDPLVTFV GPTSRFGGSA HNITQGIVLQ DSNMMSLKAL SFSGGGSKLG 240  
HSNKADKGPS CVRSPITSTE CSIQELEQKL LEREGALQKL QRSFEEKELA SSLAYEERPR 300  
RCRDELEGPE PKGKNKIKQA SQKSQRAQQV LHLQVLQLOQ EKRQLRQELE SLMKEQDLLE 360  
TKLRSYERKE TSFGPALAET QWEVCQKSGE ISLLKQQLKE SQTEVNAKAS EILGLKAQLK 420  
40 DTRGKLEGLE LRTQDLEGAL RTKGLELEVC ENELQRKKN EALLREKVN LLEQELQELRA 480  
QAALARDMGF PTFPEDVPAL QRELERLRAE LREERQGHQD MSSGFQHERL VWKEEKEKVI 540  
QYQKQLQQSY EAMYQRNQLR EKALQQLARG DSAGEPLEVD LEGADIPYED IIATEI 596

45 Seq ID NO: 352 Protein Sequence  
Protein Accession #: AAG41361.1  
1 11 21 31 41 51  
| | | | |  
MPKNSKVVKR ELDDDVTESE KDLLSNEDAA DDAFKTSELI VDGOEEKDTD VEEGSEVEDE 60  
RPAWNSKLQY ILAQGVGSVG LGNVWRFPYL CQKNGGGAYL LPYLILLMVI GIPLFFLELS 120  
50 VQQRIRRGSI GWNYNISPKL GGIGFASCVV CYFVALYVNV IIGWSLFYFS QSPQQLPQWD 180  
QCPLVKNASH TFVEPECEQS SATTYYWYRE ALNISSISSE SGGLNWKM TI CLLAAMVVMC 240  
LAMIKGIQSS GKIIYFSSLF PYVVLICFLI RAFLNLSID GIRHMFTPKL EIMLEPKVVR 300  
EAATQVPFAL GLGPGGVIAF SSYNKRDNNC HFDVAVLSFI NFFTSVLATL VVFAVLGFKA 360  
NVINEKCITQ NSETIMKFLK MGNISQDIIP HHINLSTVTA EDYHLVYDII QKVKEEFPFA 420  
55 LHLNSCKIEE ELNKAVQGTG LAFIAFTEAM THFPASPFWS VMFFLMLVNL GLGSMFGTIE 480  
GIVTPIVDTF KVRKEILTIV CCLLAFICGL IFVQSRGNFY VTMFDDYSAT LPLLIVVILE 540  
NIAVCFVYGI DKFMEDLKD M LGFAPSRYYY YMNKYISPLM LLSLLIASVV NMGLSPPGYN 600  
ANIEDKASEE FLSYPTWGLV VCVSLVVFAI LPVPVVFIVR RFNLIIDSSG NLA SVTYKRG 660  
RVLKEPVNLE GDDTSLIHGK IPSEMPSPNF GKNIYRKQSG SPTLDTAPNG RYIGIYLMAD 720  
60 IMPDMPESDL 730

65 Seq ID NO: 353 Protein Sequence  
Protein Accession #: NP\_005594.1  
1 11 21 31 41 51  
| | | | |  
MEEGERSPLL SQETAGQKPL SVHRPPTSGC LGVPVPREDQA EAWGCSCCPP ETKHOALSGT 60  
PKKGPAAPSL PGSSCVKYLI FLSNFPFSL GLLALAIGLW GLAVKGSLSG DLGGPLPTDP 120  
70 MLGLALGLV VSAASLAGCL GALCENTCLL RGFSGGILAF LVLEAVAGAL VVALWGPLQD 180  
SLEHTLRVAI AHYQDDPDRL FLDDQVOLGL RCCGAASYQD WQONLYFNCS SPGVQACSLP 240  
ASCCIDPRED GASVNDQCGF GVLRLDADAA QRVVYLEGCG PPLRRWLRLAN LAASGGYAIA 300  
VLLQGAELL LAARLLGALA ARSGAAYGPG AHGEDRAGPQ SPSPGAPPAA KPARG 355

75 Seq ID NO: 354 Protein Sequence  
Protein Accession #: AAL84622.1  
1 11 21 31 41 51  
| | | | |  
MADPEVVVSS CSSEHEENRC NFNQQTSPSE ELLLEDQMRR KLKFFFMNPC EKFWARGRKP 60  
WKLAIQILKI AMVTIQLVLF GLSNQMVFV KEENTIAFKH LFLKGYMDRM DDTYAVYTQS 120  
80 DUYDQLIFAV NOYQLQLYNV VGNHAYENKG TKQSAMAICQ HFYKRGNIYP GNDTFDIDPE 180  
IETECFFVEP DEPFHIGTPA ENKLNLTLDL HRLLTVELQF KLKAINLQTV RHOELPDCYD 240  
FTLTITFDNK AHSGRKIKISL DNDISIRECK DWHVSGSIQK NTHYMMIFDA FVILTCLVSL 300  
ILCIRSVIRG LQKQEFVNF FLLHYKKEVS VSDQMEFVNG WYIMIIISDI LTIIGSILKM 360  
EQAKSLTSY DVCISLLGTS TMLVWLGVIR YLGFFAKYNL LILTQAAALP NVIRFCCCAA 420  
MIYLGVCFCG WIVLGPYHDK FRSLNMVSEC LFSLINGDDM FATFAKMOCK SYLVWLFSLRI 480  
YLYSPISLFI YMILSLFIAL ITDTYETIKQ YQDGFPE TE LRTFISECKD LPNSGKYRLE 540



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|                                  |   |     |
|----------------------------------|---|-----|
| DDPPVSLFCC CKK                   |   | 553 |
| Seq ID NO: 355 Protein Sequence  |   |     |
| Protein Accession #: NP_000105.1 |   |     |
| 5                                | 1 11 21 31 41 51  |     |
|                                  |   |     |
|                                  | MEPGLWLLFG LTVTSAGGFV PCSQSGDAGR RGVSQAPTAA RSEGDCEETV AGPGEETVAG     | 60  |
|                                  | PGEETVAPTA LQGPSPGSPG QEQAAGAPE HHRSRRTCTF TYKDKECVYY CHLDIIWINT      | 120 |
| 10                               | PEQTVPYGLS NYRGSFRGKR SAGPLPGNLQ LSHRPHLRCA CVGRYDKACL HFCTQTLDVS     | 180 |
|                                  | SNRRTAEKTD KEEEGKVEVK DQSKQALDL HHPKLMPSGS LALAPSTCPR CLFQEGAP        | 238 |
| Seq ID NO: 356 Protein Sequence  |   |     |
| Protein Accession #: NP_005347.2 |   |     |
| 15                               | 1 11 21 31 41 51  |     |
|                                  |   |     |
|                                  | MGCGCSSHPE DDWMENIDVC ENCHYPIVPL DGKGTLLIRN GSEVRDPLVT YEGSNPPASP     | 60  |
|                                  | LQDNLVIALH SYEPSHDGDL GFEKGEPLRI LEQSGEWWKA QSLTTQEGF IPFNFAKAN       | 120 |
|                                  | SLEPEPWFFK NLSRKDAERQ LLAPGNTHGS FLIRESESTA GSFSLSVRDF DQNGGEVVKH     | 180 |
| 20                               | YKIRNLDNGG FYISPRITFP GLHELVRHYT NASDGLCTRL SRPCQTQKPQ KPWWDEWEV      | 240 |
|                                  | PRETLKLVER LGAGQFGEVW MGYNGHTKV AVKSLKQSGM SPDAFLAEAN LMKQLQHQL       | 300 |
|                                  | VRLYAVVTQE PIYIITEYME NGSLVDLTKT PSGIKLTINK LLDMAAQIAE GMAFIEERNY     | 360 |
|                                  | IHRDLRAANI LVSDTLSCKI ADFGLARLIE DNEYTAREGA KPPIKWTAP EAINYGFTTIK     | 420 |
|                                  | SDVWSFGILL TEIVTGRIP YPGMTNPEVI QNLERGYRMV RPDNCPPELY QLMRLCWKER      | 480 |
| 25                               | PEDRPTFDYL RSVLEDFFTA TEGQYQPQP                                       | 509 |
| Seq ID NO: 357 Protein Sequence  |   |     |
| Protein Accession #: NP_055469.1 |   |     |
| 30                               | 1 11 21 31 41 51  |     |
|                                  |   |     |
|                                  | MAIAYLGSSC PSQPPSSIAL SLSPTPSDFE QESGIETAMR FSPDVALAVS TTPAVLPTIN     | 60  |
|                                  | IQPVGTFPFE LPSEPTLEP ATSPLVVTEV PEEPSQRATT VSTTMATTAA TSGDPTVAT       | 120 |
|                                  | VPATVATATP STPAAPPFTA TTAVIRTTGV RRLPLPLTT VATARATTPE APSPTTAAV       | 180 |
|                                  | LDTEAPTPLR VSTATSRPRA LPRPATTQEP DIPERSTLPL GTTAPGPTEV AQTPTPETFL     | 240 |
| 35                               | TTIRDEPEVP VSGSPSGDFE LPEEETTPD TANEVAVGG AAKASSPPG TLPKGARPGP        | 300 |
|                                  | GLLDNAIDSG SSAQLPKQS ILERKEVLVA VIVGGVVGAL FA AFLVTLTI YRMKKKDEGS     | 360 |
|                                  | YTLLEPKQAS VTYQKPKDKE EFYA  | 384 |
| Seq ID NO: 358 Protein Sequence  |   |     |
| Protein Accession #: NP_008848.1 |   |     |
| 40                               | 1 11 21 31 41 51  |     |
|                                  |   |     |
|                                  | MYGNYSHFMK FPAGYGGSPG HTGSTMSMPS AALSTGKPM D SHPSYTDTPV SAPRTLSAVG    | 60  |
|                                  | TPLNALGSPY RVITSAMGPP SGALAAPPGI NLVAPPSSQL NVVNSVSSSE DIKPLPLGPG     | 120 |
| 45                               | IGNMNPSTS PGSLVKHICA ICGDRSSGKH YGVYSCEGCK GFFKRTIRKD LIYTCRDNKD      | 180 |
|                                  | CLIDKRQRNR CQYCRYQKCL VMGMKREAVQ EERQSRERA ESEAEATSG HEDMPVERIL       | 240 |
|                                  | EAEALAVEPK ESYGDMNMEN STNDPVTNIC HAADKQLFTL VEWAKRIPHF SDLTLEDQVI     | 300 |
|                                  | LLRAGWNELL TASFSHRVS VQDGILLATG LHVHRSSAHS AGVGSIFDRV LTELVSCKMD      | 360 |
|                                  | MQMDKSELGC LRAIVLFNPD AKGLSNPSEV ETLREKVYAT LEAYTKQKYP EQPGRFAKLL     | 420 |
| 50                               | LRLPALRSIG LKCLEHLFF KLGIDTPIDT FLMELETPLE QIT                        | 463 |
| Seq ID NO: 359 Protein Sequence  |   |     |
| Protein Accession #: NP_002176.1 |   |     |
| 55                               | 1 11 21 31 41 51  |     |
|                                  |   |     |
|                                  | MTILGTTFGM VFSLQVVSF ESGYAQNGDL EDAELDDYSF SCYSQLEVNG SQHSLTCAFE      | 60  |
|                                  | DPDVNTTNLE FIECCALVEF KCLNFRKLQE IYFIETKKFL LIGKSNICVK VGEKSLTCKK     | 120 |
|                                  | IDLTITIVKPE APFDLSVIYR EGANDFVVTF NTSHLQKKYV KVLMDHVAYR QEKDENKWT     | 180 |
|                                  | VNLSSTKLTL LQRAKLQPAAM YEIKVRSIPD HYFKGFWESE SPYFYRTPE INNSSGEMDP     | 240 |
| 60                               | ILLTISILSF FSVALLVILA CVLWKKRIKP IYVPSLPDHW KTLHLCKKP RKNLNVSFNP      | 300 |
|                                  | ESFLDCQIHR VDDIQARDEV EGFLQDTFPQ QLEESEKQRL GGDVQSPNCP SEDVVVTPES     | 360 |
|                                  | FGRDSSLTCL AQNVSACDAP ILSSSRSLDC RESGKNGPHV YQDLLLSLGT INSTLPPPF      | 420 |
|                                  | LQSGILTLPN AGQGQPI LTS LGSNQEEAYV TMSFFYQNPQ                          | 459 |
| Seq ID NO: 360 Protein Sequence  |   |     |
| Protein Accession #: NP_006263.1 |   |     |
| 65                               | 1 11 21 31 41 51  |     |
|                                  |   |     |
|                                  | MSELEKAMVA LIDVFHQYSG REGDKHKLKK SELKELINNE LSHFLEEIKE QEVVDKVMET     | 60  |
| 70                               | LDNDGDGECD QFQEFMAFVAM VTTACHEFFE HE                                  | 92  |
| Seq ID NO: 361 Protein Sequence  |   |     |
| Protein Accession #: NP_006148.1 |   |     |
| 75                               | 1 11 21 31 41 51  |     |
|                                  |   |     |
|                                  | MPMDLILVVV FCVCTARTVV GFGMDPDLQM DIVTELDLVN TTLGVAQVSG MHNASKAFLF     | 60  |
|                                  | QDIEREIHAA PHVSEKLIQL FQNKSEFTIL ATVQQKPSTS GVILSIRELE HSYFELESSG     | 120 |
|                                  | LRDEIRYHYI HNGKPRTEAL PYRMADGQWH KVALSVSASH LLLHVDCNRI YERVIDPPDT     | 180 |
| 80                               | NLPPGINLWL GGRNQKHGLF KGIIQDGKII FMPNGYITQC PNLNHTCPTC SDFLSLVQGI     | 240 |
|                                  | MDLQELLAKM TAKLNYAETR LSQLENCHCE KTCQVSGLLY RDQDSWVDGD HCRNCTCKSG     | 300 |
|                                  | AVECRMSCP PLNCSPDSL P VHIAQCCKV CRPKCIYGGK VLAEGQRILT KSCRECRGGV      | 360 |
|                                  | LVKITEMCPP LNCSEKHIL PENQCRCVCR GHNFCAEGPK CGENSECKNV NTKATCECKS      | 420 |
|                                  | GYISVQGD SA YCEDIDEC AA KMHYCHANTV CVNLPLGLYRC DCPVGYIRVD DFCSTEHEDEC | 480 |

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|                                  |             |            |            |             |             |             |            |     |
|----------------------------------|-------------|------------|------------|-------------|-------------|-------------|------------|-----|
|                                  | GSGQHNCDEN  | AICTNTVQGH | SCTCKPGYVG | NGTICRAFCE  | BGCRYGGTCV  | APNKCVCPSG  | 540        |     |
|                                  | FTGSHCEKDI  | DECSEGIIEC | HNHSRCVNL  | P           | GWYHCECRSG  | FHDDGTYSLS  | GESCIDIDEC | 600 |
|                                  | ALRTHTCWND  | SACINLAGGF | DCLCPSPGSC | SGDCPHEGGL  | KHNGQVWTLK  | EDRCSVCSCCK | 660        |     |
| 5                                | DGKIFCRRTA  | CDCQNPSADL | FCCPECDTRV | TSQCLDQNGH  | KLYRSGDNWT  | HSCQCRCLE   | 720        |     |
|                                  | GEVDCWPLTC  | PNLSCEYTAI | LEGECCPRCV | SDPCLADNIT  | YDIRKTC LDS | YGVSRSLGSV  | 780        |     |
|                                  | WTMAGSPCTT  | CKCKNGRVCC | SVDFECLQNN |             |             |             | 810        |     |
| Seq ID NO: 362 Protein Sequence  |             |            |            |             |             |             |            |     |
| Protein Accession #: NP_057264.1 |             |            |            |             |             |             |            |     |
| 10                               | 1           | 11         | 21         | 31          | 41          | 51          |            |     |
|                                  |             |            |            |             |             |             |            |     |
|                                  | MGSNSGQAGR  | HIYKSLADDG | PFDSVEPPKR | PTSR LIMHSM | AMFGREFCYA  | VEAAYVTPVL  | 60         |     |
|                                  | LSVGLPSSLY  | SIVWFLSPIL | GFLLQPVVGS | ASDHCRSRWG  | RRRPYIITLG  | VMLVGMALY   | 120        |     |
| 15                               | LNGATVVAAL  | IANPRRKLW  | AISVTMIGVV | LFDFAADFID  | GPIKAYLFDV  | CSHQDKEKGL  | 180        |     |
|                                  | HYHALFTGFG  | GALGYLLGAI | DWAHLELGRL | LGTEFQVMFF  | FSALVLTLCF  | TVHLCSISEA  | 240        |     |
|                                  | PLTEVAKGIP  | PQQTQDPPL  | SSDGMVEYGS | IEKVKNQYVN  | PELAMQGAKN  | KNHAEQTRRA  | 300        |     |
|                                  | MTLKSLLRAL  | VNMPPHYRYL | CISHLIGWTA | FLSNMLFFTD  | FMGQIVYRGD  | PYSAHNSTEF  | 360        |     |
|                                  | LIYERGVEVG  | CWGFCINSVF | SSLYSYFQKV | LVSYIGLKGL  | YFTGYLLFGL  | GTGFIGLFPN  | 420        |     |
| 20                               | VYSTLVLCSL  | FGVMSSTLYT | VPFNLITEYH | REEEKERQQA  | PGGDPDPSVR  | GKGMDCATLT  | 480        |     |
|                                  | CMVQLAQLLV  | GGGLGFLVNT | AGTVVVVVIT | ASAVALIGCC  | FVALFVRYVD  |             | 530        |     |
| Seq ID NO: 363 Protein Sequence  |             |            |            |             |             |             |            |     |
| Protein Accession #: NP_036532.1 |             |            |            |             |             |             |            |     |
| 25                               | 1           | 11         | 21         | 31          | 41          | 51          |            |     |
|                                  |             |            |            |             |             |             |            |     |
|                                  | MELALLCGLV  | VMAGVIPIQG | GILNLNKMVK | QVTGKMPILS  | YWPYGCCHGL  | GGRGOPKDAT  | 60         |     |
|                                  | DWCCQTHDCC  | YDHLKTQGCC | TYKDYRYNFF | SQGNIHCSDK  | GSWCEQQLCA  | CDKEVAFCLK  | 120        |     |
|                                  | RNLDTYQKRL  | RFYWRPHCRG | QTPGC      |             |             |             | 145        |     |
| Seq ID NO: 364 Protein Sequence  |             |            |            |             |             |             |            |     |
| Protein Accession #: NP_061313.1 |             |            |            |             |             |             |            |     |
| 30                               | 1           | 11         | 21         | 31          | 41          | 51          |            |     |
|                                  |             |            |            |             |             |             |            |     |
| 35                               | MRLPDLRPWT  | SLLLVDAALL | WLLQGPLGTL | LPQGLPGLWL  | EGTLRIGGLW  | GLLKLRLGLL  | 60         |     |
|                                  | FVGTLLPLC   | LATPLTVSLR | ALVAGASRAP | PARVASAPWS  | WLLVGYGAAG  | LSWSLWAVLS  | 120        |     |
|                                  | PPGAQKEQD   | QVNNKVLWNR | LLKLSRPDL  | LLVAAPFFLV  | LAVLGETLIP  | HYSGRVIDIL  | 180        |     |
|                                  | GGDFDPHAF   | SAIFFMCLFS | FGSSLSAGCR | GGCFITYTMSR | INLRIREQLF  | SSLLRQDLGF  | 240        |     |
|                                  | FQETKTGELN  | SRLSSDTTLM | SNWLPLNANV | LLRSLVKVVG  | LYGFMLSISP  | RLTLLSLLHM  | 300        |     |
| 40                               | PFTIAAEKVY  | NTRHQEVLR  | IQDAVARACQ | VVREAVGGLQ  | TVRSFGAEEH  | EVCRYKEALE  | 360        |     |
|                                  | QCRQLYWRD   | LERALYLLIR | RVLHLGVQML | MLSCGLQMQ   | DGELTQGSLL  | SFMIYQESVG  | 420        |     |
|                                  | SYVQTLVYIY  | QDMLSNVGAA | EKVFSYMDRQ | PNLPSPGTILA | PTTLQGVVKF  | QDVSFAYPNR  | 480        |     |
|                                  | PDRPVLKGLT  | FTLRPGEVTA | LVGPNGSGKS | TVAALLONLY  | QPTGGQVLLD  | EKPISQYEH   | 540        |     |
|                                  | YLHSQVSVVG  | QEPVLFSGSV | RNNIAYGLQS | CEDDKVMAAA  | QAAHADDFIQ  | EMEHGIYTDV  | 600        |     |
| 45                               | GEKGSQLAAG  | QKQRLAIARA | LVRDPRVLIL |             |             |             | 630        |     |
| Seq ID NO: 365 Protein Sequence  |             |            |            |             |             |             |            |     |
| Protein Accession #: NP_002407   |             |            |            |             |             |             |            |     |
| 50                               | 1           | 11         | 21         | 31          | 41          | 51          |            |     |
|                                  |             |            |            |             |             |             |            |     |
|                                  | MKKSGLVFL   | GIILLVLIGV | QGTPVVRKGR | CSCISTNQGT  | IHLQSLKDLK  | QFAPSPSCEK  | 60         |     |
|                                  | IEIIATLKNG  | VQTCLNPDSA | DVKELIKKE  | KQVSQKKKQK  | NGKKHQKKKV  | LKVRKSQSR   | 120        |     |
|                                  | QKKT        |            |            |             |             |             |            |     |
| Seq ID NO: 366 Protein Sequence  |             |            |            |             |             |             |            |     |
| Protein Accession #: NP_006524.1 |             |            |            |             |             |             |            |     |
| 55                               | 1           | 11         | 21         | 31          | 41          | 51          |            |     |
|                                  |             |            |            |             |             |             |            |     |
|                                  | MARSLVCLGV  | IILLSAFSGP | GVRGGPMPKL | ADRKLCAQDE  | CSHPISMAVA  | LQDYMAPDCR  | 60         |     |
| 60                               | FLTIHRQVV   | VVFSKLKGRG | RLFWGGSVQG | DYYGDLAARL  | GYFPSSIVRE  | DQTLKPGKVD  | 120        |     |
|                                  | VKTDKWDIFYC | Q          |            |             |             |             | 131        |     |

It is understood that the examples described above in no way serve to limit the true scope of this invention, but rather are presented for illustrative purposes. All publications, sequences of accession numbers, and patent applications cited in this specification are herein incorporated by reference as if each individual publication or patent application were specifically and individually indicated to be incorporated by reference.

WHAT IS CLAIMED IS:

- 1           1.       A method for determining the presence or absence of a pathological cell in a  
2     patient, said method comprising detecting a nucleic acid comprising a sequence at least 80%  
3     identical to a sequence as described in Tables 2A-68 in a biological sample from said patient,  
4     thereby determining the presence or absence of said pathological cell.
- 1           2.       The method of Claim 1, wherein:  
2           a) said pathology is described in Table 1, including a cancer; and/or  
3           b) said biological sample comprises isolated nucleic acids.
- 1           3.       The method of Claim 1, wherein said biological sample is tissue from an organ  
2     which is affected by said pathology of Table 1, including a cancer.
- 1           4.       The method of Claim 2, wherein said nucleic acids are mRNA
- 1           5.       The method of Claim 2:  
2           a) further comprising a step of amplifying nucleic acids before said step of detecting  
3                said nucleic acid; or  
4           b) where said detecting is of a protein encoded by said nucleic acid.
- 1           6.       The method of Claim 1, wherein said nucleic acid comprises a sequence as  
2     described in Tables 2A-68.
- 1           7.       The method of Claim 2, wherein:  
2           a) said detecting step is carried out by:  
3                i) using a labeled nucleic acid probe;  
4                ii) utilizing a biochip comprising a sequence at least 80% identical to a sequence  
5                as described in Tables 2A-68; or  
6                iii) detecting a polypeptide encoded by said nucleic acid; or  
7           b) said patient is:  
8                i) undergoing a therapeutic regimen to treat said pathology of Table 1; or  
9                ii) is suspected of having said pathology or cancer.
- 1           8.       An isolated nucleic acid molecule comprising a sequence as described in  
2     Tables 2A-68.

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- 1           9.     The nucleic acid molecule of Claim 8, which is labeled.
- 1           10.    An expression vector comprising the nucleic acid of Claim 8.
- 1           11.    A host cell comprising the expression vector of Claim 10.
- 1           12.    An isolated polypeptide which is encoded by a nucleic acid molecule  
2 comprising a sequence as described in Tables 2A-68.
- 1           13.    An antibody that specifically binds a polypeptide of Claim 12.
- 1           14.    The antibody of Claim 13:  
2 a) conjugated to an effector component;  
3 b) conjugated to a detectable label, including a fluorescent label, a radioisotope, or a  
4 cytotoxic chemical;  
5 c) which is an antibody fragment; or  
6 d) which is a humanized antibody.
- 1           15.    A method for specifically targeting a compound to a pathological cell in a  
2 patient, said method comprising administering to said patient an antibody of Claim 13,  
3 thereby providing said targeting.
- 1           16.    A method for determining the presence or absence of a pathological cell in a  
2 patient, said method comprising contacting a biological sample with an antibody of Claim 13.
- 1           17.    The method of Claim 16, wherein:  
2 a) said antibody is conjugated to:  
3 i) an effector component; or  
4 ii) a fluorescent label; or  
5 b) said biological sample is a blood, serum, urine, or stool sample.
- 1           18.    A method for identifying a compound that modulates a pathology-associated  
2 polypeptide, said method comprising the steps of:

- 3       a) contacting said compound with a pathology-associated polypeptide, said  
4       polypeptide encoded by a polynucleotide that selectively hybridizes to a sequence  
5       at least 80% identical to a sequence as described in Tables 2A-68; and  
6       b) determining the functional effect of said compound upon said polypeptide.

1       19.     A drug screening assay comprising the steps of:

- 2       a) administering a test compound to a mammal having a pathology of Table 1 or a  
3       cell isolated therefrom; and  
4       b) comparing the level of gene expression of a polynucleotide that selectively  
5       hybridizes to a sequence at least 80% identical to a sequence as described in  
6       Tables 2A-68 in a treated cell or mammal with the level of gene expression of said  
7       polynucleotide in a control cell or mammal, wherein a test compound that  
8       modulates said level of expression of the polynucleotide is a candidate for the  
9       treatment of said pathology.

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